January 1940

A Faculty Survey of the University of Pennsylvania Libraries

Bibliographical Planning Committee, Philadelphia

Follow this and additional works at: https://repository.upenn.edu/penn_history

Philadelphia, Bibliographical Planning Committee, "A Faculty Survey of the University of Pennsylvania Libraries" (1940). History of the University of Pennsylvania. 2. https://repository.upenn.edu/penn_history/2

All rights reserved. Except for brief quotations used for purposes of scholarly citation, none of this work may be reproduced in any form by any means without written permission from the publisher. For information address the University of Pennsylvania Press, 3905 Spruce Street, Philadelphia, Pennsylvania 19104-4112.


This paper is posted at ScholarlyCommons. https://repository.upenn.edu/penn_history/2
For more information, please contact repository@pobox.upenn.edu.
A Faculty Survey of the University of Pennsylvania Libraries

Abstract
This survey of the resources of the University of Pennsylvania libraries forms a small part of a large plan for the survey of library resources in the whole Philadelphia Metropolitan area. It was undertaken at the instigation of the Bibliographical Planning Committee of the Philadelphia Metropolitan Area, a joint committee of the University of Pennsylvania and the Union Library Catalogue of the area, created to plan for the closer integration of Philadelphia library resources and made possible by a generous grant from the Carnegie Corporation of New York.

This survey differs from most surveys of the same sort in that it was made, not by the distributors of books, but by the users of books; not by librarians, but by scholars. It represents an appraisal of the library collections of the university by the experts in the several fields of knowledge represented on the university faculties. To some extent it reaches beyond the university libraries and calls attention to other valuable collections of books in other Philadelphia repositories.

It serves, of course, to show at once the strong points and the weak points of the university libraries. It will be valuable to the university itself as a guide in rounding out its collections. It will be valuable to other librarians in the metropolitan area as a check list upon existing resources. And it will be of considerable value to students inside and outside of Philadelphia as a revelation of the very considerable treasury of books at the University of Pennsylvania. The Bibliographical Planning Committee hopes to use it as a pattern for the survey of other great collections in the Philadelphia area, and as a basis for determining the contributions which the university may make and the responsibilities which the university should assume in any integration of metropolitan library resources.

In the opinion of the Bibliographical Planning Committee it marks a significant step forward in library appraisals, and may perhaps suggest the appropriate technique for a realistic estimate of library resources in the country at large.

Comments
All rights reserved. Except for brief quotations used for purposes of scholarly citation, none of this work may be reproduced in any form by any means without written permission from the publisher. For information address the University of Pennsylvania Press, 3905 Spruce Street, Philadelphia, Pennsylvania 19104-4112.

A FACULTY SURVEY

OF THE

UNIVERSITY OF PENNSYLVANIA

LIBRARIES
BIBLIOGRAPHICAL PLANNING COMMITTEE
OF PHILADELPHIA

A Joint Committee of the
Philadelphia Union Library Catalogue
and the University of Pennsylvania

CONYERS READ
Chairman
American Historical Association

CHARLES M. B. CADWALADER
Academy of Natural Sciences of Philadelphia

CHARLES W. DAVID
Bryn Mawr College

THOMAS S. GATES
University of Pennsylvania

EDWARD B. KRUMBHAAR, M.D.
College of Physicians

JOHN F. LEWIS, JR.
Mercantile Library

GEORGE WM. McCLELLAND
University of Pennsylvania

MARY LOUISE ALEXANDER
Director
BIBLIOGRAPHICAL PLANNING COMMITTEE
OF PHILADELPHIA

A Faculty Survey
of the
University of Pennsylvania Libraries

UNIVERSITY OF PENNSYLVANIA PRESS

Philadelphia

1940
INTRODUCTION

This survey of the resources of the University of Pennsylvania libraries forms a small part of a large plan for the survey of library resources in the whole Philadelphia metropolitan area. It was undertaken at the instigation of the Bibliographical Planning Committee of the Philadelphia Metropolitan Area, a joint committee of the University of Pennsylvania and the Union Library Catalogue of the area, created to plan for the closer integration of Philadelphia library resources and made possible by a generous grant from the Carnegie Corporation of New York.

This survey differs from most surveys of the same sort in that it was made, not by the distributors of books, but by the users of books; not by librarians, but by scholars. It represents an appraisal of the library collections of the university by the experts in the several fields of knowledge represented on the university faculties. To some extent it reaches beyond the university libraries and calls attention to other valuable collections of books in other Philadelphia repositories.

It serves, of course, to show at once the strong points and the weak points of the university libraries. It will be valuable to the university itself as a guide in rounding out its collections. It will be valuable to other librarians in the metropolitan area as a check list upon existing resources. And it will be of considerable value to students inside and outside of Philadelphia as a revelation of the very considerable treasury of books at the University of Pennsylvania. The Bibliographical Planning Committee hopes to use it as a pattern for the survey of other great collections in the Philadelphia area, and as a basis for determining the contributions which the university may make and the responsibilities which the university should assume in any integration of metropolitan library resources.

In the opinion of the Bibliographical Planning Committee it marks a significant step forward in library appraisals, and may perhaps suggest the appropriate technique for a realistic estimate of library resources in the country at large.

The Bibliographical Planning Committee owes a great debt of gratitude to Dr. Albert C. Baugh, Chairman of the Library Committee of the University of Pennsylvania, who directed the survey, secured the cooperation of the university faculties, and drove the enterprise through to completion in an incredibly short time. It ought to be added that the whole job was a labor of love. The only expenses connected with it have been those of preparing copy for the press and of the actual printing.

Conyers Read, Chairman of the Bibliographical Planning Committee of the Philadelphia Metropolitan Area
EXPLANATORY NOTE

In the following reports the resources of the University of Pennsylvania libraries--General Library and departmental libraries--have been surveyed under subject heads representing the principal fields in which the university offers instruction. Except where otherwise noted, the reports have been written by members of the faculty chosen for their special acquaintance with the fields covered. They are not meant to be subject bibliographies. They are intended to test the adequacy of the libraries for advanced work and indicate the elements of strength and weakness in each division. The individual reports vary somewhat in length and character. This is inevitable where different types of material are involved and fifty or sixty individuals are concerned. In certain reports reference is made to the Lippincott Library of the Wharton School of Finance and Commerce. No general report on this departmental library has been included since it seemed better to consider its holdings in the treatment of the various subjects which it covers.

Albert C. Baugh, Chairman of the Library Committee of the University of Pennsylvania

VII
### CONTRIBUTORS

<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albrecht, Otto E.</td>
<td>65</td>
</tr>
<tr>
<td>Alderfer, Evan.</td>
<td>48</td>
</tr>
<tr>
<td>Allen, R. B.</td>
<td>100</td>
</tr>
<tr>
<td>Alspach, Russell K.</td>
<td>113</td>
</tr>
<tr>
<td>Armstrong, Eva V.</td>
<td>176</td>
</tr>
<tr>
<td>Austin, J. H.</td>
<td>6</td>
</tr>
<tr>
<td>Barton, S. G.</td>
<td>180</td>
</tr>
<tr>
<td>Beck, John D.</td>
<td>189</td>
</tr>
<tr>
<td>Berghold, Arthur B.</td>
<td>187</td>
</tr>
<tr>
<td>Bodde, Derk</td>
<td>160</td>
</tr>
<tr>
<td>Boll, T. E. M.</td>
<td>115</td>
</tr>
<tr>
<td>Bolles, E. C.</td>
<td>117</td>
</tr>
<tr>
<td>Bradley, Sculley.</td>
<td>119</td>
</tr>
<tr>
<td>Breyer, Ralph F.</td>
<td>39</td>
</tr>
<tr>
<td>Brown, H. Glenn</td>
<td>190</td>
</tr>
<tr>
<td>Brown, W. Norman.</td>
<td>152,156,158</td>
</tr>
<tr>
<td>Bruton, Paul W.</td>
<td>139</td>
</tr>
<tr>
<td>Bursk, J. Parker.</td>
<td>185</td>
</tr>
<tr>
<td>Churchman, C. W.</td>
<td>163</td>
</tr>
<tr>
<td>Clapp, C. B.</td>
<td>195</td>
</tr>
<tr>
<td>Connor, Ralph</td>
<td>174</td>
</tr>
<tr>
<td>Crosby, H. Lamar.</td>
<td>90</td>
</tr>
<tr>
<td>Dickinson, John</td>
<td>146,147</td>
</tr>
<tr>
<td>Dodson, Leonidas.</td>
<td>76</td>
</tr>
<tr>
<td>Ehrenfield, Frederick</td>
<td>181</td>
</tr>
<tr>
<td>Fernberger, Samuel W.</td>
<td>10</td>
</tr>
<tr>
<td>Frey, Alexander H.</td>
<td>147</td>
</tr>
<tr>
<td>Gemmell, Paul F.</td>
<td>170</td>
</tr>
<tr>
<td>Green, Otis H.</td>
<td>132,134,138</td>
</tr>
<tr>
<td>Hadzsits, G. D.</td>
<td>92</td>
</tr>
<tr>
<td>Hallowell, A. I.</td>
<td>16</td>
</tr>
<tr>
<td>Harbeson, John F.</td>
<td>63</td>
</tr>
<tr>
<td>Hoffman, G. Wright.</td>
<td>36</td>
</tr>
<tr>
<td>Howland, Arthur C.</td>
<td>69</td>
</tr>
<tr>
<td>Huebner, Grover G.</td>
<td>44</td>
</tr>
<tr>
<td>Hyde, W. W.</td>
<td>68</td>
</tr>
<tr>
<td>Keedy, Edwin R.</td>
<td>145</td>
</tr>
<tr>
<td>Kent, Roland G.</td>
<td>89</td>
</tr>
<tr>
<td>Klarmann, Adolf D.</td>
<td>93,97</td>
</tr>
<tr>
<td>Kline, J. R.</td>
<td>172</td>
</tr>
<tr>
<td>Kramer, Roland L.</td>
<td>41</td>
</tr>
<tr>
<td>Leach, MacEdward.</td>
<td>103</td>
</tr>
<tr>
<td>Linglebach, W. E.</td>
<td>73</td>
</tr>
<tr>
<td>Lockwood, J.</td>
<td>22</td>
</tr>
<tr>
<td>Mason, J. Alden</td>
<td>17</td>
</tr>
<tr>
<td>Mendenhall, John C.</td>
<td>110,111</td>
</tr>
<tr>
<td>Miller, John G.</td>
<td>174</td>
</tr>
<tr>
<td>Montgomery, J. A.</td>
<td>169</td>
</tr>
<tr>
<td>Nelson, O. S.</td>
<td>22</td>
</tr>
<tr>
<td>Nichols, Roy F.</td>
<td>82</td>
</tr>
<tr>
<td>Perry, Hobart S.</td>
<td>44</td>
</tr>
<tr>
<td>Philbrick, Francis S.</td>
<td>139,141</td>
</tr>
<tr>
<td>Preston, Malcolm G.</td>
<td>10</td>
</tr>
<tr>
<td>Prior, J. A.</td>
<td>58</td>
</tr>
<tr>
<td>Quinn, Arthur Hobson.</td>
<td>122</td>
</tr>
<tr>
<td>Read, Conyers</td>
<td>76</td>
</tr>
<tr>
<td>Register, Layton B.</td>
<td>142,143,145,148</td>
</tr>
<tr>
<td>Reid, W. Stanford</td>
<td>80</td>
</tr>
<tr>
<td>Rose, Joseph R.</td>
<td>44</td>
</tr>
<tr>
<td>Rowlands, David T.</td>
<td>34</td>
</tr>
<tr>
<td>Seitz, Frederick</td>
<td>178</td>
</tr>
<tr>
<td>Seiver, George O.</td>
<td>131,132</td>
</tr>
<tr>
<td>Sellin, Thorsten.</td>
<td>184</td>
</tr>
<tr>
<td>Senn, Alfred.</td>
<td>93</td>
</tr>
<tr>
<td>Shaaber, M. A.</td>
<td>105,107</td>
</tr>
<tr>
<td>Shohat, J.</td>
<td>172</td>
</tr>
<tr>
<td>Simpson, Smith.</td>
<td>150</td>
</tr>
<tr>
<td>Singer, Edgar A.</td>
<td>170</td>
</tr>
<tr>
<td>Spelser, E. A.</td>
<td>153</td>
</tr>
<tr>
<td>Thompson, C. Seymour.</td>
<td>188,194</td>
</tr>
<tr>
<td>Uppwall, Axel J.</td>
<td>93</td>
</tr>
<tr>
<td>Van Deventer, H. B.</td>
<td>92</td>
</tr>
<tr>
<td>Warrington, William E.</td>
<td>27</td>
</tr>
<tr>
<td>Wenrich, David H.</td>
<td>4</td>
</tr>
<tr>
<td>West, Bradford W.</td>
<td>165</td>
</tr>
<tr>
<td>Weyl, Charles</td>
<td>60</td>
</tr>
<tr>
<td>Whitaker, A. P.</td>
<td>84</td>
</tr>
<tr>
<td>Williams, Frank E.</td>
<td>47</td>
</tr>
<tr>
<td>Wilson, G. Lloyd</td>
<td>44</td>
</tr>
<tr>
<td>Woody, Thomas</td>
<td>49</td>
</tr>
<tr>
<td>Worley, Fred M.</td>
<td>29</td>
</tr>
<tr>
<td>Zirkle, Conway.</td>
<td>1</td>
</tr>
</tbody>
</table>

VIII
**TABLE OF CONTENTS**

**BIOLOGICAL AND RELATED SCIENCES**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botany</td>
<td>1</td>
</tr>
<tr>
<td>Zoology</td>
<td>4</td>
</tr>
<tr>
<td>Medicine</td>
<td>6</td>
</tr>
<tr>
<td>Psychology</td>
<td>10</td>
</tr>
<tr>
<td>Anthropology</td>
<td>16</td>
</tr>
<tr>
<td>Brinton Library of Anthropology</td>
<td>17</td>
</tr>
</tbody>
</table>

**ECONOMICS**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Theory</td>
<td>20</td>
</tr>
<tr>
<td>Accounting</td>
<td>22</td>
</tr>
<tr>
<td>Corporation Finance and Investments</td>
<td>27</td>
</tr>
<tr>
<td>Money, Credit, and Banking</td>
<td>29</td>
</tr>
<tr>
<td>Real Estate</td>
<td>34</td>
</tr>
<tr>
<td>Insurance</td>
<td>36</td>
</tr>
<tr>
<td>Marketing</td>
<td>39</td>
</tr>
<tr>
<td>Foreign Trade</td>
<td>41</td>
</tr>
<tr>
<td>Transportation and Public Utilities</td>
<td>44</td>
</tr>
<tr>
<td>Geography and Industry</td>
<td>47</td>
</tr>
</tbody>
</table>

**EDUCATION**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>49</td>
</tr>
<tr>
<td>Maria Hosmer Penniman Memorial Library</td>
<td>52</td>
</tr>
</tbody>
</table>

**ENGINEERING**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil and Mechanical Engineering</td>
<td>58</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>60</td>
</tr>
</tbody>
</table>

**FINE ARTS AND MUSIC**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Arts</td>
<td>63</td>
</tr>
<tr>
<td>Music</td>
<td>65</td>
</tr>
</tbody>
</table>

**HISTORY**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ancient History</td>
<td>68</td>
</tr>
<tr>
<td>Medieval Continental History</td>
<td>69</td>
</tr>
<tr>
<td>Henry C. Lea Library of Medieval History</td>
<td>71</td>
</tr>
<tr>
<td>European History</td>
<td>73</td>
</tr>
<tr>
<td>English History</td>
<td>76</td>
</tr>
<tr>
<td>Scottish History</td>
<td>80</td>
</tr>
<tr>
<td>United States History</td>
<td>82</td>
</tr>
<tr>
<td>Latin American History</td>
<td>84</td>
</tr>
</tbody>
</table>

**LANGUAGES AND LITERATURE**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indo-European Philology</td>
<td>89</td>
</tr>
<tr>
<td>Greek</td>
<td>90</td>
</tr>
<tr>
<td>Latin Language and Literature</td>
<td>92</td>
</tr>
<tr>
<td>Germanic Languages and Literatures</td>
<td>93</td>
</tr>
<tr>
<td>Bechstein Collection (Germanics)</td>
<td>97</td>
</tr>
<tr>
<td>Old English</td>
<td>100</td>
</tr>
<tr>
<td>Middle English</td>
<td>103</td>
</tr>
<tr>
<td>Elizabethan and Jacobean Literature</td>
<td>105</td>
</tr>
<tr>
<td>Furness Memorial Library of Shakespeareana.</td>
<td>107</td>
</tr>
<tr>
<td>Eighteenth Century English Literature</td>
<td>110</td>
</tr>
<tr>
<td>Godfrey Frank Singer Memorial Collection</td>
<td>111</td>
</tr>
<tr>
<td>Eighteenth Century English Fiction</td>
<td>111</td>
</tr>
<tr>
<td>Nineteenth Century and Contemporary English Poetry</td>
<td>113</td>
</tr>
<tr>
<td>British Fiction of the Nineteenth Century and After</td>
<td>115</td>
</tr>
<tr>
<td>Nineteenth Century and Contemporary English Non-Fictional Prose</td>
<td>117</td>
</tr>
<tr>
<td>American Literature</td>
<td>119</td>
</tr>
<tr>
<td>Clothier Collection of American Drama</td>
<td>122</td>
</tr>
<tr>
<td>LANGUAGES AND LITERATURE</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Romance Languages and Literatures</td>
<td>125</td>
</tr>
<tr>
<td>Hurlburt Collection of French Drama</td>
<td>131</td>
</tr>
<tr>
<td>Special Collection of French Plays</td>
<td>132</td>
</tr>
<tr>
<td>Francis Campbell McCauley Collection of Italian Literature</td>
<td>132</td>
</tr>
<tr>
<td>Rennert Collection of Spanish Literature</td>
<td>134</td>
</tr>
<tr>
<td>Crawford Collection of Spanish Literature</td>
<td>138</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LAW</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>United States Law</td>
<td>139</td>
</tr>
<tr>
<td>English Law</td>
<td>141</td>
</tr>
<tr>
<td>Law of the British Empire and Isles</td>
<td>142</td>
</tr>
<tr>
<td>Foreign Law</td>
<td>143</td>
</tr>
<tr>
<td>Comparative Law</td>
<td>145</td>
</tr>
<tr>
<td>Roman Law</td>
<td>146</td>
</tr>
<tr>
<td>Canon and Ecclesiastical Law</td>
<td>146</td>
</tr>
<tr>
<td>Jurisprudence and Legal Philosophy</td>
<td>147</td>
</tr>
<tr>
<td>International Law</td>
<td>147</td>
</tr>
<tr>
<td>Periodicals</td>
<td>148</td>
</tr>
<tr>
<td>Business Law</td>
<td>150</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORIENTAL STUDIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oriental Studies</td>
<td>152</td>
</tr>
<tr>
<td>Near East</td>
<td>153</td>
</tr>
<tr>
<td>Indic Studies</td>
<td>156</td>
</tr>
<tr>
<td>Penniman-Gribbel Collection of Sanskrit Manuscripts</td>
<td>158</td>
</tr>
<tr>
<td>Chinese</td>
<td>160</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHILOSOPHY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy</td>
<td>163</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POLITICAL SCIENCE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science</td>
<td>165</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RELIGION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>History of religion</td>
<td>169</td>
</tr>
<tr>
<td>Seybert Collection</td>
<td>170</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCIENCE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>172</td>
</tr>
<tr>
<td>Chemistry and Chemical Engineering</td>
<td>174</td>
</tr>
<tr>
<td>Edgar Fahs Smith Memorial Collection in the History of Chemistry</td>
<td>176</td>
</tr>
<tr>
<td>Physics</td>
<td>178</td>
</tr>
<tr>
<td>Astronomy</td>
<td>180</td>
</tr>
<tr>
<td>Earth Sciences</td>
<td>181</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIOLOGY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociology</td>
<td>184</td>
</tr>
<tr>
<td>Statistical Methods in the Social Sciences</td>
<td>185</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MISCELLANEOUS SPECIAL COLLECTIONS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlemagne Tower Collection of Russian Books</td>
<td>187</td>
</tr>
<tr>
<td>Curtis Collection of Franklin Imprints</td>
<td>188</td>
</tr>
<tr>
<td>Fairman Rogers Library on Horsemanship</td>
<td>189</td>
</tr>
<tr>
<td>Reference Collection</td>
<td>190</td>
</tr>
<tr>
<td>Manuscripts</td>
<td>194</td>
</tr>
<tr>
<td>Union Depository Catalogue</td>
<td>195</td>
</tr>
<tr>
<td>INDEX</td>
<td>198</td>
</tr>
</tbody>
</table>
BIOLOGICAL SCIENCES

BOTANY

By Conway Zirkle

The botanical resources of the Philadelphia libraries are so excellent and the librarians have, in the past, co-operated so intelligently (if unofficially), that the libraries will have to be considered as a unified whole before any one library can be evaluated properly. The books and periodicals on the botanical sciences now in the University of Pennsylvania libraries form a valuable and well integrated portion of our regional collections. Perhaps a brief though necessarily superficial description of several of our sister libraries will give us a sufficient background for judging the value of our own possession. It may be noted parenthetically that Biological Abstracts, after a careful survey of the whole country, located their editorial office in Philadelphia because of the number and availability of the biological works in several of our leading libraries.

Important Botanical Libraries in the Philadelphia region other than those of the University of Pennsylvania.

THE ACADEMY OF NATURAL SCIENCES: This is one of the great biological libraries of the world. The Academy receives approximately 2,500 periodicals. It is exceptionally rich in books on taxonomic botany, particularly the older and more expensive works. It has complete sets of the more important scientific periodicals which extend back into the eighteenth and some even into the seventeenth century.

THE COLLEGE OF PHYSICIANS: Rich in botanical incunabula and in sixteenth and seventeenth century herbals.

THE RIDGWAY BRANCH of the LIBRARY COMPANY of Philadelphia: This library is often overlooked. It contains the Loganian Collection very rich in seventeenth and eighteenth-century works on botany and agriculture.

THE AMERICAN PHILOSOPHICAL SOCIETY: The library here has an excellent collection of the older and more expensive botanical works. For the last forty years the proceeds of the Michaux Fund have been used for the purchase of books on the botanical sciences, including many which were beyond the financial reach of the other local libraries. At present the librarian endeavors to buy books which are not in other Philadelphia libraries. Suggestions from the University of Pennsylvania librarians and faculty have been welcomed.

A few excellent botanical works are also to be found in the libraries of the Horticultural Society, Historical Society of Pennsylvania, and in the Mercantile Library.

The University of Pennsylvania Libraries

The University of Pennsylvania libraries have approximately 20,000 bound volumes and 20,000 pamphlets which deal with the botanical sciences. These are distributed as follows:

Main Library

<table>
<thead>
<tr>
<th>Subject</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botany</td>
<td>1,240</td>
</tr>
<tr>
<td>Agriculture (approx.)</td>
<td>3,000</td>
</tr>
<tr>
<td>Medicinal Botany (approx.)</td>
<td>200</td>
</tr>
</tbody>
</table>
Main Library (continued)

<table>
<thead>
<tr>
<th>Library Name</th>
<th>Volumes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical School Library</td>
<td>301</td>
</tr>
<tr>
<td>Zoological Library</td>
<td>94</td>
</tr>
<tr>
<td>Library of the Laboratory of Hygiene</td>
<td>271</td>
</tr>
<tr>
<td>Library of the School of Veterinary Medicine</td>
<td>165</td>
</tr>
<tr>
<td>Library of the Philadelphia Society for Promoting Agriculture. (Deposited in the Library of the School of Veterinary Medicine but not open to the public.)</td>
<td>993</td>
</tr>
<tr>
<td>Morris Arboretum Library</td>
<td>2,158</td>
</tr>
<tr>
<td>Botanical Library</td>
<td>11,500</td>
</tr>
</tbody>
</table>
  (This Library contains 20,000 pamphlets in addition to its bound volumes.)

Total (approx.) 19,919

It will be seen from the above that the real center of our botanical collection is the Botanical Library. The value of this library is much greater than its size would indicate, because of (1) its location and (2) its contents.

The library is in the same building with the Zoological Library which contains 12,000 well-selected volumes. The periodicals of the Zoological Library and those of the Botanical Library are supplementary and together form an adequate working collection. The libraries of the School of Veterinary Medicine and the Medical School are located within a radius of a hundred yards and can be used by the students and staff with no real inconvenience.

The books of our departmental library have been most carefully chosen in the past so that our collection contains practically no deadwood. Although the budget for the last ten years has carried no funds whatever for the purchase of new books, gifts of new books by the Botanical Society of Pennsylvania have enabled us thus far to weather the depression. How long they will be able to assist us in this emergency, however, we do not know. The Main Library pays for those periodicals and for all continuations which the university buys. The Contributions of the Department of Botany bring in exchange a number of periodicals and continuations which the departmental library could not afford to purchase. The library is expanding at the rate of about 500 books a year. Last year, owing to a number of gifts, the acquisitions numbered 776 bound volumes.

It is not necessary to describe in detail the contents of the departmental library. It is adequate for the needs of the Department of Botany and it is being kept up to date. With the exception of some agricultural and forestry periodicals, any work we wish to consult is somewhere in Philadelphia. A few of its outstanding possessions may be mentioned, however, because they are of a type not usually found in departmental libraries. Some years ago the department was given the Bartram Library and later, thanks to the generosity of the late Professor John W. Harshberger, the library was given a collection of herbarls and other books of historical importance. The library now has three incunabula, eighty-six pre-Linnean volumes (pre-1753) and fifty-five other rare books. It receives yearly one
hundred and fifty periodicals, forty-nine by purchase, ninety-one by exchange and ten by gifts. An additional thirty are purchased by the Morris Arboretum. The library should have a small budget for the purchase of new books, however, for the Botanical Society of Pennsylvania cannot buy all of the new books indefinitely.

There seems to be but one gap in the biological collection of the Philadelphia region. None of the libraries subscribe to a number of the newer foreign agricultural and forestry periodicals. More and more these publications are carrying contributions to the fundamental biological sciences. Both the Free Library and the University of Pennsylvania Library receive the publications of the United States Department of Agriculture, while our departmental library receives the contributions of the various state agricultural experiment stations. Thus the Philadelphia region has a large and important collection of agricultural publications but lacks many of the foreign periodicals.

The above account would indicate that the Department of Botany is exceptionally fortunate in its library facilities. However, one real handicap that it is facing must be mentioned. For the last several years the problem of available shelf space has become acute. The library is in a room which is much too small and there are no adjoining rooms which can be incorporated with it. The library has no room for expansion and no place to move to. Temporary relief was secured in 1934 when some 1,300 volumes were removed to the Morris Arboretum. Since then more shelf space has been secured for the bound volumes by moving all of the contributions from the state agricultural experiment stations to locked cases in another building, which incidentally is not fireproof. Within the last two years, all of the 20,000 pamphlets have been transferred to locked cases in the corridor outside of the library proper. Bound volumes are now on the tops of all of the stacks, as well as inside. At the present rate of increase the library will have shelf space for two more years. At the end of that time some more volumes will have to be transferred to the Morris Arboretum, and it should be noted that the possibilities of expansion there are not unlimited. The removal of books to the Morris Arboretum has a further disadvantage. Most of the books now in the departmental library are in such use that the department would be seriously inconvenienced if it had to store them elsewhere. To illustrate the straits to which the library is rapidly being reduced, an example may be cited from the future plans for transferring books. The volumes which have to be moved in the future have already been listed. For instance, the Flora Brasiliensis, an extremely valuable work, although used primarily by specialists, will be the first to go. It will be moved first because it consists of forty folio volumes. The problems of space are thus so acute that the size of the individual works will have to be considered when the decision is made as to where they will be kept.

To sum up, the University of Pennsylvania has one of the best departmental libraries in botany in the country, and its neighboring libraries supplement its own collection so that there are no serious gaps. The botanists can, with very little trouble, consult practically any botanical work they wish, with the exceptions noted. The university really suffers from an embarrassment of riches, which it will soon be unable to store properly. When it comes to housing the future acquisitions, we can only say at present that, frankly, we do not know what to do.
ZOOLOGY

By David H. Wenrich

The library of the Department of Zoology, housed in the Zoology Building is composed of something over 12,000 volumes, of which about 6,000 are books and bound collections of reprints, the remainder being bound periodicals. In addition there are approximately 4,000 unbound reprints. About 4,000 other reprints are included in a recent gift from Dr. Edwin Linton, and that collection will eventually be incorporated in the library. This library provides a fairly satisfactory basis for the teaching and research activities of the department, although other libraries on the campus and in the city are much used by the staff members and their students.

BOOKS

The collection of books in the Zoological Library, including bound groups of reprints, amounts to approximately 6,000. It has been enriched by the private libraries of such men as Leidy, Cope, Ryder, Montgomery, and, just recently, Dr. Edwin Linton. These resources, with other gifts and purchases, provide a working library of much value.

The collection includes a number of works of historical interest, such as those of Hooke and Leeuwenhoek of the seventeenth century, of Adams, Trembley, Swammerdam, Lyonnets, DeGeer, Fabriciius, Spallanzani, Roesel, and Goeze of the eighteenth century; and of Cuvier, Rudolphi, Ehrenberg, Dujardin and others of the early part of the nineteenth century. The Main Library has a number of works of historical interest, such as Bonannio's Reum naturalium historia, Bonnet's Oeuvres d'histoire naturelle, Cuvier's Regne animal., Buffon's Complete Works, Bonaparte's Birds of North America, Audubon and Bachman's Quadrupeds of North America, and Naturalists Library of Vertebrates. There are, moreover, many additional works of historical nature that are available in the Botanical Library and at the Academy of Natural Sciences.

The more recent literature is inadequately covered in the departmental library owing to the lack of funds for the purchase of books. Two small memorial funds and gifts from interested individuals have enabled this library to secure a good many of the more urgently needed of the zoological books that have been appearing in the past few years.

There are over 14,000 books and bound periodicals on the campus in the library collections at the Wistar Institute, and many of them cover zoological subjects. The Academy of Natural Sciences has an extensive series of zoological books, especially those appearing before the last decade.

SERIALS

In the Zoological Library there is a fair number of reference works which have appeared or are still appearing serially. The list includes the Challenger Reports (33 vols.), Lehrbuch der vergleichenden mikroskopisches Anatomie (8 vols.), Handbuch der vergleichenden Physiologie (4 large vols.), Handbuch der Entomologie (3 vols.), Klassen und Ordnungen des Tierreichs (about 50 bindings), Zoological Record (now to vol. 74), Zoologischer Anzeiger, Bibliographia Zoologica (now to vol. 43), L'Année Biologique (now to vol. 40), Mitteilungen aus der zoologischen Station zu Neapel (22 vols.), Nova Guinæae (now to vol. 17), Pubblicazioni de la Stazione Zoologica Napoli (now to vol. 11), Zoologica (now to vol. 23), Fauna und Flora des Golfs von Neapel (now to vol. 38), Handbuch der Zoologie (now to vol. 7), Schultze's Nomenclator (now to vol. 5), Protoplasma-Monographien (now to vol. 15),
The Zoological Library is receiving currently about 100 periodicals including many of those most important to the various zoological subjects. Many of these are in approximately complete sets. About half of them are of foreign origin and about one-third are in languages other than English. In addition there are perhaps 150 incomplete sets and discontinued series which are not being added to at the present time. A recent gift from Dr. Calvert of about 200 unbound volumes of several periodicals in the field of entomology have not yet been incorporated in the library.

These periodical resources are supplemented by those of other libraries on the campus as well as by those in other libraries in the city.

The Main Library has more than a dozen periodicals of general scientific interest, which are also of interest to zoologists, such as Comptes Rendus de l'Academie des Sciences, Paris; Biometrika; Biologia generalis; Canadian Journal of Research; Isis; Revue scientifique; Science Progress; Chemical Abstracts; Proceedings of the National Academy of Science; Nature; Philippine Journal of Science; Annales de la Societe Royale Zoologique de Belgique; and Annales de la Societe Entomologique de Belgique. There are a considerable number of incomplete sets of periodicals containing valuable material.

The Botanical Library receives Cytologia, Genetics, Hereditas, Journal of Genetics and Protoplasma, all of much interest to zoologists as well as to botanists.

In the Medical School Library there are at least two dozen and in the library of the Wistar Institute at least three dozen additional periodicals of great value to zoologists, covering primarily the fields of anatomy and physiology, but dealing also to some extent with other phases of zoology.

The periodicals in these several libraries provide very satisfactorily for the subjects of physiology, anatomy, embryology, histology, cytology and genetics. Parasitology, which overlaps into tropical medicine, is less adequately provided for, but workers in this field can find much of their additional needed material in the Library of the College of Physicians. The Zoological Library has a number of periodicals dealing with general entomology, but medical entomology is not so well covered. The College of Physicians and the Academy of Natural Sciences are resorted to for additional items. The broad fields of taxonomy and faunistics are only partly cared for in the Zoological Library but the Academy of Natural Sciences provides extensive materials in these fields. Altogether the periodical needs of zoologists are well taken care of in the libraries on the campus of the university and in those of the College of Physicians and the Academy of Natural Sciences.
MEDICINE

By J. H. Austin, M. D., Chairman Medical School Library Committee.

This report includes the Medical School Library with its accessioned contents and the many unaccessioned libraries in the various departments of the Medical School and also the resources of the libraries of the Veterinary School and of the Evans Institute. Brief mention is made of certain library resources in Philadelphia outside the university. In this connection the library of the College of Physicians takes primary place. In addition the library of the Wistar Institute and of the Pennsylvania Hospital receive mention.

This report has been compiled through the co-operation of the librarians of these various libraries and of the professors in charge of the various departments of the Medical School.

The accessioned items of the university library dealing with medical, dental and veterinary sciences are housed in large part in the libraries of these respective schools. These collections have been developed mainly to provide a working library for use in connection with research and studies of faculty and students. Such works as are only occasionally consulted and works primarily of historical value have not, as a rule, been purchased, because we have easy access to the very complete library of the College of Physicians.

In addition to the accessioned items there are available in the Medical School to accredited workers at the university the contents of at least ten departmental collections, totalling probably 18,000 unaccessioned volumes, in addition to the important unaccessioned library of 4,700 volumes assembled by Dr. Meeker and described below.

These collections are of two types. The larger part of the departmental collections consists of periodical publications and reference books, either not otherwise available at the university or so constantly in use by the workers in these departments as to have justified duplication from the funds of the departments. In addition there are several collections assembled by former or present members of the faculty, often by special gift, containing highly valuable volumes not otherwise available on the campus and dealing with special fields of interest. These collections have in some instances been donated to the respective departments; in other instances they are the property of a member of the faculty but are placed at the disposal of any properly accredited user.

ACCESSIONED ITEMS

Medical School Library. Of the 26,000 volumes catalogued in the university libraries in the field of medicine about 9,000, representing the periodicals and the texts and reference works in current use, are housed in the Medical School Library. There are 116 current periodicals regularly received; of these ninety-three are complete from the first volume. In addition to this working library there is a small collection of some 200 works of historical value, for the most part gifts of Dean William Pepper and of Professor E. B. Krumbhaar.

School of Hygiene. Among the university library items housed in the School of Hygiene the following old publications are especially noteworthy:


UNACCESSIONED ITEMS

Piersol Library, Department of Anatomy. This collection contains 800 books on anatomy, human and comparative. There are some nine historical works dating from 1631 to 1722. Many of the books are not elsewhere available in the university. There are 577 bound periodicals representing twenty-four publications, ten of which are currently received and are not otherwise available in the Medical School. None of these sets is, however, complete from volume 1 to date.

Physiological Chemistry. This department has an excellent small working library of biochemistry containing about 1,500 volumes. It contains five biochemical periodicals, three physiological journals and Chemical Abstracts, currently received. Three of these are not taken in the Medical School Library. In addition are reference works, textbooks and monographs, many of which are not elsewhere available on the campus.

Physiology. Noteworthy in the library of this department is Bethe's Handbuch der normalen und pathologischen Physiologie, eighteen volumes (Berlin 1927) and H. Milne Edwards' nine volume Textbook on Physiology, (1857). This collection has thirty-two standard monographs on physiology which are not in the University Main Library, as well as others of minor importance. Some of these are out of print and are valuable reference books.

Pathology. The library of this department contains about 5,000 volumes, of which about 2,000 are bound or unbound volumes of thirty-five periodical publications, at least two of which are not in the University Main Library, 1,400 are books on pathology and related subjects and the remainder (about 1,600) is a collection of books on the history of medicine. Of especial value is the almost completed twenty volume Handbuch der pathologischen Anatomie, of Henke and Luborsch. The historical collection, brought together by Professor Krumbhaar, is particularly noteworthy in that nearly all the important books on pathology and on the history of medicine are represented, and in that it contains some items probably not found in any other library in Philadelphia.

Pharmacology. Noteworthy in the library of this department is Heffter's Handbuch der experimentellen Pharmakologie (twelve volumes and currently received) and Tigerstedt's Handbuch der physiologischen Methodik; neither of these being in the Main University Library.

Harrison Department of Surgical Research. This department maintains files currently received of the major surgical journals of this country and the British Journal of Surgery; also a fairly large group of surgical monographs on a wide variety of subjects. It has a number of old volumes dealing with surgical anatomy, surgical pathology and surgical physiology, and a special group dealing with the biliary system and intestinal obstruction. A number of these are privately owned but are available to the workers at all times.

University Hospital. In the departments of Biophysics, Research Medicine, Pepper Laboratory and Medical Clinic are some 5,000 volumes, periodicals and books of reference, which duplicate for the most part volumes in the Medical School Library but which are required at hand.
and are in constant use. Many of these volumes were obtained by gift from members of the faculty. There are, however, a number of recent monographs of importance not otherwise available in the university library.

Radiological Library of Dr. E. P. Pendergrass. In the Department of Radiology is the personal library of Dr. Pendergrass, commenced by the late Dr. Pancoast. It contains 1,100 volumes on clinical radiology and is probably the best library in its field in Philadelphia. It contains sets of the three most important radiological periodicals currently received and not in the university library.

The Library of the Department of Biochemistry of the Graduate School of Medicine assembled by Dr. George H. Meeker and containing 4,700 volumes is predominantly a chemical library. It is noteworthy that in this library is housed an almost invaluable collection of English, French, German, and American chemical periodicals. This collection includes practically all of the important chemical journals. Almost without exception they are complete from their first publication to the year 1932 and are bound through the year 1930. Among the older and more valuable periodicals we find: 500 volumes of Liebig's Annalen der Chemie covering the years 1832-1932; 331 volumes of Poggendorff's Annalen der Chemie (und Physik), 1824-1932; 243 volumes of Journal fur praktische Chemie, 1834-1932; 346 volumes of Dingler's Polytechnisches Journal, 1820-1931; and finally of the most value a complete collection of the Transactions of the Royal Society of London from the year 1600 to 1932. Besides complete files of more recent English, German and American chemical journals, there are also complete files of the four important biochemical periodicals: Zeitschrift fur physiologische Chemie, Biochemische Zeitschrift, Biochemical Journal, and the Journal of Biological Chemistry. The latter two journals are complete to date.

It is extremely unfortunate that financial curtailment has made it necessary to discontinue the subscription to many of these periodicals which have been complete for so many years. This library is not accessioned in the General University Library.

LIBRARY AT THE VETERINARY SCHOOL
(All accessioned in the General University Library)

In the library at the Veterinary School there are approximately 6,000 volumes. The collection includes three special groups:

1. The Library of the Philadelphia Society for Promoting Agriculture, which includes the early minute books of the society, which was organized in 1785, old letters and addresses presented at the meetings of the society and agricultural books and journals of historical value, some of them quite rare. The society has provided a small endowment fund for this collection which is being used to purchase books on agriculture and related subjects published in Great Britain and the United States from the Colonial Period down to the beginning of the machine age in agriculture.

2. The Leonard Pearson Memorial Library. This was the private library of Dr. Pearson, Dean of the Veterinary Faculty 1895-1909, and at the time of its presentation contained about all of the best veterinary publications available.

3. The Fairman Rogers Library of Horsemanship, a rather large collection of books on horsemanship and related subjects; containing many rare books, some quite valuable.

The balance of the 6,000 volumes consists of veterinary books and journals published in recent years. Some of the books were presented
by veterinarians or their heirs and the others were purchased with university funds.

During the last fiscal year, July 1, 1938, to June 30, 1939, twenty-two books were purchased, this being all that could be obtained with the funds available. The gifts during this period included the library of the late Dr. C. J. Marshall, professor of veterinary medicine, and a member of the teaching staff for forty-three years.

Twenty-three periodicals are regularly received by the library on subscription and twenty-one by gift.

LIBRARY OF THE THOMAS W. EVANS MUSEUM AND DENTAL INSTITUTE,
SCHOOL OF DENTISTRY UNIVERSITY OF PENNSYLVANIA

(All accessioned in the General University Library, except the German and Spanish dissertations)

The Dental School of the University of Pennsylvania had no separate library prior to the opening of the Evans Dental Institute, although some material had been accumulated in the university library and in the Dental School. When the Institute opened, Dr. Edward C. Kirk, then Dean of the Dental School, presented to the Evans Society his private library, a collection of "about 4,000 volumes - an almost complete record of the social, professional, technical, political, educational and legislative features of dentistry in its local, national, and international aspects". This collection was particularly rich in historical material. "Dr. Kirk's munificent donation formed the nucleus - and a good sized one at that - of the present library. In respect both to content and to extent this library is the finest collection of dental books in existence, a fact in no small degree due to Dr. Kirk's gift". At about this time came the gift of the library of the Academy of Stomatology, between three and four hundred books.

From that beginning has grown a library of approximately 10,000 books and reprints. About 150 periodicals from all over the world are currently and regularly received. Nearly 400 books are added each year by gift and purchase. The Journal of the American Dental Association and the Dental Cosmos are the only sets duplicated in the above statistics, although there are many other duplicate periodicals which would be available for sale or exchange if they could be satisfactorily arranged and stored. In the last fiscal year $130 was spent on books and $150 on periodicals. The library is fortunate in having generous friends among both the faculty and the alumni who give old and current material to the collection.

There is a collection of well over 3,000 German and Spanish dissertations, which would be much more useful if properly catalogued. An attempt has been made but time and help are not available for the completion of this task.

There are no separate collections except the Gildersleeve Memorial Library, in the Department of Bacteriopathology, and the collection of something over three hundred very old and rare books. This includes a copy of Artzney Büchlein, the earliest known dental book, published in Leipzig in 1530, one of the two copies of this edition still known to exist. Other rarities are the first dental book published in Spanish by Martinez in 1557 and the complete four editions of Pierre Fauchard, 1728, 1746 and 1786 in French and 1733 in German. Heister, Horst, Hunter, Pare, Parmly and Pfaff are other classics in the historical collection.

Several hundred reprints are housed in the Department of Bacteriopathology and used for optional and required collateral reading in connection with the courses in that department. These, like the dissertations, have not been completely catalogued because of lack of time and help.
There is a cumulative bibliographical card index of articles of dental interest, comprising to date from twenty to twenty-five thousand references to articles in medical, anatomical, physiological, bacteriological, pathological, pharmacological, biological and chemical journals, both English and foreign.

Upon the walls and stored in closets for lack of wall space, are many rare and interesting prints and cartoons relating to dental subjects. A small but growing collection of Apollonia pictures is also housed in the library, as is a collection of early extracting instruments, and Norman Kingsley's bust of Christ.

Since any student of the university may use any library in the university system, the Dental Library concentrates on dental material, with the result that practically no duplication with any other library occurs. Not only the faculty and students of the Dental School make use of the library, but in the past year alumni, students from the Medical School, Wharton School, and college course and alumni of the university have used the library, and also members of the local and state dental societies, students from the Philadelphia College of Pharmacy and from Temple University Dental School. There are also frequent calls for material from this library to be used in interlibrary loans.

OUTSIDE THE UNIVERSITY

The Library of the College of Physicians. This library will, I understand, be adequately dealt with apart from this report. It need be only mentioned here that its 150,000 accessioned items, including 409 incunabula and 1,184 current periodicals regularly received are the main reliance as to library resources of the workers in the medical sciences in the Philadelphia area. All other collections here are supplementary to this one.

The Library of the Wistar Institute contains a valuable collection of 8,680 books, 4,874 bound journals and receives 150 periodicals regularly. The field especially covered is that of comparative anatomy. Noteworthy among its older works may be mentioned Trouissart's Catalogus Mammalium and Gustav Retzius' Biologische Untersuchungen.

The Library of the Pennsylvania Hospital, the earliest medical library in the United States, with about 15,000 volumes was assembled mainly during the nineteenth century. It is rich in medical and biological works of the seventeenth and eighteenth centuries, with such valuable items as works of Malpighi, Leeuwenhoek, Swammerdam, Cuvier and Buffon, Ray's British Fiches, Bewick's Quadrupeds, Reaumur's Insects and Van Rumsdyk's colored anatomical plates. Its early records, some in Franklin's handwriting, are of great historical value. (Based on "The Earliest Medical Library in the United States"by F. R. Packard, Virginia Medical Monthly, June 1933.)

Each of the three important scientific libraries of the area, namely of the Academy of Natural Sciences, of the Franklin Institute and of the American Philosophical Society, furnishes occasionally the solution to some inquiry in the field of the medical sciences.

PSYCHOLOGY

By Samuel W. Fernberger and Malcolm G. Preston

Psychology, as an experimental science, developed quite late in the history of sciences and the beginning of this development may be dated at approximately 1875. Before this time the psychological con-
tributions appeared primarily as (1) theoretical discussions in philosophical publications or (2) as articles appearing in the earlier journals covering the field of physiology. By 1875, it was possible to gather together a systematic handbook of psychology in which many of the experimental facts were already extant in the physiological literature.

During the last years, the growth of psychological literature has been enormous as indicated by the size of the listings of titles in the Psychological Abstracts for the last three years as follows: for 1936 - 6,062 titles; for 1937 - 6,063 titles, and for 1938 - 6,693 titles. It may be said, at the outset, that there is no library in the world which contains the hundreds of thousands of titles which could be listed for psychology for the last sixty years in anything like totally complete form. But it may also be said that many of the titles listed in the Psychological Abstracts or the previously published Psychological Index are not primarily psychological but are more or less propaedeutic to psychological research in such fields as statistics, physiology, neurology, genetics, psychiatry, sociology, anthropology and education.

With the development of psychological research and the increase of psychological knowledge, the fields and special problems in which psychologists are interested, have increased enormously during the last several decades. Much work in psychology is still being done which is of purely theoretical interest. There is an enormous increase of the amount of experimental work which is of interest for itself and which also has theoretical implications. But the greatest increase of interest, as represented by the publications of psychologists, has been the ever widening and newly demarked fields in which psychology has been applied to problems of human welfare. One may mention the fields of clinical psychology, of educational psychology, of vocational psychology, of the applications to psychiatry, to sociology and social welfare, to industry and business to indicate the very wide interests of psychologists and the variety of fields in which they have been making major contributions.

On the other hand, it is fortunate for psychologists that the pattern for the publication of research has been largely in the journal literature and in old established series of monographs rather than publication in book form. It is fortunate for the facilities at the University of Pennsylvania that the Department of Psychology was established early in the history of the experimental period, so that the library has subscribed to all of the older psychological journals from their beginning and also has subscribed to most of the important psychological journals published in English, German and French as they have been founded. Hence, with certain notable exceptions of a few recent journals, the library has complete and bound runs of practically all of the important psychological journals printed in these three languages. It must be stated that there are some serious gaps in some of these journal runs, due to loss, destruction, etc., but the loss of this sort for psychology has been certainly no greater than that in other fields of research. The library has not subscribed to a few recently established journals published in German, Italian, Russian, Polish, Roumanian, Chinese, Japanese and the Scandinavian languages but, in our opinion, these new journals are less important partly because of the content (as estimated from English abstracts) and partly because of the difficulty of finding anyone who can read in these languages. Professor Fernberger has published some recent studies which show, in an apparent wave of nationalism, that the number of papers published in languages other than English, German, French and Italian have increased very considerably in the last ten years and that before this time, the number of titles in psychology printed in other than these four principal languages was very small indeed.
The General conclusion may be made that facilities exist at the library of the University of Pennsylvania which are adequate so far as the strictly psychological literature is concerned. This is especially true when one considers that certain of the gaps in our own library, especially those in recently established German journals, is adequately supplemented by facilities at Bryn Mawr College and especially at Swarthmore College, where the special interests of certain individuals in that department have made this literature completely available.

The situation is different in regard to psychological books which might be an aid in psychological research and study. The library is well equipped with books dealing with psychological systems before the beginning of the experimental period. Most of these books are to be found under the classification of philosophy but such shelves contain practically all of the books in any language which contributed to any great extent to the early development of psychological system and theory. We also have an adequate supply of books of major interest to psychology which were published early in the experimental period, down probably to the year 1920.

During the last twenty years, we have not been so adequately supplied with books either of general psychological interest or books dealing with special problems. The reasons for this situation appear based on at least three influences: (1) great increase in the number of books published (2) lack of funds and (3) the publication of many books of highly specialized content some of which did not interest any particular member of the staff or any graduate student at the time of publication or since publication. Considering the funds available, the effort has been to buy books of original content (rather than secondary sources) of either general systematic importance or in some special fields which was of research interest to some member of the research group. We have been somewhat foiled in even this selection because a certain amount of the funds available have been, of necessity, applied to the purchase of "reserve" copies of books of secondary source material which must be supplied for reading of undergraduate students in our courses in psychology. A second item, which we have hoped to cover by the purchase of books, has been a number of "handbooks" which have been published on special phases and fields of psychology during the last years. Our selection of such handbooks has been perhaps more adequate than those of initial report, mentioned above, simply because there have been far fewer handbooks published. Except for reading material for undergraduate students, mostly kept on reserve, there has been little attempt to keep up with new secondary sources published in book form of a general nature. Those secondary sources which have been purchased, deal largely with the treatment of some special fields of psychology, of interest to certain special members of the department. Hence we have a reasonably adequate collection of books in the field of the simpler conscious processes and the so-called higher mental processes, while we are much less adequately supplied with books dealing with problems of reaction. There is adequate reference material for clinical psychology in general and for the special fields of speech correction, educational guidance, vocational guidance and personnel from the more clinical point of view. We are less adequately supplied with books in the general field of social psychology which now seems to be developing rapidly.

It must be pointed out that many of the deficiencies in the general Library are supplemented by books and periodicals in special libraries about the university campus. Of special mention are the following:

Penniman Library - Educational Psychology
Medical School Library - Physiology, neuroanatomy and psychiatry
Lippincott Library - Industrial and vocational applications including advertising, etc.
Certain phases of social psychology as criminology, etc.

University Museum Library - Certain phases of social psychology and psychological linguistics.

Books in the Main Library listed under
Philosophy (Early psychological systems and some recent theories) and Anthropology (Certain phases of social psychology).

In order to indicate, in a more objective manner, the adequacy of certain specialized fields on which we have information at hand, the following statistics are given. Some years ago, Dr. Robert A. Brotemarkle, of our department, obtained help from student sources to list the library call numbers opposite titles in two large bibliographies for those items in the possession of the library. These bibliographies may be considered quite adequate and most complete for these special fields for the date of publication. These are the special fields which Professor Brotemarkle is especially interested in from the points of view of research and graduate instruction. The bibliographies are:


Both fields are rather broad and include titles drawn from general and theoretical psychology, experimental psychology, clinical psychology, tests, educational and social psychology and hence together they may be considered a rather wide sampling of the general field. No effort has, as yet, been made to determine how many of the gaps in our own collection might be filled by materials available in such libraries as those at Bryn Mawr College, Swarthmore College, the College of Physicians and, in addition, other collections in this area. From a knowledge of these other collections, the authors of this report are certain that some of these gaps can be filled. Nor has there been any effort to determine how well we are supplied with materials published in these fields after the publication dates of these two bibliographies.

Roback has "starred" what he believes to be the most important 500 of the titles listed. The breakdown of starred and unstarred titles gives the following statistical table:

<table>
<thead>
<tr>
<th></th>
<th>In U. of P. Library</th>
<th>Not in U. of P. Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starred</td>
<td>291</td>
<td>209</td>
</tr>
<tr>
<td>Unstarred</td>
<td>1,041</td>
<td>1,697</td>
</tr>
<tr>
<td>Total</td>
<td>1,332</td>
<td>1,906</td>
</tr>
</tbody>
</table>

Hence the university library contains 47.6 percent of all of the titles listed by Roback. We possess 58.2 percent of his starred titles and only 38.0 percent of his unstarred titles. Further significance is given to these figures by a description of Dr. Roback and the nature of his bibliography. Roback is noted for his thoroughness, exhaustiveness in bibliographical work and for his historical approach. Inspection indicates that many of the missing titles, both in the starred and unstarred lists, have to do with very early publications in characterology and the like and are purely of historical interest and these titles would be of little use to the student or research worker except for their historical interest.
A further breakdown of the 209 starred titles missing from the university library indicates the following:

Journal entries ---- 98  
Books -------------- 111

Attention is called to the fact that the first figure refers to journal entries and not to missing journals. The number of journals in which these entries are found is very much less, of course, than the number listed.

Of the total of 2,183 titles listed by Cowley, one finds the following statistics:

In U. of P. Library ----------- 1,801  
Not in U. of P. Library -------- 382

Hence 82.5 percent of all of the titles listed by Cowley are found in our own university library. It should be noted that the field of personnel is a much newer field than that of character and personality and also that it contains much more material found in the standard periodical literature of psychology. A survey would indicate that many of the missing titles from both lists are in obscure proceedings or in publications of obscure societies many of which are European. And again, one is reminded that these statistics refer only to the items known to be in the University of Pennsylvania Library and that many items could be added if we had the same information for other libraries in the Philadelphia area as a whole.

The sampling of another field for which it is known that the University of Pennsylvania Library is particularly strong is possible because of the publication of a bibliography by an acknowledged specialist in that field, namely, the field of human learning. The reference is:


The bibliography is a selective one because the total number of titles in this field is enormous. Professor McGeoch has selected the 1,200 titles which he believes are the most important.

The resources in the University of Pennsylvania Library are as follows, with a breakdown of books and monographs in one category and of journal articles in the second category. This gives the following table:

<table>
<thead>
<tr>
<th></th>
<th>Books &amp; Monographs</th>
<th>Journal Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number in bibliography</td>
<td>135</td>
<td>1,065</td>
</tr>
<tr>
<td>Number in U. of P. Library</td>
<td>106</td>
<td>1,049</td>
</tr>
<tr>
<td>Percent in U. of P. Library</td>
<td>78.5</td>
<td>98.7</td>
</tr>
</tbody>
</table>

These results indicate again the superiority of the Pennsylvania collections for psychology as regards journals as compared with books. One of the writers of this report has done considerable work in this field and he can state that of the twenty-nine missing books, fourteen are known to be on the campus in a private collection and that, of the sixteen missing journal items, four are known to be on the campus in the same collection. Thus it is known that only twenty-seven of the 1,200 items are missing from the General University Library plus this private source (which is available for the use of graduate students and others) and hence that there are available more than 97.8 percent of the total number of titles in the bibliography.
A breakdown of the sixteen missing journal items gives the following analysis for languages:

<table>
<thead>
<tr>
<th>Language</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>8</td>
</tr>
<tr>
<td>German</td>
<td>2</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>East Indian</td>
<td>1</td>
</tr>
<tr>
<td>Swedish</td>
<td>1</td>
</tr>
<tr>
<td>Japanese</td>
<td>1</td>
</tr>
</tbody>
</table>

In evaluating these results, however, two factors must be borne in mind, namely, that human learning is a field in which the collections of the university library are unusually strong and, secondly, that this strength consists in the relatively large number of titles found in the journal literature rather than in books and monographs.

Another source of printed material available at the University of Pennsylvania are the private collections of books, bound journals and offprints belonging to Professor Samuel W. Fernberger and Professor Morris S. Viteles. The Fernberger collection has been deposited by him in the graduate seminar room on the third floor of the Hare Building and has been made available in that place for the use of members of the staff and of graduate students. The collection comprises approximately 900 books, current runs of some thirty journals (many of which are complete runs from the founding of the journals) and close to 10,000 reprints and offprints. In a number of cases, the journals in this collection do not duplicate those found in the General University Library while, in most cases, the duplication of journals found in the Main Library is exceedingly helpful for research workers who are sure to find those items in the collection immediately available for use. The Fernberger Collection has an author's index and a cross reference subject index. The Viteles Collection comprises about 400 books dealing primarily with various phases of applied and industrial psychology. They are deposited in his office in College Hall and are available for use of the members of the staff and graduate students.

Conclusions

The library facilities available at the University of Pennsylvania are reasonably adequate for the study of psychology in any of its fields of research or the various aspects of its application to human welfare. This is due to the fortunate pattern of publication in psychology to print research articles in journals and established monograph series rather than as books. Facilities for this journal literature, although not complete, is entirely adequate in the Library of the University of Pennsylvania and is even more adequate when supplemented by known materials in the libraries of neighboring institutions.

Facilities for materials appearing as books are less adequate than those available as periodical literature but fortunately, on the whole, such materials are relatively less important for the study of psychology. The weakest part of our collections would appear to be books particularly those published during the last ten years. Many of these may be supplemented by known copies in neighboring institutions.

As an example of the adequacy of our own and of neighboring collections, it can be reported that no research worker has had to send for the loan of a book or periodical from some other institution, outside the Philadelphia metropolitan area, more than six to ten times during the last half dozen years.

One difficulty with study in psychology is the way in which books, which may be of interest to psychologists, are scattered about the campus. Most of them are in the Main Library but many are in the Lippincott, Penniman and University Museum libraries and in the Library of the Medical School.
Another difficulty has to do with listings of psychological books under the Dewey Decimal System by which many psychological books – or those of primary interest to psychologists – are listed under other headings.

General Conclusion and General Estimate

Of the library facilities known to the authors of this report, those available in this area are superior to the collections at Princeton but inferior in both magnitude and content to those at Harvard and Yale. Certainly the collections at the University of Pennsylvania for the study of psychology are markedly superior to those in any other institution in the Philadelphia metropolitan area.

ANTHROPOLOGY

By A. I. Hallowell

Viewing the resources available broadly and including in our appraisal the University Museum Library, as well as that of the Wistar Institute, there is, on the campus itself, adequate material for the pursuit of literary research in almost all branches of anthropology. If we add to these libraries the facilities afforded by such institutions as the American Philosophical Society, the Academy of Natural Sciences, the Commercial Museum and the College of Physicians, the local resources available are further enhanced.

For purposes of more detailed appraisal it will be convenient to subdivide general anthropology into its recognized branches, viz.: (1) physical anthropology, (2) ethnography, (3) archaeology, (4) linguistics, (5) folk-lore.

Physical Anthropology. Since physical anthropology, as such, has never been established at the university there has been no incentive for building up the resources of the library in this particular field. Nevertheless a number of standard works are available and the Wistar Institute publishes one of the outstanding periodicals in this field, the American Journal of Physical Anthropology. Other relevant periodicals are to be found in the Wistar Institute Library but not in the university library itself. The College of Physicians also contains valuable material, as does the Academy of Natural Sciences.

Ethnography. Under this heading it will be convenient to proceed by continental divisions. The most important periodicals in this general field such as the American Anthropologist, Anthropos, Journal of the Royal Anthropological Society, Zeitschrift für Ethnologie and so on are available.

North and South America. Both the General Library and the University Museum Library are rich in materials pertaining to native Indian life in all its aspects. Among other source materials of note are the publications of the Smithsonian Institution and the Bureau of American Ethnology, issued for almost half a century. Various museums also have published important series (e.g., The American Museum of Natural History, the Museum of the American Indian: Heye Foundation, etc.) We also possess the recent publications of several university departments which deal almost exclusively with the American Indians, as well as the longer series of the University of California. The Journal of the Société des Américanistes de Paris and the Proceedings of the International Congress of Americanists also may be mentioned.

Africa. For this continent the source material is fair but less rich than for the Americas. But the General Library and the University Museum Library together contain most of the standard monographs in English, French and German. Among special periodicals, Bantu Studies is available, in part, and Africa.
Oceania (including Australia). The most essential books and periodicals (eg., Oceania and the Journal of the Polynesian Society) are at hand, although there are many gaps which could be filled.

Asia. Material on the aboriginal people of this continent especially for northern Asia, is good, although a number of important volumes are in the Commercial Museum Library.

Archaeology. (outside the classical Mediterranean, Near East, Far East and Egypt). Source material dealing with the results of excavations in Middle and South America are rich on account of the specialized research done in this field by the University Museum and the interest of Dr. D. G. Brinton. In the field of European prehistory, primary sources are often lacking, especially books in European languages. But the library contains the monumental encyclopaedia of Ebert, Reallexikon der Vorgeschichte, and other authoritative compilations and surveys of the data. The same holds true for Africa (outside Egypt) where archaeological excavation is being pursued with necessary vigor. In other parts of the world occupied by aboriginal peoples, archaeology is still in its infancy.

Linguistics. In this field mention should be made of the Daniel G. Brinton Collection in the University Museum Library which comprises outstanding source material representing the early period of the study of American Indian languages. By and large, the local resources available for study in this field far surpass that of any other in the linguistic division of the subject. In fact the textual material that has appeared in the publications of the American Ethnological Society, in those of the Bureau of American Ethnology and in the International Journal of American Linguistics is immense. All of this is available locally. We are relatively weak in comparable material from Africa and Oceania; the Mitteilungen des Seminars für orientalische Sprachen being, however, at hand.

Folk-lore. Most standard compilations and many collections of the mythology and folk tales of native peoples from all over the world are available. For the Americas much of this is in text (see above) or has been published in the Journal of American Folk-lore. The English journal Folk-lore is available.

THE BRINTON LIBRARY

By J. Alden Mason, Curator, American Section, University Museum.

Dr. Daniel Garrison Brinton (1837-1899) was one of the founders and leaders of the science of anthropology in this country; he is often considered one of the three pioneers. While his interests and knowledge covered the world, he early in life became especially interested in the aborigines of America and devoted the greater part of his life to their study; he was one of the first, if not the first, to term himself an "Americanist". Also he particularly stressed the necessity of the study of American Indian languages, and a large part of his published work refers to this topic. Because the natives of Mexico and Central America achieved a higher grade of culture than those of the regions to the north, but especially because there is a much larger body of literature upon them, his interests centered on this region.

Dr. Brinton occupied the post of professor of American archaeology and linguistics in this university from 1886 until his death. The American Philosophical Society, of which he was a prominent member, held a memorial meeting on January 16, 1900, at which delegates attended from twenty-six learned societies to which he belonged. The published proceedings of this meeting attest the esteem in which he was held. Long obituary notices were also published in Science, the Journal of American Folk-lore, etc., generally giving his bibilography...
Dr. Brinton's library naturally reflects his interests. Though covering all phases of anthropology throughout the world, it is especially strong upon America and the native languages of America. With his wide personal acquaintance with foreign scholars of his time he secured almost all the anthropological works published during his lifetime, especially many small articles published in out-of-the-way places. To these he added many or most of the valuable original sources of Colonial days. Several times he purchased the entire libraries of deceased colleagues so that his library contains valuable items and manuscripts from the libraries of Brasseur de Bourbourg, Pinart, etc. Books and manuscripts too rare or valuable to be sold he often had copied by an amanuensis. The largest and most important lot that Brinton thus secured consisted of the papers and books of Dr. Carl Hermann Berendt, later to be described.

A few months before his death in 1899 Dr. Brinton presented his library to the University of Pennsylvania Library. The librarian reported that it consists of 4,098 volumes. Of these, 162 are bound volumes of pamphlets, of which there are apparently over 2,000. The library is housed in the library of the University Museum where it occupies about 180 feet of shelf space. It is kept separate from the other books, and catalogued with a special numerator "Br", but otherwise the books are numbered in accord with the usual system of library classification. As no endowment fund was given, the Brinton Library is static and not increased by accession. The rest of the University Museum Library, however, contains anthropological works along the same lines, to which accessions are constantly being made, both of newly-published and older works, and special efforts are made to secure works in the field in which Brinton was pre-eminent, that of American languages, and especially the languages of Middle America. Thus, frequently, the University Museum Library possesses two copies of the same work on different shelves, one in the Brinton Collection, catalogued with the exponent "Br", and another with the exponent "Mu", but otherwise catalogued with identical numbers. The most valuable works, especially the unbound manuscripts, are kept in the museum safe.

In the Guide to Depositories of Manuscript Collections in Pennsylvania, compiled by the Historical Records Survey and published as Bulletin No. 4 of the Pennsylvania Historical Commission (Harrisburg: 1939) the reference on page 77 to the Brinton Collection is as follows: "109 original MS. volumes plus copies, facsimiles, printed and type-written matter relating to Central American linguistics and ethnology, containing representations of more than forty languages and dialects, 1529 to the latter part of the nineteenth century".

Though no catalog or extensive description of the Brinton Collection has ever been published, Dr. Brinton himself prepared an annotated catalog of his most valuable accession, the Berendt Linguistic Collection. This was published after Brinton's death in the Bulletin of the Free Museum of Science and Art (now the University Museum), II (1900), 203-234. Dr. Carl Hermann Berendt (1817-1878) spent the greater part of his life studying the languages of Middle America, especially those of the Mayan linguistic group. He secured many rare original manuscripts and rare published sources, and laboriously copied by hand a great many others that he was unable to purchase.

There are 183 items mentioned in the "Catalogue of the Berendt Linguistic Collection", of which apparently about 140 are manuscripts. About sixty of these are originals; the others are hand-written copies of rare sources, or compilations from sources, both made by Berendt. It is difficult to describe these, as they range from the famous Motul Maya dictionary of some 2,500 pages to vocabularies of a few pages or words, collected by Berendt or for him, or copied by him.
from other manuscripts, rare sources, or culled from the general litera-
ture. The languages covered are Maya, Cakchiquel, Kiche, Tzutuhil, 
Pocomchi, Kekchi, Huastec, Cholti, Mam, Pocomam, Ixil, Tzental, Zotzil, 
Chaneabal, Chinantec, Mixe, Zapotec, Zoque, Chiapanec, Huave, Popoluca, 
Chontal, Xinca, and the various languages of Honduras, Nicaragua, Costa 
Rica, Darien and Panama. On all but the first three the material is of 
purely linguistic interest: vocabularies, dictionaries, grammars or 
"artes", sermons, catechisms, doctrines and Scriptures, and a few 
dramas and other secular compositions, in the native tongues. The 
three other most important languages comprise about one-third of the 
items, and include, in addition to the same linguistic material, very 
important old source material on history, the calendar, religion and 
ceremonies, and medicinal recipes and pharmacopoeia, some of it going 
back to the time of the Spanish Conquest, or in the case of traditional 
historical material, even before. The collection even includes a large 
manuscript by Berendt on the Spanish dialectology of Nicaragua. Some 
of the languages above mentioned are entirely extinct and a number of 
others are on the verge of extinction; a few are known almost exclus-
ively from the material in this collection. The Berendt Collection 
formed the basis for a great deal of Brinton's scientific work, and 
many of his publications, but in very few cases was the source ma-
terial published in toto, and generally only digested or excerpted. 
Since Brinton's day almost nothing has been done upon it, and it re-
 mains a mine of valuable information.

In the Berendt Collection are three large manuscript Maya diction-
aries. One of these, the Motul, consisting of more than 2,500 large 
quarto pages, is a copy of the original manuscript dictionary, but more 
useful than the original inasmuch as throughout his life, by reason of 
his long study of the language, Berendt corrected the many errors of 
the original, and added to it, using ink of different colors so that 
the exact text of the original should not be interfered with. Another 
very valuable item is a copy of the Book of Chilam Balam of Chumayel. 
Among the other manuscripts deserving special mention is a 21,000 word 
vocabulary of the Zoque language, copied from a manuscript in private 
possession. Parenthetically it may be noted that the originals of a 
great many of the manuscripts which Berendt copied are lost, of un-
known whereabouts, in private possession, or otherwise unavailable to 
students.

There are also a number of manuscripts in the Brinton Collection 
which were not part of the Berendt Collection, though far fewer in 
proportion to the published books. Most of these were studied and di-
gested by Brinton but few published in toto. Several of the latter, as 
well as some of the Berendt manuscripts, were published by Brinton in 
his "Library of Aboriginal American Literature" (8 numbers). Among the 
Brinton manuscripts thus published are Rafinesque's original of the 
Walam Olum (The Lenape and their Legends), and the original manuscript 
of the Annals of Xahila or Memorial de Tecpan Atitlan (Annals of the 
Cakchiquels).

The Brinton Collection is also unusually strong in rare works on 
the languages of the other areas of America. Toward the end of his 
life Brinton became very much interested in the languages of South 
America, accumulated books, manuscripts and notes on these, and pub-
lished a number of researches upon them.

Thus in the field of American linguistics the Brinton Collection 
is one of the outstanding collections in America, if not the most im-
portant.
ECONOMICS:

ECONOMIC THEORY

By The Department of Economics

The following report on the facilities for research is limited by the following factors:

The other departments of the Wharton School, such as Finance, Transportation, etc., are making separate reports. Hence, information on material which cuts across these applied fields and is related to economic theory is not contained in the report.

While two studies of the adequacy of research materials in the university libraries have been made, there is no complete study upon which a final answer to the question of adequacy of our research facilities can be made. A study of the economic literature in our libraries was made by Dr. Raymond T. Bye about 1927. This study covered in the main the books in economic theory published prior to 1910. An extensive bibliography was prepared covering the following subjects: general economic theory; economic history; history and criticism of economic theory; money and banking; public finance; international trade; labor; socialism, communism, anarchism, etc.; monopolies; insurance; miscellaneous economic problems; political aspects of economics; government publications; references and bibliographies.

Dr. Bye found that more than 90 percent of the volumes listed in this extensive bibliography were available on the campus. There are, therefore, available as research materials practically all of the works of the great authors prior to 1910. This includes works in German, French and English.

Recently a second sampling study was made to test the adequacy of our library facilities in the field of economic theory. Dr. Karl W. H. Scholz checked the volumes in our libraries against those listed in the bibliography of Edward Chamberlin's The Theory of Monopolistic Competition. Since this is a recent significant volume on economic theory containing 159 references, it was thought that a quick check of the adequacy of our resources could be made this way. This study showed that of the 159 titles listed a total of 130 are available in the Lippincott Library or the Main University Library. No check was made to see if the missing references might be available in some other library on the campus. The studies by Dr. Bye and Dr. Scholz would therefore indicate that our facilities in economic theory are rich in sources but that there are certain gaps which should be filled in to complete our collections.

While no definite study has been made of the strength of our materials in books published in the past decade, it is probable that such facilities are less adequate than for the publications of the previous 150 years. However, our collections contain practically all of the standard works of the past decade. For example, Paul H. Douglas' important Theory of Wages is available but a number of less important books in the same field could not be found in the library.

In addition to the two studies mentioned above, each faculty member of the department has been consulted in attempting to estimate the adequacy of our resources in the field in which he has a special interest. The following statement by specialized fields is the result:

Economic Theory

In the foregoing statement, the subject of economic theory was treated at length, but it can be added that Dr. Bye believes that we
have "an unusually promising nucleus for further expansion along lines that would encourage theoretical activity". He points out that the deficiencies of materials in the past decade can be remedied, since most of the works which are lacking are still available for purchase.

History of Economic Thought

The report from Dr. S. H. Patterson on our resources in the field of the history of economic thought shows that these are among the best available in the United States. Our collections in this field begin in the eighteenth century and extend up to the present. We have a number of rare books, long since out of print, and a number of editions of such authors as Adam Smith and David Ricardo. The collection is particularly strong in pamphlets. In the 1870's the library received a gift of 7,000 pamphlets in political economy from the Library of Stephen Colwell. This was supplemented in the 1880's by a gift of 3,000 pamphlets in political economy from the library of the American economist, Henry C. Carey. This collection of 10,000 pamphlets, known as the Colwell Pamphlets in Political Economy, is catalogued separately and also included in the general university catalogue. About 1,800 of the pamphlets have been abstracted individually and these abstracts are available on the campus. Needless to say, this is a source of research material which is of great importance. An indication of the rarity of some of these pamphlets is evidenced by the project of the Johns Hopkins University Press, which has issued from time to time "Reprints of Economic Tracts". Some of these are reprints of especially valuable tracts to be found upon the shelves of our library. Mention might also be made of the extensive collection of Frankliniana. Franklin, of course, was not an economist, but in so far as he spoke of economic matters, a great deal of material would be available on his economic thought.

Theory of Consumption

Dr. W. C. Plummer, who is particularly interested in the field of consumption theory, reports that we have a large amount of statistical and other material in this field published by government and private agencies. We also have a collection of the standard works in this field such as those written by Patten, Veblen, Dickinson, Kirk and others. We also have considerable material on consumer credit, a field which is developing rapidly at the present time.

International Economics and International Financial Theory

Fortunately the equipment in this field in the libraries of the University of Pennsylvania is quite satisfactory. Reference is made, in reports from other quarters to the vast amount of material which deals with international finance and international trade. Specific attention should be called also to the valuable collection in the library of the Commercial Museum, which it would be difficult and perhaps undesirable for the University of Pennsylvania to duplicate in full.

In our own libraries (with occasional omissions) there are available the invaluable documents which are published by the Economic and Financial Section of the League of Nations, and also fairly complete collections of the reports and documents of the other international conferences since the end of the World War, and the reports of such bodies as the Reparation Commission and the Allied organizations which have functioned in this same period. Taken as a whole and in conjunction with such other materials as are to be found, for example, in the library of the Commercial Museum, our resources are good. Such gaps as exist have resulted from a failure to include a good many of the special studies that have been made in the field in recent years.

Reference should be made finally to the fairly complete collections of important foreign journals of value in this field, among which

**Evaluation and Reform of Economic Institutions and Systems**

Dr. Paul F. Gemmill, who has a special interest in these fields, reports that our library collections include most of the older important works dealing with economic reform. More recently many important contributions in these fields have had to be omitted from our acquisition lists.

**Periodicals**

Our library facilities contain, for many years back, the standard periodicals in the field of economic theory. This includes such publications as the *American Economic Review*, *The Economic Journal*, and similar established periodicals. Most of these are available from the first number.

**Lippincott Library**

Special mention must be made of the resources of the Lippincott Library which is specialized as a reference library in the field of economics and business. In this library are contained all such standard sources as those published by the National Bureau of Economic Research, the National Industrial Conference Board, the Brookings Institution, and the League of Nations economic publications. It also contains periodical material covering a wide range of subjects. This would include, for example, the reports of the Department of Overseas Trade of Great Britain, the quarterly publications of the Reichskredit-Gesellschaft, and the weekly publication of the German Institute of Business Research, as examples. There is a very extensive but not inclusive collection of United States publications. This would include a nearly complete collection of Department of Commerce publications, all the statistical publications of the Department of Agriculture and nearly all of the reports of the Treasury Department. The other government publications, which are not primarily statistical, are to be found in the Main Library.

It should be noted that the Lippincott Library performs a unique function in uniting research in the theoretical and practical. The inter-relations between the theoretical and the applied departments of the Wharton School are immensely facilitated by the ready services of the library. Much could be said in commendation of the Lippincott Library but it will not be necessary here to do more than indicate the character of its services in the field of economic theory.

**ACCOUNTING**

By J. Lockwood and O. S. Nelson

University instruction in accountancy is of recent origin. Forty years ago institutions of higher learning in the United States were generally without courses in accounting. Less than half a dozen institution offered the subject and only in its most elementary form. Today, accounting subjects are firmly entrenched in the curricula of collegiate schools of business and are also offered in colleges of liberal arts, in engineering courses of study and in law schools in the universities. Its growth as a course of study in the undergraduate schools has been phenomenal in this period. Instructors in accounting, practitioners and graduates of these schools have contributed unstintingly to the development of a literature of accountancy and to the development of an honorable profession. Within the last decade demands have been made by practitioners, by teachers and by students for the establishment of accountancy courses on the graduate level. Many
universities have responded to this demand, one institution, Columbia University, having established a Graduate School of Accountancy, and another the University of Illinois becoming this year the first university in the United States to grant a Doctor of Philosophy degree in accountancy.

The development of university instruction in accounting is an outgrowth of the tremendous strides made by trade and industry in the latter half of the nineteenth century and in the twentieth century to date. The exacting requirements of modern business have been largely responsible for the expansion of bookkeeping into modern accountancy and the latter in turn has contributed to the further growth of complex business entities.

CHARACTERISTICS OF ACCOUNTING BIBLIOGRAPHIES

Before attempting an appraisal of resources for the study of accounting at the University of Pennsylvania libraries the relation of accounting and the activities of business entities should be understood. Accounting activities are concerned not only with the recording of transactions, but with the measurement, summarization and the control of all of the financial, manufacturing and distributing activities of business organisms. Hence accounting data are co-mingled with other business data. Reference to accounting, to its purposes, its problems and to its accomplishments is found in trade bulletins, pamphlets and periodicals and in books on allied business activities. Much of its material of interest to the research student is catalogued under titles other than accounting or bookkeeping. References are found under auditing, budgeting, corporations, court cases, distribution, English history, finance, industrial management, insurance, law, management, systems, trade and commerce, transportation, types of business organizations, such as banks, railroads, and so on. It should not be forgotten that Philadelphia is a center of almost every conceivable type of business, of social, and of religious activity producing almost every conceivable type of accounting problem. Indeed Philadelphia industries furnish a rich laboratory for the research student interested in securing primary accounting data of the most desirable kind.

HISTORICAL MATERIAL

Modern accountancy has its roots in bookkeeping, the history of which dates back to antiquity and parallels the history of trade and commerce and of civilization itself. American accounting procedures are an outgrowth of the methods of our English Colonial ancestors. The subsequent developments of cost accounting and auditing were brought to America by the accountants of England, whose investors largely financed the development of the continent in the nineteenth century. Hence much of historical interest to accountants will be found in source materials of English history.

The university library is a vast storehouse of this historic material. The Exchequer Rolls, Accounts of the High Treasurer, Calendar of Treasury Books, Annual Reports of Deputy Keepers of Public Records, the Pipe Rolls containing accounts of the kings revenues, accounts of royal household expenses, manorial accounts, etc., which appear in publications of British societies are merely a few of the sources. Of historical interest are old textbooks of which there are but few on early bookkeeping or accounting in our libraries. No collections of old bookkeeping texts such as the Montgomery Collection at Columbia University are available in this vicinity. In our libraries there are fewer than a dozen of the several hundred bookkeeping texts mentioned in Bentley's Bibliography of Works on Accounting by American Authors, 1796 - 1900. A copy of Richard Dafforne, The Merchant's Mirrour, or Directions for the Perfect Ordering and Keeping of His Accounts, published in 1651 and several other old texts on bookkeeping are avail-
able in the Biddle Law Library.

Very few accounting books of an historical nature are available at the Philadelphia Free Library. The library of Swarthmore College contains the Stout manuscript records and the Richardson manuscript records, several boxes of them being available. In the Friends' Historical Library are some old account books of meetings.

The library of the Pennsylvania Historical Society is exceedingly rich in account books of the Colonial Period. Included therein are the ledgers of Thomas Coates and estate, 1705-1726; the Isaac Norris account books, 18 volumes, 1709; William Bird's ledger, 1740-1747; Henderson accounts, 24 volumes, 1779-1809; Philadelphia Merchants' account book, 1694-1698, and many others.

The Library Company of Philadelphia contains a few old bookkeeping texts, some of which are indexed under arithmetic, and quite a stock of old books on trade and commerce pertaining to the Colonial Period. The library has the Smith family ledgers, and also the original entry books and ledgers of the Aikens printing business, 1771-1820.


The libraries of the University of Pennsylvania are deficient in foreign historical material and contain none of the foreign language books and pamphlets to which reference is made in one or more of the five historical books listed above.

The discussion of historical material is now concluded. The development of the factory system, the emergence of the corporate form of enterprise, the development of bankruptcy statutes in the nineteenth century and the passage by Parliament of the English Companies Acts mark the transition from the simple methods to those of modern accountancy.

TEXT MATERIAL ON ACCOUNTING

Books on general accounting and its various subdivisions which are available in the university libraries, including the personal libraries of the accounting department staff, may be said to be adequate for teaching purposes but wholly inadequate for purposes of research. The University of Pennsylvania Library has a representative collection of compendiums, dictionaries and encyclopedias on accounting for the period 1900-1910 and a number of books published in the following ten years. It is deficient, however, in material pertaining to the early years of modern accounting. The Lippincott Library and the Philadelphia Free Library contain very good collections of textbooks, many of which, however, are duplicates. Using Bentley's Bibliography of Works on Accounting by American Authors, 1900-1934 as a guide, it can be stated that there is a real dearth of secondary material available in the libraries, particularly from 1925 to date.

Very few books by authors, other than American, are available. There are several texts written by English accountants. Foreign language texts are entirely lacking.
ACCOUNTING PERIODICALS

A representative list of accounting periodicals in English is available for the use of undergraduate and graduate students. Subscriptions to many of them have been entered in recent years and consequently the files of accounting periodicals are very incomplete. Complete files of the Journal of Accountancy, 1905-1939, the Accounting Review 1926-1939, National Association of Cost Accountants, 1919-1939, the Certified Public Accountants' Magazine 1922 to 1939 exist on the campus. The file of twenty-three volumes, 1899-1920 of the Scottish publication, the Accountant's Magazine, is supplemented by a collection in the Philadelphia office of Lybrand, Ross Brothers and Montgomery, dating back to 1915. The Accountant, an English publication, is available in the university library, volume 38-100 from 1909-1939. The Lybrand Ross Brothers and Montgomery file is complete from volume 19 beginning in 1893. We have no French, German, Italian or other foreign language magazines devoted exclusively to accounting.

The Biddle Law Library has practically a complete file of all law reviews of the United States, England and its dominions. These are of inestimable value to accountancy students researching on corporation, taxation and governmental aspects of accounting.

Thousands of articles on accounting are indexed in the Accountant's Index, 1920, and its supplements, 1920-1935, from about 2,000 legal and business periodicals. Several hundred of these periodicals are available in the university libraries. No attempt has been made to correlate the periodical coverage and the articles indexed. Many of the periodicals not available on the university campus can be secured at the Philadelphia Free Library, the Commercial Museum and other libraries in the metropolitan area.

GOVERNMENT PUBLICATIONS AND OTHER SOURCE MATERIAL

A great deal of accounting research data emanates from federal, state and local governmental units and agencies. These data consist of legislative enactments, court decisions, commission regulations and releases, executive orders, etc. In the public and private libraries of the Philadelphia metropolitan area may be found nearly all of this material. The Biddle Law Library, for example, has complete files of "Federal Decisions" and "Statutes", almost complete files of "Colonial Statutes", a remarkable collection of laws and decided cases of England and its colonies and a fairly complete file of other foreign statutes. In the Lippincott Library are available various services and publications pertaining to the laws and regulations of both federal and state governmental units. Among these are the Alexander Federal Tax Service, the Commerce Clearing House Services, the Standard Federal Tax Service and the Pennsylvania Tax Service, the Board of Tax Appeals Decisions, the Cumulative Tax Bulletins, the American Federal Tax Reporter, the Releases of the Securities and Exchange Commission, the Codes of Fair Competition and selected information on industrial and other companies collected on Works Progress Administration projects (not complete). Some of this material is also available in other libraries. Reports and Account Classifications of the Interstate Commerce Commission, other federal commissions, and various state public utility commissions are available in several libraries although none has a complete file. The Lippincott Library has a fairly complete file of insurance company reports published by the insurance commissioners of various states and some bank and building and loan association reports published by state departments of banking. Many financial reports and budget reports of federal, state and local governments are available in various libraries. In addition, the archives of many cities, boroughs, townships, and school boards are accessible to research workers.
In addition to the periodicals, there are numerous publications of accounting societies, etc., which are issued from time to time. Not all of these are available in the libraries surveyed, however. The Main Library of the university and the Lippincott Library together have complete files of such important publications as the Yearbook and the Monthly Bulletin of the National Association of Cost Accountants; the Yearbook, Bulletin and Research Releases of the American Institute of Accountants, the Papers and Proceedings of the Association of University Instructors in Accounting, and the Accountants' Index and its supplements. On the other hand, the files of publications of the Controllers' Congress of the National Retail Dry Goods Association, the Controllers' Institute, the accountants' societies of various states, the bulletins of the research bureaus of various universities and the reports of committees on accounting of various business associations are incomplete and these are not fully available in the libraries of the Philadelphia metropolitan area.

MATERIAL RELEASED BY BUSINESS AND SOCIAL ORGANIZATIONS

Important sources of accounting research material are the financial reports issued periodically by business establishments, religious societies, hospitals and organizations of like nature. The Main Library has many old financial reports of railroads, coal companies, etc. The Lippincott Library has a representative collection of financial reports of the leading industrial, mercantile and financial companies of the United States. Some of these reports date from 1900 but most of them from 1927. The Philadelphia Free Library has a similar collection of financial reports, which is more extensive and also includes reports of religious and other social organizations, but which likewise does not include many reports dated prior to 1927, except for some railroad reports and reports of social organizations for the nineteenth and early twentieth centuries. The Lippincott Library as well as some of the other libraries in this vicinity have complete files of "Poors'" and "Moodys'" manuals containing reports of industrial, financial and railroad companies. Hunts Merchants Magazine, the Commercial and Financial Chronicle and various rating reports also are available. The files of privately issued research pamphlets and house organs of accounting firms are incomplete, however.

ORIGINAL SOURCE MATERIAL

Needless to say, there are certain types of source material which are not available in any of the libraries in the Philadelphia metropolitan area. Chief among these are original reports presented by professional accountants to their clients, accountants' working papers, and original books and records of various enterprises. A small number of university libraries in other localities have built up collections of books and records of defunct business concerns and some attempts have been made to acquire collections of accountants' reports and accountants' working papers, but, for the most part, these types of accounting research data are unavailable in any libraries. It is felt that an attempt should be made to develop library source material of the types here enumerated as they are very valuable to students and research workers. At present it is necessary for those researching in accounting to gain access to data in the offices of business concerns. Much difficulty is experienced in this regard because of the confidential nature of the data. Material in the offices of public accountants is practically unavailable to researchers because of the professional relationship between accountant and client. The client's consent is necessary to gain access to accountants' reports and working papers. If library space is made available, a certain amount of data of the above types can be accumulated. Books and records of defunct concerns and accountants' reports and working papers of public and semi-public
ACCOUNTING

enterprises could no doubt be secured to start such collections.

CONCLUSIONS

Although this is but a survey, rather than an exhaustive study of the accounting library resources, certain definite conclusions may be drawn. For the general needs of undergraduate instruction, the library resources are adequate. For research purposes, however, certain inadequacies are apparent. Undergraduates in their research work find it necessary to seek some of their material in other areas. In the case of more extended research work on the graduate level our library resources are far from adequate.

CORPORATION FINANCE AND INVESTMENTS

By William E. Warrington

In considering the adequacy of our library resources for research in corporation finance and investments it will be convenient to consider the subject under four headings:

corporation finance, principles and practice,
corporate regulation,
corporate taxation,
security analysis and investment.

Corporation Finance, Principles and Practice

We are well equipped for research in this direction. Of unusual value in tracing corporate financial practice is the complete set of the *Commercial and Financial Chronicle* from volume 1, July, 1865 to date. In addition the Lippincott Library has bound volumes of the *Merchants Magazine* running back to 1835 and the *Bankers Magazine* and *Statistical Register* from 1858 to 1895 inclusive which contain valuable information for students of early business finance. Both of the latter sets are recent acquisitions from former private libraries and it is hoped that other files dealing with early business and corporation finance will come to our libraries. The general adaptation of the corporate form of organization to all types of business enterprise has occurred since 1850 so that we have some of the best material going back to that period.

The Lippincott Library also has a considerable amount of source material in the form of agreements, annual reports of corporations, articles of incorporation or charters, bonds of various types, corporate histories, leases, prospectuses dealing with security issues, and types of stock certificates. These materials are seldom found in libraries and are of great value in the study of corporate financial practice. We have the annual reports of a number of leading business and public service corporations going back a decade or two. It would be especially useful to students if we had many more complete sets of annual reports through which the financial growth or decline of corporations could be traced. The financial services are of use in this respect and our libraries are well equipped with "Poor's" and "Moody's" manuals covering railroads, public utilities, industrials, and banks and trust companies, running back to the beginning of each series of volumes.

Of particular value in studying corporate financial practice would be larger collections of corporate mortgages, collateral trust deeds, debenture indentures, voting trusts, voluntary trust agreements, preferred stock contracts, corporate by-laws, etc. In addition we could use a much larger number of the new form of prospectus under which securities have been marketed since the Securities Act of 1933. There
are a number of private collections in various Wharton School offices but they are fragmentary.

Our libraries are not lacking in good text material. All of the outstanding texts are here as well as books dealing with special phases and problems in corporate finance. Likewise our libraries contain complete files of economic and financial journals and proceedings of societies containing articles on special topics in finance.

Of particular value in research dealing with current corporate financial practice are the financial newspapers. The Lippincott Library receives the Wall Street Journal, Barron's Weekly and the New York Times among others. A file of bound volumes of the New York Times is complete from July, 1927 to date and in addition the New York Times Index covering the same period is maintained. To facilitate research work the library staff indexes newspapers and periodicals daily with reference to articles, tables, charts and maps of timely interest.

Corporate Regulation and Control

Our library facilities for research in this direction are excellent. When we consider the available material in the Biddle Law Library, the Main Library and the Lippincott Library, there is an excellent collection of both source and secondary material. All have substantial collections of annual reports of regulative bodies, both federal and state, dealing with public service corporations. We have the Reports and Decisions of the Interstate Commerce Commission and the Annual Report on the Statistics of Railways complete, as well as much of the interim statistics published by the commission for class one carriers. Regarding the annual reports of state public service commissions it might be desirable to avoid duplication by having each of the libraries procure the reports of different groups of states to the end that we have all on the campus.

For research in regulation of non-public service corporations we have the reports of the Federal Trade Commission, the Securities and Exchange Commission, as well as the reports of hearings of congressional and legislative committees prior to the passage of various regulatory acts. In addition the Main Library has a complete set of the Congressional Record and its predecessor reports (Congressional Globe, Congressional Debates, Annals of Congress) going back to 1789. A statement with respect to regulation of our banking system is given elsewhere in this report. The best of the secondary material in the form of texts, and monographs dealing with particular phases of regulation, are likewise here.

The presence in this area of a number of excellent law libraries, particularly the Biddle Law Library and the library of the Bar Association of Philadelphia in City Hall add tremendously to research in this phase of corporate finance.

Corporate Taxation.

For research in corporate taxation, the Lippincott Library is well equipped, particularly with respect to current taxation both federal and state. The cumulative loose-leaf tax services, the Standard Federal Tax Service and the Pennsylvania Tax Service of the Commerce Clearing House, Prentice-Hall Insurance and Tax Service, and the Alexander Federal Tax Service are received. A partial set of Proceedings of the National Tax Association is available, (1928 to date), and reprints of some of their important earlier studies. Our libraries are rich in secondary material dealing with this problem. The report of the Political Science Department on public finance will also appraise our facilities in this direction.
Security Analysis and Investment

We have on the campus the best equipped library in this area offering facilities for securities and investment analysis. In addition to "Poor's" and "Moody's" manuals covering various types of corporations for many years already referred to, the Lippincott Library subscribes to Moody's supplemental services which keep the latter file up to date. It also subscribes to Standard Statistics Corporation Records and Standard Trade and Securities Service. The Fitch Service was discontinued in June, 1939 because our committee felt that our finances did not permit duplication. If we had ample funds it would be continued. These are cumulative services with data supplied daily, weekly, monthly or at irregular intervals, the same services as those used by investment banking and brokerage houses. For use in conjunction with any or all of the services we have the information releases of the Securities and Exchange Commission and the listing applications of the New York Stock Exchange and the Stock Exchange Regulation Service of the Commerce Clearing House.

There are private financial libraries in this area which are superior to ours in a number of directions, particularly in those banking institutions which can afford to maintain their own statistical departments for the compilation of data in great detail on particular corporations. Owing to lack of funds and shelf space our libraries cannot procure much source material which would greatly facilitate research in this field. For example, the yearbooks and special studies issued by particular industrial associations such as Standard Metal Directory, Minerals Year Book, Lockwood's Directory of Paper and Allied Trades and the publications of the United States Pulp Producers Association, to mention a few. Furthermore investment research would be greatly aided by complete files of annual reports of many more of the large publicly owned corporations, and by a complete set of prospectuses on new security issues under the regulations of the Securities Act of 1933.

If it could be afforded, a substantial collection of copies of registration statements filed with the Securities and Exchange Commission would be invaluable, since they contain detailed information regarding the corporation for a number of years prior to the application for permission to market securities which cannot be found in either the published annual reports of the company or the financial services. The prospectuses referred to above are but a brief of the registration statement.

MONEY, CREDIT, AND BANKING

By Fred M. Worley

The report specifically limits its field to exclude related material which deals with corporation finance and investments or real estate, together with such phases of banking and credit as they may involve. These topics will be covered in separate reports submitted by Drs. Warrington and Rowlands, respectively.

The two principal collections at the university, which are of value in this field, are in the General or Main Library and the Lippincott Library of the Wharton School. The Main Library for the past ten years or more has developed its materials in the field of finance less extensively than was its earlier practice. Most of its additions have been in the nature of textbooks or reference books currently used in undergraduate courses. This is not to imply that the Main Library has not added many things of value and continued many important periodical series, but merely to point out that it does not cover the field as completely as was the case prior to the establishment of the special-
ized Lippincott Library. If it had done so it would have provided many unnecessary and expensive duplications.

The Lippincott Library is particularly valuable for source material and other publications for advanced study. It is of inestimable value to seniors and graduate students in the field, and to faculty members. The Main Library maintains a complete catalogue of all materials which are available in the Lippincott Library. To a certain extent Lippincott Library maintains records of materials in its special fields which are available in the Main Library. It would seem unnecessary, therefore, to treat the two collections separately. All reference to university resources in this report will consider the two as one unit.

So far as university resources are concerned it will be convenient to treat the field of money, credit and banking under three principal divisions, as follows:

- Monetary theory,
- Commercial credit, including consumers' finance,
- Banking.

These divisions will first be considered independently. Of necessity there is some overlapping. Later in the report an attempt will be made to give a summarized evaluation of resources in the entire field.

Monetary Theory

Under this heading materials will be subdivided into (a) classical, (b) modern treatises and monographs, and (c) textbooks. Special attention will be given to the subjects of business cycles and of prices, which are in part matters of monetary theory, although not exclusively so.

In the classical field the combined resources of the Lippincott and Main libraries are only fairly adequate. The works of the well-known classical economists dealing with monetary theory from the time of Adam Smith on, are available. When one goes beyond such names, original works are generally lacking. As illustration, the prolific writings produced in the controversy between the banking and currency schools of thought in England during the nineteenth century are almost entirely absent. We refer to the writings of such men as Tooke, Fullerton, Wilson, Torrence, and Loyd. Even Ricardo is not fully represented, although most of his well-known works are on hand. Some collected selections such as Robertson's are to be found, as well as secondary treatments included in the work of more modern writers. It is true that copies of some of the works are rare and expensive, but it would seem well worth while to include such as might be available. The same is true of other lesser known contributions to the field during the nineteenth century, both English and American. A very considerable amount of unorganized material, however, is owned by the Main Library in special collections which are unknown to most of those using the library. Much that has generally been considered historical is of value in the field of finance.

Modern Treatises and Monographs are fairly well represented. The outstanding American periodicals in the field of economic theory, and some of the English publications, are available. Many of the best current contributions in the field of monetary theory are to be found here. Outside of the periodical field many gaps are apparent. It should be remembered that the very multitude of such publications makes complete representation difficult without unlimited resources. Such recent important contributions as those of John Barr Williams and of Arthur Marget on the theory of prices are lacking. Much of the important work
of R. G. Hawtrey is not available. John Maynard Keynes is very well represented.

While a great deal is available, especially for the period covering the first thirty years of the twentieth century, the materials of this type are not sufficiently in step with modern thought. Anglo-Saxon sources may, nevertheless, be judged as fairly well covered. The great volume of foreign language contributions is almost entirely neglected. Translations, where available, are sometimes included, but otherwise there is almost a complete gap.

Textbooks on monetary theory present a somewhat peculiar situation. The better and more important texts are well represented if one allows for a time lag of some years. Many texts are promptly purchased, but others are added only after their importance has been established. Perhaps this is the most effective way of utilizing the limited funds available for this purpose.

Business Cycles

This field is not entirely a matter of finance or monetary theory. It obviously overlaps the fields of other reporting departments such as economics, industry, etc. In as much as the monetary and credit aspects of the cycle are outstanding, and since specialized courses are given by the Finance Department, it falls properly within this report. In this field our library resources are outstanding. Secondary sources available include most of the outstanding works on the subject. Such rare volumes as Wesley C. Mitchell's The Business Cycle, 1913 edition now out of print, are included. In this connection the private collection of Professor Frank Parker of the Finance Department should be mentioned. It is both selective and extensive, including some materials difficult to duplicate.

Primary sources for original research in the field of business cycles are abundant. The Lippincott Library contains a wealth of such material, and when supplemented by the Main Library and special data available elsewhere in the Philadelphia area, should prove a gold mine to the advanced research student. All of the data published by the United States government and its various agencies, and extensive files of the annual reports of corporations are available. Physical volume figures are included where possible, although funds are needed for wider collection of original data. Anticipating the following section it should be stated here that price data contained in the Lippincott Library is surpassed by few collections in the United States.

Prices

Secondary sources dealing with prices or price theory have been included in considering monetary theory earlier in this report. It might be added that works on prices are covered more extensively by our libraries than is the case in other phases of monetary theory.

Primary sources for price studies, as stated in connection with business cycles above, are unusually extensive. Periodical and serial publications containing price data are obtained by Lippincott Library currently. In addition we possess a wealth of special compilations of price data; some by industries or commodities, some by geographical areas. While additional funds would make further improvement possible, our present materials are outstanding. The special studies of Dr. Eleanor Dulles and the Industrial Research Department, together with her invaluable collection of price data, should be mentioned here.
Credit

Under this heading we will include commercial credit and credit analysis, and consumers' credit. In its broader aspects the term credit includes much that we cover under the headings of monetary theory and banking, as well as material specifically left to other reports on corporation finance and investments and real estate.

In the field of consumers' credit materials are limited, since relatively little is available anywhere in printed form. Such periodicals as Personal Finance News and data collected by the Department of Labor are on file, together with some trade publications. Since much of the last named type of material comes under the classification of house organs, which Lippincott Library has been forced to bar because of space limitations, there is not a great deal that is eligible. Such worthwhile literature as is available in this field is well covered in our libraries. Most of it is necessarily secondary in source. Where primary studies have been made they are included and primary data, although almost non-existent in a form available to libraries, has been gathered where possible. Considering the limitations in this field our resources are very good.

Commercial Credit and Credit Analysis. Under this heading we find an unusual and most fortunate combination of resources. In addition to our own libraries and in friendly co-operation with the university work in this field, we have the Robert Morris Associates, the Commercial Museum Library, the Federal Reserve Bank of Philadelphia, and the private library of Professor Parker. For research purposes their combined resources offer a rare opportunity.

We will consider each of these sources in turn. Our own libraries are well equipped. They include a competent selection of the best secondary works on the subject. The same may be said of primary sources. Excellent corporate statement files have been previously referred to. We lack original statements in segmented industries but recognize their desirability. In fact this gap is universal. The Robert Morris Associates is the only place where an attempt has been made to provide such data and even their material is fragmentary.

The Robert Morris Associates is the outgrowth of co-operation among bankers throughout the entire country. Its offices, which are within a few miles of the university, are a central clearing house for credit information and a scientific laboratory for its analysis, unique in the entire field. It not only serves currently the greatest single group of creditors in the United States, but has for years pioneered and set the pace for technique in the field. The leading spirit in this organization, Mr. Alexander Wall, has for years been associated with the university faculty in various special capacities such as lecturer or supervisor of research. His co-operation is complete, even to the point of making his plant available for the work of university research students. There is no comparable collection of primary material anywhere.

The Commercial Museum within a few hundred yards of the campus is another institution unique in its field. Its library contains much of great value to the student of commercial credit. Particularly in the field of foreign credits, information compiled is probably the most complete of its kind.

The Federal Reserve Bank of Philadelphia has recently completed a study in the field of credit analysis which would have been possible only to an institution of its type. Under the direction of Mr. Casimir Sienkiewicz, their research department has assembled data for the Third Federal Reserve District that is of untold value. Part of the results have been published recently in limited edition, available in our library. Mr. Sienkiewicz has also been a member of the university faculty.
and is enthusiastic in his co-operation with our research students.

The private collection of Professor Parker must again be mentioned. It includes most of the works which are of importance in the field of commercial credit. In addition to secondary sources it contains valuable illustrative data.

In this field improvements would result from closer contact with such organizations as Commercial Credit Clearing House, National Credit Office, Dun and Bradstreet, and special mercantile agencies like the American Manufacturers Export Association and the Lyons Furniture Mercantile Agency.

Banking

In this division of our general field we include not only banking institutions as such, but also those problems related to or affecting our financial structure. This somewhat broad application of the term necessarily overlaps both monetary theory and credit, but refers nonetheless to a well-recognized division of the general field of finance.

Our library resources in this field are good, and in some respects outstanding. In secondary material the selection is both broad and representative. Our primary resources include the best current data available and in some cases extend back to the Civil War. All periodical or serial publications of the Federal Reserve System, the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Farm Credit Administration, and in fact all agencies of the federal government dealing with banking or finance, are included. Statistical and financial information, such as the Standard Corporation Records and Standard Trade and Security Service of Standard Statistics and other commercial or private compilations, is well represented.

As illustrative of the completeness with which periodical and serial literature is covered, Lippincott Library receives regularly 230 publications in the particular field of money and banking. Included are fifty-nine publications carrying current review of financial and business conditions in twenty-six different foreign countries. The reports of all important commissions for the study of banking and currency in the United States and various foreign countries are in our libraries. The League of Nations, Congressional investigations, Royal Commissions on banking and currency in Canada and India, the National Monetary Commission, are a few examples of the sources of such reports.

In the Philadelphia area, the library of the Federal Reserve Bank of Philadelphia is of further aid to the research student. It contains extensive materials in the specialized field of banking and has always extended cordial co-operation and aid to university research students.

Our main weakness in the field of banking lies in the scarcity of material dealing with the forty-eight different state banking systems. The Biddle Law Library covers many of the state banking laws. Current state banking reports are not published in many cases, but we do not have all the data that is available.

Mention should be made of one peculiar advantage inherent in this area. In our particular field Philadelphia offers more possibilities for original study of the origins of American finance than any other locality. It was, in Colonial days and for years thereafter, the financial center of the country. It is doubtful whether any other city has as many existing institutions whose records go back into the early beginnings of American business. Banks, insurance companies, and many other businesses offer records still in their possession, or in family collections, which have never been fully utilized by the research student. The studies of Dr. Eleanor Dulles in the field of
early American price movements suggest the potentialities in this field. Results of such research can throw valuable light on even modern financial problems.

Conclusions

Considering the entire field of money, credit and banking our resources are very good. The gaps which we have attempted to indicate are far outweighed by the many places where our libraries offer unusual facilities. Considering the limited funds available in recent years, the high standards which they have maintained in this particular field are remarkable. The foundations are sound and, particularly in Lippincott Library, this field indicates a continued and dynamic improvement.

REAL ESTATE

By David T. Rowlands

An appraisal of the resources of the University of Pennsylvania in the study of real estate requires consideration of the accessibility of primary data available in the business records maintained by real estate brokers and financial institutions as well as the library facilities of the university. The study of real estate requires materials dealing with the structure of the real estate market, the problems of building, appraising, financing and management of properties, the legal instruments involved in the ownership and use of property, and the regulation and control of real estate.

In view of the character of research projects currently conducted in the field and the emphasis given to the economic and social aspects of real estate in academic study, the resources for study of the legal aspects of the subject will be treated briefly. Other resources of the university will be discussed under the captions of "business practices" and "financial".

Until a little more than a decade ago research in the field largely emphasized the legal aspects of the subject. Today study is directed primarily to the economic and social significance of the business transactions which take place in the market. Hence, at the present stage of academic and business development students of real estate need the data of business records which give details of transactions. The primary data of the real estate market of metropolitan Philadelphia, which are becoming more available, provides a useful laboratory that serves effectively students from communities other than Philadelphia.

Fortunately many business records in the offices of real estate brokers and financial institutions are now being made available to students. The co-operation of active practitioners in the field and the whole-hearted co-operation of officers of the Philadelphia Real Estate Board and the Philadelphia Housing Association have proved to be invaluable in furthering the studies of students. Through the co-operation of appraisers, who have developed information plants, considerable materials have become available for first-hand study of the economics of real estate. Co-operation of the type described is vital to fruitful first-hand study in the field.

Compared with the literature extant in some fields of study the volume of published materials in the nature of textbooks, monographs, reports and journals dealing with the economics of real estate appears to be small. The literature of this type has increased considerably in the past decade and it continues to increase in quantity as well as quality. It is gratifying to report that a comparison of existing published data and studies with the literature and data available in our libraries indicates that the university has very few important gaps.
One would wish for more extensive literature in the field. However, the inadequacies of published data on economic phases of the field are well known to researchers. The inadequacies of the libraries of the University of Pennsylvania are traceable to the limited studies in the field rather than the failure to acquire them for the libraries. The university libraries have acquired most of the published studies.

Where maps and directories are needed in research the university's libraries are weak, but this deficiency is no handicap since an important collection of maps is located at the Free Library on the Parkway. These maps are conveniently located and there is no need for duplicating these facilities. Through the co-operation of the Real Estate Directories Service, directories needed by real estate students are available to them. Records in public buildings are likewise conveniently located.

**Resources for Legal Research**

The resources of the Biddle Law and Lippincott libraries are excellent for research in the legal aspects of the subject. The collections of case reports, legal journals and published books acquired by these libraries provide an adequate basis for research in problems related to property.

**Business Practices**

The collections of literature dealing with business practices are very good. Every important pioneer work in urban domestic real estate is to be found at the university. Such deficiencies as occur in our collections are relatively unimportant. Every important journal except The Journal of Certified Property Manager is available. Reports of the Apartment House Experience Exchange of the National Association of Building Owners and Managers would be useful in some studies if they were available at the university. The weakest part of the collections on practice relate to the materials on agricultural real estate and foreign housing. The present collections here are small but well selected.

Many sources not available in ordinary libraries are to be found at the university. The news services of the National Association of Real Estate Boards and United States Building and Loan League are included in our collections. The Valuer, an Australian publication, and The Dominion Mortgage and Investments Yearbook are regularly acquired.

The series Annals of Real Estate Practice published by the National Association of Real Estate Boards is practically complete. Inventories of real property made by various federal and state agencies are fairly complete. The collection of reports made by regional plan committees, city and state planning boards, and state boards of housing is extensive. Other important series accumulated in our libraries are the Housing Index-Digest and the reports of the Bureau of Census.

The publications of the National Resources Committee have been acquired. The Proceedings of the National Conference on City Planning, the American Civic Annual and the Harvard City Planning Studies are included in our collections.

**Financial**

Our resources for research in the financial aspects of real estate are unusual. The reports of banking commissioners in the various states on financial institutions under their jurisdiction are as complete as possible. The Building and Loan Annals of the United States Building and Loan League are complete. The 1893 Report of the Com-
missioner of Labor, a landmark in the literature of all institutions of the savings and loan type, is included in our collections. Historical works like Henry S. Rosenthal's *Cyclopedia of Building, Loan and Savings Associations* and Bodfish's *History of Building and Loan* are also available at the university.

Materials describing the activities of governmental agencies in real estate financing are practically complete. The *Financial Survey of Urban Housing* of the Bureau of Foreign and Domestic Commerce has been acquired. The journal, reports and releases of the Federal Home Loan Bank are kept current. The *Insured Mortgage Portfolio* published by the Federal Housing Administration and the reports and releases of this agency are accumulated regularly. The publications and releases of the United States Housing Authority, the Federal Reserve Board, the Department of Interior, Department of Agriculture, Comptroller of Currency and the Federal Deposit Insurance Corporation are also accumulated.

The files on hearings before Senate and House committees on subjects related to real estate are adequate. Among the published hearings included are those on Real Estate Bondholders' Reorganizations, the Home Loan Bank Act and the National Housing Act.

**General Comment**

In this report deficiencies of research resources have been cited. Specific attention has been directed to our deficiencies in agricultural real estate and foreign housing. In interpreting this report it should be noted that these deficiencies have not proved vital. Research interests of our student body have been concerned primarily with urban domestic real estate.

Considered as a whole, the university's resources for the study of real estate are exceptionally good.

**INSURANCE**

*By G. Wright Hoffman*

As an area of advanced study, insurance has barely made a beginning. For many years, annual state insurance reports, proceedings of insurance societies, reports of legislative investigating committees, company reports, laws and judicial decisions have been published, and of course some of these have been preserved in libraries. Concerted efforts, however, to assemble these and other materials for use as sources by students having a major interest in the subject, are of recent origin, generally not dating back much beyond thirty years. In these efforts the University of Pennsylvania has been a pioneer.

Insurance as a field of instruction was undertaken in the Wharton School of the university in the year 1904 and in 1914 a separate department of insurance was formed. As insurance instruction grew, the collection of insurance materials in the Main Library also grew. In 1927, with the establishment of the Lippincott Library of the Wharton School, the university's insurance collection began to expand rapidly especially in reference works, services, and special reports, both private and governmental. The Lippincott Library collection has now become the principal one in insurance at the university, being supplemented by the older works at the Main University Library and, in the field of insurance law, by the Biddle Law Library.

In breadth of sources the present collection of the university may be regarded as unusually complete. It includes fairly complete compilations of the laws of the various states, annual state insurance reports where such are published, judicial opinions, proceed-
ings of the leading insurance societies, the various statistical and legal insurance services, and a fairly complete list of insurance journals. This statement of the range of the university's collection applies, however, more to recent than to earlier years and especially since the establishment of the Lippincott Library in 1927. Its runs of annual reports and periodicals are not as continuous in every case as they might be nor do they extend as far back as they should.

Nor is the university's collection of insurance history, especially as regards company history, as strong as it should be. Philadelphia is one of the leading insurance centers in the United States. Here in 1752 was formed under the leadership of Mr. John Smith, a prominent merchant of Philadelphia, with the co-operation of Benjamin Franklin, one of the first fire insurance companies in America. It was called the Philadelphia Contributionship, and is active today. The Insurance Company of North America formed here in 1792 is a leader in the field of property insurance. It was here, also, in 1759, that America's first life insurance company, now known as the Presbyterian Ministers Fund, had its beginning under the guidance of the Reverend Dr. Francis Alison, at that time Vice-Provost of the College of Philadelphia (now the University of Pennsylvania). Ten years later the Episcopal Corporation was formed by our Provost, the Reverend Dr. William Smith, with the assistance of Vice-Provost Alison. In this city today are located such important life insurance companies as the Provident Mutual Life Insurance Company, the Fidelity Mutual Life Insurance Company and the Penn Mutual Life Insurance Company. These and other companies are of course important primary sources in themselves and offer to the student of insurance history unusual opportunity for study in Philadelphia.

In the sections which follow a more detailed consideration of the university's source materials in insurance is presented. In addition to sections on the familiar areas of life, property, casualty, social insurance and workmen's compensation insurance, there is also included a section on organized security and commodity markets. This last section is included as a field of insurance since from a functional point of view it is related to risk and risk-bearing.

Life Insurance

The present collection of insurance laws is quite complete. The annual insurance reports of the various states are also available for important insurance states such as New York, Massachusetts, Connecticut, Illinois and Wisconsin, whose reports, and especially those of New York State, are most comprehensive and meaningful. For the past twenty years the runs of proceedings of life insurance societies and organizations are generally complete though for earlier years they vary widely in extent of runs and in continuity. Thus the Main Library has a complete set of the Transactions of the Actuarial Society of America; also volumes 1 through 69 of the Journal of the Institute of Actuaries. The Proceedings of the National Association of Life Underwriters date back only to 1921 and those of the National Fraternal Congress of America only to 1925. With respect to some of these series, the collection of which was begun only in recent years, earlier volumes might still be obtained; in other cases they are extremely scarce if not impossible to obtain.

Yearbooks and manuals are only fairly complete. Best's Life Insurance Reports go back to 1915. The series of the Spectator's Insurance Year Book runs back to 1899 but some volumes are missing. The Flitcraft Compend goes back to 1920; other manuals are for fewer years. The insurance services now regularly received in the Lippincott Library supply comprehensive data covering insurance court decisions, tax statutes and changes, comparative premium rates and a wide range of other materials. The coverage of current periodicals is also quite good though some of the series are incomplete. So also is the collection of special works and monographs.
Property Insurance

As in the field of life insurance the collection of insurance laws, insurance reports and reports of court cases covering the various types of property insurance is excellent. For example the insurance reports of Massachusetts run back to 1879; those of New York State to 1859; those of Canada to 1911. Likewise the proceedings of the leading insurance associations of the United States as well as a number of important foreign series are fairly complete. Thus the Transactions of the Insurance Institute of Liverpool are complete going back to volume 1 for 1907-08; the Proceedings of the Insurance Institute of Toronto run back to 1900; so also does the Journal of Chartered Insurance Institute (formerly the Journal of the Federation of Insurance Institutes of Great Britain and Ireland). A number of the series, however, such as the Proceedings of the National Board of Fire Underwriters and the Proceedings of the National Fire Protection Association, date back only to the early 1920's.

In its collection of directories, cyclopedias, yearbooks, manuals and services the present library collection is quite complete though here again the series are not always unbroken nor do they extend back as far as might be desired. The Insurance Year Book goes back to 1899, Best's Insurance Reports (fire and casualty editions) run back to 1900; others include only the past decade or so. In the areas of insurance journals and of special works, monographs and pamphlets, the Lippincott Library has in recent years built up an excellent collection. Its weakness, as elsewhere indicated, is in earlier years — histories, special studies, hearings and governmental reports which the student of insurance trends and historical developments should have but which are not now available.

Casualty Insurance

Most of what has just been said regarding property insurance is equally true for our library collections in casualty lines of insurance. Laws, annual reports, proceedings of insurance organizations such as the Proceedings of the Casualty Actuarial Society are quite complete. So also are the services, periodicals and special works in this field. Weakness lies mainly in earlier reports and special studies though it should be pointed out that the comparatively recent origins of many casualty lines give to this criticism less weight than when applied to the area of life and property insurance.

Social Insurance including Workmen's Compensation

These are newer forms of insurance in the United States. Experience in workmen's compensation dates back about twenty-five years; social insurance only a few years. They are not, however, as new in practice abroad, especially in England and Germany. Because of this fact any adequate collection of documents in these fields will naturally have a larger proportion of items relating to other countries. As general references the publications of the International Labour Office are rich in comparative data in these areas of which the university's collection is quite complete. Our library is also very strong in British documents generally including all Parliamentary papers on statutory laws and regulations. In similar German documents it is decidedly weak. A somewhat similar situation prevails in our series of annual reports; it is fairly complete for the United States and Great Britain but weak for Germany. The list of periodicals published in these fields is not extensive with runs extending often only over a few years. Of these the university has a fairly complete collection.

Organized Security and Commodity Markets

Formal instruction in this area began at the university in 1904, the same year instruction in insurance was undertaken and has since
continued as a part of the work of the Insurance Department. It is not an extensive field and the university's comparatively long and continued interest in it has resulted in a collection of items which are quite comprehensive. These include the constitution, rules and by-laws of the various stock and commodity exchanges, the annual reports of the principal exchanges, the securities acts of the various states, a fairly complete file of the publications of the Securities and Exchange Commission, of the Commodity Exchange Administration and of its predecessor the Grain Futures Administration. The principal services relating to this area are also quite complete such as the Standard Statistics Company, "Moody's", "Fitch's" and "Poor's" reports. There are also to be had fairly long runs of the more important periodicals of which the Commercial and Financial Chronicle is the most noteworthy, extending back to volume 1 (1865), and its predecessor, Hunt's Merchants' Magazine, continuing back to 1839. The library is not as strong as it might be in financial history centering around our leading exchanges.

MARKETING

By Ralph F. Breyer

The university has three depositories of works on marketing, the Main University Library, the Lippincott Library of the Wharton School, and the Biddle Library of the Law School. Except to note one or two contrasts in the general nature of their resources this report will treat them as a single unit, which, in truth, they are. Although in the broader categories of commerce and trade the sources extend back for many centuries, a distinct body of literature in the field of marketing began to emerge not more than twenty-five or thirty years ago. It is the university's holdings of this body of literature that is to be appraised here, with two exceptions. Foreign trade, which may be considered a part of marketing, is reported upon separately and is therefore omitted. Also, because marketing is a co-ordinative activity that includes certain portions of other economic sectors, especially insurance, finance, and transportation, no complete picture of the resources for the study of marketing can be had without reference to our libraries' holdings in such other fields. Since these fields are also the subjects of separate reports, no attempt is made to cover them in this appraisal.

The possessions of the university's libraries pertaining to marketing will be examined under the following heads:

- federal government publications,
- state government publications,
- college and university publications,
- publications of research foundations,
- publications of business associations and societies,
- publications of individual business concerns.

Federal Government

The university's libraries have all the purely statistical series or compilations relating to marketing published by the federal government. In some instances, such as the three censuses of marketing (1929, 1933, 1935), each of the three libraries that carry marketing items have complete sets. Of other marketing publications (not purely statistical) issued by the federal government our libraries have a full complement, without noteworthy exception, for non-agricultural subjects. While the stacks contain extensive holdings of agricultural marketing studies originating with the federal government and include all major continuations, some of the bulletins issued by the Department of Agriculture are missing. The same is true of several of the marketing bulletins put out by the agricultural experiment stations although in
this instance the deficiency is confined largely to the earlier studies.

State Government

The bulk of the marketing studies published by state governments relate to agricultural products. However, a number of important ones of recent origin deal with non-agricultural goods. The files of the university's libraries are not as complete for such works as for those of the federal government. They do contain nearly all marketing studies published during the last decade by a score of the most populous states. Many earlier studies (admittedly of much less importance except for the historian) of the larger states, and recent, as well as earlier, studies of the smaller states are often not to be found.

Colleges and Universities

The holdings of college and university publications are quite complete. All of the collegiate bureaus and committees of research are fully represented, and hardly an important study is missing.

Research Foundations

Practically all of the marketing reports and studies of every research foundation in the country are to be found in the university's libraries. Except for a few of the earlier studies of the older foundations, nothing is wanting.

Business Associations and Societies

Of the vast amount of marketing material put out by trade associations, chambers of commerce, co-operative marketing associations, professional and semi-professional associations and business societies much is of little or no value for scientific research. The problem is obviously one of selection. A thorough sampling of this type of data indicates conclusively that the university's libraries have handled this task skillfully for they are well-stocked with such publications and the holdings portray every evidence of discriminating selection. It is true that there are some inadequacies, especially in the category of occasional studies of merit published by rather obscure associations and of the very expensive study of decidedly restricted application, such as The Continuing Study of Newspaper Reading by the Advertising Research Foundation, but improvement here must wait upon larger library appropriations. Even as it is the libraries are very well equipped in this group.

Individual Business Concerns

Included under this title are not only those private concerns that are directly engaged in marketing, but also any other private enterprises not embraced in previous groups, such as publishing companies, economic research service concerns, public utilities, and so on. This type of marketing data constitutes one of the largest groups. Its range in quality, treatment, and cost is perhaps greater than in any other class. And certainly the sources of such data are more scattered. All of which makes the problem of search and selection a laborious and costly one.

The university's possessions of this kind of marketing literature are really surprisingly comprehensive. Here, again, one is impressed with the admirable selection of the resources. There are many publications the libraries do not have, but they include few that are important. It is, of course, unfortunate that the files of such standard magazines as Sales Management, Advertising and Selling, Editor and Publisher, and Printers' Ink Weekly lack a number of the earlier volumes. And while the libraries contain all trade journals that have a broad appeal, in many of these the files are broken. Furthermore, the
bulk of the journals covering secondary or minor trades are not carried. One or two quite costly studies of limited interest are likewise not available. Despite these shortcomings the present holdings, because of the care with which they have been selected, deserve to be classed as very good indeed.

Conclusion

The university's holdings of resources for the study of marketing are for the most part extensive, and where they are not all-inclusive they represent excellent selections. The Lippincott Library headed by Miss Dorothy Bemis is one of the best specialized business libraries in the country. The Main Library of the university has a wealth of earlier marketing literature indispensable to the study of the recent past. Add to this the resources of the Biddle Law Library that cover the legal aspects of marketing and the whole comprises a collection which ranks among the best in the country. True, the libraries lack some important agricultural marketing studies, the number of trade journals they carry is limited, and some earlier works are missing. These imperfections can be remedied, in part, by larger appropriations for the acquisition of marketing sources. Even as they now stand the university's resources for the study of marketing are as well qualified to serve as the basis of a bibliographical and research center in this field as are those of the best of the country's libraries.

FOREIGN TRADE

By Roland L. Kramer

The field of foreign trade embraces every aspect of the economic life of a nation. In order to avoid needless overlapping on reports prepared by other departments, it would appear desirable to set forth specifically the scope of library materials to be embraced within this respect.

From the standpoint of utility for the study of and research in foreign trade subjects, library materials may be classified under three headings, viz., (1) those pertaining to the technical and mechanical phases of the subject, (2) those dealing with the economy of the several nations, and (3) those pertaining to commodities.

This report will embrace the holdings of both the Main University Library and the Lippincott Library of the Wharton School. These libraries are located on the university campus, a short distance apart. Another depository close at hand is the library of the Commercial Museum. This library, through the courtesy of the Commercial Museum, is available for the use of university students and faculty; and it is located but a short distance from the campus.

This report will discuss the foreign trade literature of these libraries under the three topical headings set forth above.

Materials Pertaining to Technical and Mechanical Phases of Foreign Trade

The university and Lippincott libraries are, generally speaking, well stocked with books dealing with these phases of foreign trade. An effort is made to distinguish between general books and those of a distinctly research character, in order that the special research purposes of the Lippincott Library may be served. Probably all of the books, in English, relating to this subject are included in our collections; and the library of the Commercial Museum supplements our own materials.

In the periodical and documentary fields, the holdings of the Lippincott and Commercial Museum libraries are important and are adequate
for intensive study and research in foreign trade. United States government publications and reports issued under the auspices of such bodies as the League of Nations and the International Chamber of Commerce are also embraced within our combined collections. The chief difficulty in the use of these materials is their general inaccessibility. The Main University Library is designated as a United States government depository but many documents are difficult of access due to the cramped condition of that library. Doubtless, this deficiency in our library equipment will be mentioned in other reports. Our use of United States government materials in study and research work would be greatly improved if adequate facilities for filing and cataloguing these materials were available.

The same improvement could be made in connection with the documents of other governments, notably the British. Publications of the British Board of Trade and Department of Overseas Trade, as well as the various "Bluebooks" and "White Papers" of the British government are not as readily available as they profitably could be.

For purposes of study and research in foreign trade these public documents are essential.

Materials Dealing with the Economy of the Several Nations

Foreign trade studies devoted to specific countries and geographic areas would require the same general type of materials as are essential in studies in regional commercial geography and in many phases of current economics.

The most authentic sources under this heading are the official publications of the several national governments. The problem of inadequacy of space in connection with the use of these materials has already been discussed.

The bulk of the present holdings in the Main and Lippincott libraries consists of United States and British government publications. These materials should be supplemented more fully with official publications of other governments. While a scattering of these materials is to be found in our collections, the addition of more French, German, Japanese, Argentine and other governments' publications would enhance our study and research possibilities in the foreign trade field.

In the past, the library of the Commercial Museum has maintained current copies of the official publications of the important commercial nations. In recent years, however, this collection has not been kept up.

A valuable addition to the foreign trade study and research materials available on the university campus would be provided by (1) supplementing the present extensive collection with the official publications of additional governments and (2) providing improved physical facilities for the proper storage and use of these publications. To bring together, for example, the official foreign trade statistics of the several commercial nations would place the Main Library in a unique position in this area for the use of students and business men concerned with these official data. Emphasis at this time could readily be laid upon the publications of the several Latin American countries and thus provide a nucleus, from the commercial angle, of a Latin American study center on the university campus.

Yearbooks of a number of countries are readily available in the Lippincott Library. This collection could also be supplemented with the yearbooks of additional countries.
Those pertaining to commodities

While both the university and Lippincott libraries have, from time to time, received copies of the numerous commodity journals published for commercial purposes, the library of the Commercial Museum has been particularly strong in this regard. In the field of foreign trade, a limited number of commodity magazines are published for either overseas circulation or for the information of American business firms engaged in foreign trade in a particular commodity. Probably, for university purposes, a limited number of such periodicals should be regularly available for the use of students, principally for illustrative purposes. Examples of such standard foreign trade (commodity) journals would be American Exporter, Dun's International Review and Importers Guide; and such foreign-language journals as El farmaceutica, Ingenieria internacional and La hacienda.

The publications in Spanish would contribute to the Latin American study materials that would strengthen our position in this field.

United States government periodicals and periodicals are among the best sources dealing with commodities moving in foreign trade. The situation with respect to the ready availability of these materials as a result of the present cramped situation in the Main Library would not apply in this case, as the Lippincott Library has an extensive current collection of such materials readily available.

Conclusion

From this survey, it would appear that the materials available on the university campus for study and research in the field of foreign trade are generally ample; and with the few suggested additions, notably foreign government publications, would constitute a study center in the Philadelphia area.

The main deficiency, therefore, is not in library materials. The chief deficiency noted pertains to the library facilities for the proper storage and use of government publications, principally those of the United States, and of certain international bodies, as the League of Nations and International Chamber of Commerce. The usefulness of these valuable official and semi-official sources will depend upon the provision of adequate physical facilities for their storage and handling.

****

This comment on the materials available for the study of the history of American commerce is confined to materials dealing directly with the movement of goods and with governmental policy. It therefore includes sources bearing on the history of transportation, on organization of commercial enterprise and on the tariff but excludes financial history.

For collections of primary sources, the Main Library is satisfactory. It possesses for the early period in American history such collections as the American State Papers and the Reports of the Secretary of the Treasury on Commerce and Navigation. The latter reports as continued by the Department of Commerce are available for every year in Lippincott Library as well as in the Main Library. Special mention should also be made of Pitkin's A Statistical View of the Commerce of the United States and Seybert's Statistical Annals both of which are to be found in the Main Library. In addition, the Main Library contains the important reports of Congressional and other committees bearing on the domestic and foreign commerce of the United States.

With respect to secondary sources perhaps the most important general work is the History of Domestic and Foreign Commerce of the United
FOREIGN TRADE

States by E. R. Johnson and others. This is available in both the Main and Lippincott libraries. These libraries are also rich in the numerous secondary works on the history of transportation in all its forms. They contain books, theses and monographs on the history of transportation of the country at large, of particular sections and of individual railroads. Most of these sources include important data relative to commerce.

With reference to history of commercial organization, there is in general a paucity of material. For the English background both the Main and Lippincott libraries have Scott's Joint Stock Companies and for this country the Lippincott Library has Davis' Essays in the Earlier History of the American Corporation.

With respect to periodical literature there are available in both libraries all the issues of the Journal of Economic and Business History until its publication was suspended. This was the only American publication bearing directly on the field of commercial history. There is still available the historical supplement to the Economic Journal which is to be found in Lippincott Library together with other economic periodicals in which articles on the history of commerce occasionally appear. For the early era in American history such periodicals as Niles Register and Hunt's Merchants Magazine and Commercial Review should be mentioned, both of which are to be found in the Main Library.

TRANSPORTATION AND PUBLIC UTILITIES

By Joseph R. Rose, Hobart S. Perry, Grover G. Huebner and G. Lloyd Wilson

This report on materials available at the University of Pennsylvania for the study of transportation and public utilities is based upon an investigation of the Main University Library, the Biddle Law Library and the Lippincott Library. Consideration was also given to the contents of the library of the Moore School of Electrical Engineering; and these contents may be disposed of at this point. The Moore School Library contains much material bearing on transportation and public utilities but this material deals with the mechanical rather than the economic and financial aspects of these industries, and for that reason seemed to be outside the scope of this report. For purposes of discussion the sources of information discovered in the three libraries named above may be classified as follows: (1) government reports (2) secondary works (3) periodicals (4) publications of societies and associations.

Government Reports

The reports of the decisions of the Supreme Court of the United States constitute a primary source of information in transportation and public utilities. Complete sets of these reports are to be found in all four libraries. Reports of the decisions of lower federal courts are in the Biddle Law and Lippincott libraries.

Of equal importance with judicial decisions from an economic viewpoint are the reports of the various federal regulatory agencies. Those agencies which influence transportation and public utilities most directly are the Interstate Commerce Commission, the Federal Power Commission, the Federal Communications Commission, the Maritime Commission and the Civil Aeronautics Authority. The Interstate Commerce Commission, the Federal Communications Commission and the Maritime Commission publish their decisions in bound volumes. Complete sets of the decisions of the Interstate Commerce Commission are to be found in all three libraries. The Biddle Law and Lippincott libraries possess sets of the Federal Communication Commission decisions, while the decisions of the Maritime Commission are lacking.
In addition to publishing their decisions, regulatory and other agencies issue annual and special reports, annual and current statistical reports, rules governing practice and procedure and accounting classifications; and, from time to time they publish other documents. Material of this kind is abundantly available in the Lippincott Library. The same may be said of reports of federal agencies which are not regulatory in nature and which are difficult to classify but nevertheless are important in the field. Notable examples are the reports of the Tennessee Valley Authority and of the Federal Co-ordinator of Transportation.

Congressional reports, resolutions, records of committee hearings and debates and reports published by government departments and bureaus relative to transportation and public utilities are important sources of information. These are to be generally found in the Main Library, in many instances in Lippincott, and occasionally in the Biddle Law Library. In this connection, mention should also be made of the Congressional Record and its predecessors which are to be found complete in the Main Library.

Report of decisions of state appellate courts are of first rate importance. Such reports are available for the appellate courts of all states in the Biddle Law Library. The appellate court reports for Pennsylvania are also to be found in the Main Library and in the Lippincott Library. In addition, the latter includes the unofficial reporters of some of the other states.

The primary source of data in the field of public utilities from the regulatory standpoint are the decisions of the several state public service or public utilities commissions. Complete sets of the decisions of the Pennsylvania commissions are in all three libraries. The Main Library and the Lippincott Library also have the bound volumes of the decisions of the commissions of other states but these volumes are not in every instance complete, and the decisions of states of lesser importance are lacking altogether. The reports of the decisions of state commissions are supplemented, however, by a complete set of Public Utility Reports to be found in the Lippincott Library and in the Law Library. The Lippincott Library has also a complete set of United States Aviation Reports, and the Air Law Review. The Main Library has a few volumes of an early date. The Biddle Law Library has a complete set of the Public Utilities Reports Digest. It must be noted in this connection that the Public Utilities Reports and the Digest are not official state publications but for purposes of research are just as useful.

Another important source of official data is the annual and other reports of the various state commissions. Both the Main Library and the Lippincott Library possess the reports of many state commissions. In addition many reports of special investigations either by state commissions or state legislatures are available. A notable example is the report of the Committee on the Revision of the New York Public Service Company Law which can be found both in the Main and in the Lippincott libraries. The Main Library is particularly adequate on legal sources as it contains the journals of the debates and proceedings of the legislatures of many states.

Secondary Sources

Consideration will be here given to books, including doctoral and other dissertations and monographs, and not to periodicals which will be discussed separately.

All the standard secondary works in the field under survey are to be found in the three libraries. The Biddle Law Library is completely supplied with texts, case books, digests and other works covering every legal phase of transportation and public utilities and in addition
it has a good many standard works written from the economic viewpoint. Many of the books in the Law Library are also to be found in the Main and Lippincott libraries. Occasionally a book devoted exclusively to economic analysis such as the Fair Rate of Return in Public Utility Regulation by N. L. Smith, is curiously enough found in the Biddle Law Library (also in the Main Library) but not in the Lippincott Library. In some instances relatively expensive works are in all three libraries, a noteworthy example being Sharfman's volumes on the Interstate Commerce Commission.

Special mention should be made of the numerous histories of transportation in the Main Library. Not only is there a wealth of material on the general history of transportation but there also are many works on sectional development and on individual railroads. The Lippincott Library also contains important historical works.

In general it may fairly be concluded that the resources of the university libraries so far as secondary sources bearing on transportation and public utilities are concerned, are satisfactory.

Periodicals

The Lippincott Library maintains a careful selection of periodical literature in the field of transportation (except water) and public utilities. It has such well-known journals as the Traffic World, the Railway Age, the Public Utilities Fortnightly, Air Law Quarterly and the Journal of Land and Public Utility Economics. In addition, it contains more specialized journals such as the Transit Journal, Commercial Car Journal, Bus Transportation, Automotive Industries, Aviation, Oil and Gas Journal, Public Roads, and other similar periodicals. Periodicals relative to mechanical and physical operations of the various industries, such as The Electrical World, for example, are available in the engineering libraries.

Bound volumes of periodicals no longer published and bound volumes of early issues of periodicals still in existence are in some instances found in the Main Library.

Publications of Societies and Associations

The Lippincott Library has numerous publications both of bulletins and proceedings of transportation and public utility associations. It has, for example, many of the publications issued by the following: American Gas Association, National Electric Association, American Transit Association, National Automobile Chamber of Commerce and Automobile Manufacturers Association, Associated Traffic Clubs of America, the Association of American Railroads, Aeronautical Chamber of Commerce, Association of Motor Bus Operators, American Trucking Association, the Chamber of Shipping of the United Kingdom, and the Liverpool Steam Ship Owners' Association.

Special mention should also be made of bulletins and reports of associations of governmental agencies as for example, the National Association of Railroad and Public Utilities Commissioners. These are to be found in the Lippincott Library.

The Lippincott Library has on file the annual reports of numerous transportation and other public utility corporations. Certain periodicals published by these corporations are also available in Lippincott Library, a notable example being the Bell Telephone Quarterly.

Conclusions

The materials of all the libraries on the campus for research in the general field of transportation and public utilities are on the whole adequate. In railroad transportation, while the collections do
not compare favorably with such specialized libraries as that of the Bureau of Railway Economics and that of the Interstate Commerce Commission, they are satisfactory. In the field of public utilities, they are excellent. One shortcoming here is that the resources are scattered, there being important omissions in the materials of the Lippincott Library which are available only in the Biddle Law Library. In the case of water transportation an important weakness is the absence of foreign periodicals. In the field of motor and highway transportation the governmental reports and general publications are adequate, the most noteworthy deficiency being the lack of certain important periodicals. In the field of air transportation the economic treatises are adequate and again the most serious deficiency is in periodicals, particularly the foreign (British) publications.

GEORAPHY AND INDUSTRY

GEOGRAPHY

By Frank E. Williams

In general the facilities and sources for serious study in the broad field of geography in Philadelphia are poor, although in some special phases there is an abundance of material.

The printed sources of material may be conveniently divided into the following groups:

- government publications,
- publications of societies,
- secondary works.

Government Publications

Publications of the United States Government and of States

The Main University Library is a depository for United States government publications and it has most, but not all, of them. Others may be obtained on request through the Main Library or Lippincott Library. Many of the publications of the state agricultural experiment stations are not in the library and if there, are not bound and are therefore difficult to use. The Free Library, however, has practically all of these publications.

In government maps the university library is weak and facilities are poor for using the ones on hand. There are many such maps in various libraries in the vicinity, particularly the Geographical Society of Philadelphia and the Free Library.

Publications of Foreign Governments

In these the university is generally weak. Such publications as the Parliamentary Debates are incomplete. The Geographical Society of Philadelphia, the Commercial Museum and the Free Library furnish a large amount of material in foreign publications. In these libraries there are fine collections of maps especially those of the British and Japanese governments.

Publications of Societies

In these publications the university library is generally weak, but there are other sources in the city such as the Free Library, the Academy of Natural Sciences, and the Geographical Society of Philadelphia. The latter is especially good for society publications until 1933, at which time the Philadelphia Geographical Society began to curtail on its own Bulletin and hence received a diminishing amount in exchanges. However, there may be found in the city complete files of
such periodicals as The Geographical Review, Annals of the Association of American Geographers, as well as the publications of the leading societies of many foreign countries.

Secondary Works

In these resources the university library and the region generally are poorly equipped. Indeed, if it were not for the Commercial Museum and the Geographical Society of Philadelphia, metropolitan Philadelphia would be in extreme poverty in secondary publications in geography. In the two libraries mentioned above a large proportion of the books are works related to exploration and compilation of economic and commercial activities rather than serious studies in the principles and philosophy of geography.

Conclusion

While in many respects metropolitan Philadelphia is well equipped for geographical studies, it is relatively poor in comparison with many other regions of similar population density. It is particularly weak in complete and well-arranged collections of maps.

INDUSTRY

By Evan Alderfer

The field of industry calls for material from a great variety of sources. Our resources fall into the following principal categories:

government documents,
publications of professional societies,
trade association publications,
studie of research foundations,
general literature,

With respect to each of these classes, the library facilities are not confined solely to the materials housed in the Main University Library proper. Fortunately there is very little duplication between the Main and Lippincott libraries because the latter specializes in the acquisition of current factual data and services.

Government Documents

We do not receive all government publications but have accumulat-ed a selective list of government publications, both federal and state. Our collection of publications of the federal government includes all of the basic materials such as the Census of Manufactures, Minerals Yearbook, Census of Unemployment, etc. In addition to these periodic compilations we have an excellent collection of special reports, hearings and investigations such as the Pujo Investigation, monopoly inves-tigations of the steel, petroleum, liquor, tobacco and other in-dustries, Tariff Commission studies, reports of the Federal Trade Commission and the Commission of Corporations. The collection of studies in wages and working conditions includes almost every industry.

Our collection of regular and special reports of state govern-ments is rather limited. Aside from reports of the Department of Labor and Industry of Pennsylvania, the collection is incomplete. However, in view of the complete files of government documents, both state and federal, at the Free Library of Philadelphia, there is little need for duplication at the university.
Professional Societies

The collection of publications of professional societies in the field of industry is practically complete. This includes publications of such societies as the American Management Association, the Taylor Society, the Personnel Association and others. The papers and transactions of these and their antecedent associations are well preserved.

Trade Associations

The Main University Library together with the departmental libraries of the several schools -- Wharton, Towne Scientific and Moore School -- offer an almost complete coverage of trade journals. The leading publications of all the major industries are represented and many of these files go back to the founding of the several publications. Limited funds have necessitated careful selection, and useless duplication has therefore been avoided.

Research Foundations

The Main University and Lippincott libraries contain a very complete collection of industrial studies of all the established research foundations such as the National Bureau of Economic Research, the Brookings Institution, the Pollock Foundation, etc. We also have a fairly complete collection of special research studies of other universities such as the Wheat Studies of the Food Research Institute of Stanford University and the outstanding monographs of other institutions.

Our Industrial Research Department has collected a vast amount of primary source material from the coal, foundry, wool and hosiery industries which has served as the basis for a number of studies in each of these industries. One of the outstanding collections is the Wetherill Papers -- a private collection of papers of a business which was in the Wetherill family for five generations. These papers contain invaluable data and served to stimulate the studies of Prices in Colonial Pennsylvania. The Industrial Research Department also has an extensive collection of employee publications, labor contracts and trade union agreements.

General Literature

The collection of purely secondary sources in the field of industry is by no means complete. However, such publications as we have are on the whole well chosen and properly representative of the rather extensive area covered.

EDUCATION

By Thomas Woody

The Maria Hosmer Penniman Memorial Library of Education has at present, according to a report of its librarian, 46,579 volumes. It has been increasing its holdings at the rate of 1,000 items a year during the past quinquennium. This rate of additions is not sufficient to keep the library tolerably abreast of each year's output of new material. Some years ago the chairman of the Penniman Library Committee made an effort to check omissions that ought to be made good in the collection. That study pointed to the need of $2,000; and to the further conclusion that a minimum annual expenditure of $1,000 would be necessary to enable us to hold a fairly satisfactory standard for a school of education of our size and requirements.

This valuable collection, even at its present size, is quite inadequately housed, from the standpoint of expansion of the collection.
and space for students, graduate and undergraduate. About 4,000 items are in the fourth floor attic, which leaves much to be desired both in respect to accessibility and physical care of the books.

Twenty years ago, the School of Education was said to be "...in the forefront of teacher training institutions," in respect to its library facilities. Although, through marked improvement in many other institutional libraries and by reason of the decrease of our purchases in relation to annual output of literature in the field, this favorable estimate may be open to question today, there is, nevertheless, an excellent collection covering a wide range of special areas of education, such as child study, pre-school, elementary, secondary, and higher education, commercial training, educational philosophy, history of education, administration, manual training, methods of teaching, school management, education of the handicapped, education of women, religious education, etc. It would be difficult to name an area of education that is not touched by this collection, though the representation of each is by no means even, and in some cases slight.

Divisions of education such as the Illman-Carter Unit, serving kindergarten and primary teachers, and the Department of Nursing Education, recently established, have small independent collections which are supported adequately for present needs, in the judgment of those responsible for the direction of work in such areas. The library of the Illman-Carter Unit has upwards of 3,000 volumes, housed at 4000 Pine Street. The Nursing Education Department has a serviceable collection of several hundred volumes, located at present in the Main Library because of inadequate space at the Penniman Library, and makes special provision for new books on its own budget.

Considered from the point of view of students engaged in research, the Penniman Collection is much more serviceable to those interested in philosophical and historical aspects of education; less so, to those dealing with contemporary problems, for, as stated, the acquisition of current materials is by no means in proper proportion to the output of books, periodicals, official documents, etc. Fairly adequate accounts of the collection were given by reports of Graves and Woody in 1920 and 1928. (Graves, F.P., "The Maria Hosmer Penniman Memorial Library of Education", University of Pennsylvania Bulletin, XX (1920), Woody, T., Some New Accessions to the Penniman Memorial Library of Education, Philadelphia: 1928.) They convey a better idea of the library's unique strength than a brief summary statement, such as can be given here. Both pamphlets corroborate the generalization covering strength on the historical and philosophical side, which is accounted for both by Dr. Penniman's interests and by the fact that there was incorporated with his gift some thousands of volumes on education that had been garnered throughout the years, before the School of Education was founded.

The strength of the Penniman Library is enhanced by the fact that it is associated with, and its users can draw upon, the extensive collections of the Main Library in the fields of primitive life, early Oriental societies, Greco-Roman culture, medieval and modern Europe. It ought to be housed in the same building, be it stated in passing, so as to facilitate the use of all these auxiliary fields. The proximity of the Historical Society of Pennsylvania, with its excellent collection of local histories, newspapers, and numerous manuscript possesses, is also a most significant asset to students of educational history. The Biddle Law Library of the university; the Swarthmore and Haverford collections on Quaker history; the collection of Quaker manuscripts at 4th and Arch Streets; the holdings of the General Assembly of the Presbyterian Church, Department of History; the Library Company; Crozier Theological Seminary Library; and several local historical society collections must also not be overlooked in estimating the potential usefulness of Penniman Library as a center around which this metropolitan area's library facilities for educational research might be centered.
The periods of primitive, early Oriental, Greek, Roman, Middle Ages, Renaissance, Reformation, modern naturalistic and experimental tendencies in education are well covered if we keep in mind the interdependence of the Penniman Collection with other branches of the university library. It would be supererogatory to name items pertaining to these extensive areas, considering that this is done in the documents named. The strongest field is that of American education, within which it is perhaps worth while to specify some types of holdings and certain shortcomings (omitting reference to particular books).

Educational journalism in the United States is well represented from 1818 to the present, there being on the shelves: The Academician; Russell's American Journal of Education; American Annals of Education (complete save for part of vol. 8); Massachusetts Common School Journal; Connecticut Common School Journal (several volumes lacking); Barnard's Journal of Education; Pennsylvania School Journal; Rhode Island Common School Journal, all important for nineteenth-century history. The physical condition of many of these is bad.

Of more recent periodical materials, the following are representative of the Penniman Library's holdings: American School Board Journal (not complete); California Journal of Secondary Education (complete save for vol. 1); The Catholic Education Review (complete save for a few volumes); Educational Administration and Supervision; Journal of Educational Method; Educational Record; Teachers College Record; School and Society; The School Review, and the Social Frontier.

Invaluable sources, such as reports and proceedings of public officials, state and national, and of special educational societies are on the whole fairly numerous in the Penniman Collection, but state and municipal report files are by no means satisfactory for research purposes. The reports of the Commissioner of Education; circulars of information, and bulletins issued by the commissioner; annual reports and proceedings of the National Educational Association; reports of the Herbartian Society; the National Society for the Study of Education, and the College Teachers of Education are a small but representative sampling of this type of holdings. The files of these have few lacunae.

To the above may be added a reference to such reports as those of Bache, Stowe, Griscom, a century ago, which, because of their bearing on the relation between European and American education, have unique significance for students of American educational history.

An old textbook collection, containing primers, spellers, readers, arithmetics and other branches of mathematics, grammars, histories (general foreign, and American), geographies, natural philosophy, moral and mental philosophy, etc., runs to several hundred volumes. Many publishers have contributed modern texts. Available also to qualified research students is Woody's collection of between 400 and 500 old texts.

History of education in the several states of the Union is represented by the series edited by Adams, to which a number of recent studies, those on Pennsylvania and Washington, for example, have been added. There is a fair collection of histories of colleges and universities, but in recent years numerous new books have appeared which could not be purchased. Of foreign institutions of higher learning, Oxford and Cambridge are best represented in this class of histories, but the range is wide. There are many official reports of foreign universities, but the files are quite irregular and hence not very satisfactory to students.

Of research collections there are several of considerable value, and the Penniman files are fairly complete: Teachers College Contributions to Education, practically complete (with upwards of 800 vols.), and similar sets of studies, but much fewer titles, for Pennsylvania,
Chicago, Peabody College, Harvard, Iowa, Minnesota, California, Hopkins and a few other universities. Foreign collections are but slightly represented. The library has the Bibliothek Pädagogischer Classiker (45 vols.) and similar items, but it is regrettable that of such a foreign series as the Monumenta Germaniae Paedagogica, the Penniman Collection contains the merest handful of volumes.

The weakest department is that of foreign education, though this is better for the pre-war than for the post-war period, due to the increasing discrepancy between funds available and publications issued. Many British and continental materials have come free of charge, of course, through official channels and a few periodicals and foreign books are purchased. There is, for example such valuable material as the official Deutsche Wissenschaft, Erziehung und Volksbildung (1935), for Prussia and the Reich, indispensable for the record of educational matters under the totalitarian regime. The files of most of our foreign magazines are quite incomplete, greatly restricting their usefulness. The following is suggestive: L'Ecole et la vie (a number of volumes are lacking); L'Education (lacks the first 12 vols.); The Educational Times, complete since 1890; Revue internationale de l'enseignement (only the later part of this file); The Revue universitaire is complete only after volume 29. The set of Neue Bahnen begins with volume 39 and runs to date. These few examples suffice to show the character of some of Penniman Library's weaknesses in foreign education. In some cases these should be discounted because of the existence of volumes elsewhere which cover the gaps. Everything considered, there is an important nucleus of materials which could be made into a fine serviceable collection. Of secondary materials we have most of the books written in this country on foreign schools but of German, French, Russian, etc. a very small fraction.

Besides the common and indispensable American reference works like Monroe's, the Library has many foreign ones, of which the following are representative: Hergang's Pädagogische Real-Encyclopädie ... des Unterrichtswesens; Buisson's Dictionnaire de pedagogie; Kalashnikov's Pedagogicheskaya entsiklopediya; Kiddie and Schem's Encyclopedia of Education; Hein's Encyklopaedisches Handbuch der Pädagogik (not complete); Schmid's Encyklopaedie des ... Unterrichtswesens (two vols. missing); and Foster Watson's Encyclopaedia and Dictionary of Education.

THE MARIA HOSMER PENNIMAN MEMORIAL LIBRARY OF EDUCATION

By Thomas Woody

Shortly after the establishment of the School of Education in 1914, Dr. James Hosmer Penniman founded the Maria Hosmer Penniman Memorial Library of Education in honor of his mother and as a means of improving the education of teachers. In the succeeding five years over 12,000 volumes were added which, in the judgment of the Dean of the School of Education, Frank P. Graves, placed the new school "in the forefront of teacher-training institutions" in respect to library facilities. With the gifts of Dr. Penniman were combined several thousand volumes from classifications pertaining to various phases of education already in the Main Library, representing the accumulation of many years since the first systematic courses of lectures on pedagogy, near the close of the nineteenth century. To the combined strength of this older collection and of the Penniman donation have been added several thousand volumes in the past twenty years. According to official report, the Penniman Collection has at present 46,579 volumes, and has been adding about 1,000 volumes annually during the past five years. At his death Dr. Penniman left an endowment valued at approximately $16,000 which, under favorable conditions, would greatly strengthen the acquisitions from year to year, though, under adverse economic circumstances, it has yielded nothing recently.
The Penniman Memorial Library, originally housed on the second floor of the Main Library, was moved to Bennett Hall, at its opening, with the School of Education. Its holdings are catalogued with those of the Main Library. The Penniman card catalogue is incomplete. There is no published catalog. The usefulness of the collection will be greatly enhanced, especially for graduate study, when it is returned to the Main Library where it can be better cared for, where all its holdings will be accessible, and students can with facility combine its use with that of the entire collection. The Penniman Collection covers a wide range of divisions of education, some of them being only touched upon, others fully represented. History and philosophy of education are best covered, perhaps because they claim all things human as their domain. Some of the more modest areas, staked out under the heads of administration, methods, discipline, education of blind and deaf, manual and industrial training, vocational education, psychology, child study, elementary, secondary, and higher education, the education of adults, political and religious education, education of women, and education in contemporary foreign lands are less well represented, especially in respect to current materials, because of insufficient funds.

Educationally considered, the life of man in the Western world has been shaped by three main tendencies: particularism in the city states of the ancient world; universalism in the medieval church; and nationalism (again particularism, but on a different scale) in modern times. The materials in the Penniman Library reflect all three tendencies; though naturally, the modern nationalistic period, with its numerous cross currents, is represented in greatest detail.

Illustrative of the first pattern of practice and thought are the politico-educational works of Plato and Aristotle, the treatises on education of the orator by Cicero and Quintilian, and works of the grammarians Donatus and Priscian, some in the original tongues, others only in translation, as well as numerous commentaries upon them by modern authors. Along with these may be mentioned an extensive literature giving systematic accounts of education in the ancient world, e.g., Mahaffy's Old Greek Education; Freeman's Schools of Hellas, Gwynn's Roman Education from Cicero to Quintilian, Cole's Later Roman Education, Wilkins' Roman Education and National Education in Greece and Forbes' Greek Physical Education.

Representing the merging of pagan philosophy and Christian thought in the service of a universal ideology there are numerous works from Augustine to Abelard and Bonaventure. The latter's Disputationes (1491) a beautiful, embellished, double-column text, was secured a few years ago. Among other rare items is an epitome of medieval learning, the Margarita philosophica (1504) which represents the student's progress from the hornbook, Donatus and Priscian through logic, rhetoric and the quadrivium to the highest of all sciences, sacred theology. Mention may be made, too, of standard works on education of the period, such as Montalembert's The Monks of the West, Townsend's Great Schoolmen of the Middle Ages, Rashdall's The Universities of Europe in the Middle Ages, McCabe's Augustine and Abelard, and Mullinger's Schools of Charles the Great.

The Catholic reaction, intended to offset Lutheran and other Reformation excesses is illustrated by the Ratio studiorum of the Jesuits and by numerous works written by and about the Jesuit movement, such as Hughes' Loyola and the Educational System of the Jesuits and Schwickerauth's Jesuit Education. Other Catholic educational movements, such as the Port Royalists and the schools of the Christian Brothers, are presented in contemporary documents and recent scholarly studies, such as Les Constitutions du Monastère de Port Royale du S. Sacrement (1665), Beard's Port Royal (1861), Romanes Story of Port Royal (1907), Barnard's Little Schools of Port Royal (1913), and numerous others.
The breakup of medieval culture and the emergence of the modern secular state as controlling agent in education, is fully reflected in the Penniman Collection, whether considered in its religious, literary, scientific, social, political or philosophical aspect. A glimpse of the early educational consequences of religious revolt is gained from Luther’s Letter to the Mayors and Aldermen and his Sermon on the Duty of Sending Children to School. In the Kirchenordnungen and Schulschildungen of the sixteenth and seventeenth centuries one sees the actual growth of power of Protestant princes and clergy over education.

Pietism, Puritanism and Quakerism, representing the extremes of religious revolt, are portrayed not only in numerous contemporary works, e.g., Gansen’s The Educational Writings of A. H. Francke; Francke’s Kurztes und einfältiger Unterricht wie die Kinder zur Wahren Gottseligkeit Anzuführen sind (1733) and Pietas Hallensis; or, An Abstract of the Marvelous Footsteps of Divine Providence (1707), but in such detailed, modern historical studies as those of Klain, and others who set forth the educational history of the eighteenth and nineteenth centuries from original manuscript sources. The Philanthropic movement, more or less closely linked with religious groups, is represented further by Watts’ defense of charity schools, Mandeville’s antagonistic Essay on Charity and Charity Schools, and such works as Lancaster’s British System of Education (1812), Improvements in Education (1806), and Bell’s Experiment in Education (1797), Madras School (1808), Mutual Tuition and Moral Discipline (1823), and numerous others which set forth the methods and systems by which they hoped to promote education of the poor with little expense and great benefit.

On the literary side, deviation from the medieval pattern of education is represented first by a devotion to classical letters, and second by a stress on the use of the language of the new nations. Typical of the first, in the Penniman Collection, are Woodward’s works on Vittorino da Feltre, Education during the Renaissance and Erasmus; Seebohm’s Oxford Reformers; Einstein’s Italian Renaissance in England; and such a fundamental text as Lily’s Grammar. Erasmus’ dialogue on the Ciceronians, translated by Scott, castigates the degenerate bookishness of his day and makes a stirring appeal to reason. Typical of the second tendency is Ascham’s Scholemaster and Mulcaster’s Elementarie and Positions, and Milton’s Tractate on Education, with their plea for attention to the mother tongue. Vernacular instruction, first chiefly through private, philanthropic agencies and then by state intervention, was in the coming centuries to supplant classical studies in large measure. The shelves are crowded with books and documents pertaining to the growth of these vernacular institutions in the states of Europe and in America. Cousin’s Report on the State of Public Instruction in Prussia (1835), Stowe’s Elementary Education in Europe and Instruction in Prussia (1837), Bache’s Report on Education in Europe to the Trustees of Girard College (1839), and Griscom’s Year in Europe (1819), are among the most significant examples of early American study of this tendency, which had wide influence here.

Philosophically considered, modern education denies the position of Medieval realism, giving first place to the study of things, Realien. The Penniman collection is rich in original works and later criticism bearing on this scientific, realistic movement. Spedding’s extensive work on Bacon, and those of Dixon, Lovejoy, Nichol, Fisher, and others in this collection, and the philosopher’s own works go far toward illuminating this tendency of the modern age. Besides numerous editions of Bacon’s essays, mention may be made of the Novum Organum Scientiarum (1645). The Comenian works, the Orbis Pictus, Great Didactic, School of the Mother’s Lap, the Janua Linguarum; various works of Ratke; Basedow’s Elementarwerk (1770); and numerous less well-known items, such as Unterweisung in den Vornehmsten Künsten und Wissenschaften; Unterhaltungen eines Landschullehrers mit seinen Kindern auf Spaziergängen und in der Schule; and Ritter’s Erfindungen, prepared for Burger und Industrieschulen (1804), illustrate the realistic tendency in German education. Franklin’s Proposals and other philosophical
and educational publications illustrate the reaction against purely classical literary education and the demand for realistic and vernacular training in eighteenth-century America.

The extremes of reaction against the traditional philosophical and literary patterns of education are found in Naturalism, typified by Rousseau's Emile; Pestalozzi's Leonard and Gertrude, How Gertrude Teaches Her Children; and Letters on Early Education; Fellenberg's Letters from Hofwyl; Froebel's Education of Man, Pedagogics of the Kindergarten, and Education by Development; and by the works of many American followers and critics, notably John Dewey and his numerous disciples.

On the socio-political side there is a vast literature dealing with the education of the elite ruling element of society. In the sixteenth and seventeenth centuries, this is typified by Thomas Elyot's The Governour, Peacham's Compleat Gentleman, Brathwaite's English Gentleman, Erasmus' Education of a Christian Prince, Castiglione's The Courtier, and Defoe's Complete English Gentleman, written about 1720 but not published till 1890.

With the decay of monarchism and the rise of middle class society, the education of the citizen became an important theme. The revolutionary period, both in France and America, gave rise to new concepts of government (or re-discovered old ones), and many plans for a "new" education of man to fit him for it appeared. Representative of this tendency are La Chalotais' Essay on National Education (1763); Condorcet's Report on the General Organization of Public Instruction (1792); Rush's Thoughts upon the Mode of Education Proper in a Republic (1786); Knox's Essay on the Best System of Liberal Education (1799); de Nemours' National Education in the United States of America (1800).

The fortunes of the citizen, experiencing education at the hands of the state, entered a third phase following the World War. Alexander and Parker tell a story of it in The New Education in the German Republic; Kosok, in Making German Citizens; Hartshorne, in German Universities and National Socialism; and Graefe, in German Education Today. Divergent tendencies in the Soviet Union, are set forth in Pinkевич's The New Education in the Soviet Republic, Harper's Civic Training in Soviet Russia, Ilin's New Russia's Primer, King's Changing Man, and are reflected in such source material as the extensive collection of children's literature. Italy and numerous other countries in the post-war era are covered in a similar fashion.

Apart from materials relating to foreign educational movements which affected our own growth, the Penniman Collection contains a large amount of Americana. This is undoubtedly its greatest strength. To do justice to it in a few words is impossible, but the nature of it may be indicated roughly. For the research student there is a splendid collection of early nineteenth-century educational journals, for example, Russell's American Journal of Education; American Annals of Education; the Common School Journal of Massachusetts; the Connecticut Common School Journal; Barnard's Journal of Education; and, naturally, an increasing number of files as one nears the end of the century. There are also some foreign journals, English, French and German, but the files are incomplete.

For an insight into studies of an earlier day, one may turn to the old textbook collection, containing several hundred volumes, primers, spellers, readers, grammars, rhetorics, arithmetic, geometry, algebra, history, geography, natural, moral, and mental philosophy. Among the more unusual of these may be noted a New England Primer of early date, and Joseph Emerson's Evangelical Primer; readers by Murray, Webster, and Bingham; The Little Grammarian (1830); Cocker's Arithmetik, Pike's Arithmetic, The American Tutor's Assistant, Dilworth's Schoolmaster's Assistant; Workman's Elements of Geography, Woodbridge
and Willard's Geography; Willard's History of the United States and Guide to the Temple of Time, Noah Webster's History and Goodrich's History of the United States, as also "Peter Parley's" Common School History (1839).

While there are few original sources available in the collection bearing on administration and control of early education, such thorough researches as Bell's The Church, the State and Education in Virginia, Dunlap's Quaker Education in Baltimore and Virginia Yearly Meetings, Mulhern's A History of Secondary Education in Pennsylvania, Kemp's Support of Schools in Colonial New York, Suzzallo's Local School Supervision in Massachusetts, Updegraff's Moving School in Massachusetts, and many others, bring to students what scholars have gleaned from distant fields. For a study of control and other aspects of public education, the reports of state superintendents and reports of the United States Commissioner of Education are available. Likewise important for early and later public educational developments are the reports of various societies such as the American Institute of Instruction, the National Education Association, the Herbartian Society, the College Teachers of Education, Progressive Education Association, the John Dewey Society, and numerous others whose files are all practically complete.

The scientific movement has drawn many minds to make a more or less exact scrutiny of manifold aspects of the educative process. The result of these efforts, dating from about the beginning of the century, are found chiefly in series of studies, such as the Teachers College, Columbia University, Contributions to Education, which runs to about 800 volumes. These are in the Penniman Collection, along with smaller series produced at Chicago, Pennsylvania, Harvard, Hopkins, Peabody College, Iowa, California, and elsewhere. Besides American collections, there are, of course, a few of foreign origin.

One of the most ambitious efforts at the writing of educational history was made by H. B. Adams. While not conforming generally to the more rigorous standards of later scholarship, the volumes of that series, issued by the Government Printing Office, are useful to students of education within the several states, and may serve as aids to those today who undertake more extensive and profound research in such fields. With this class of state histories of education should also be mentioned a large collection of institutional histories, colleges, universities, and secondary schools. The most distinguished of recent additions to this class is Samuel Morison's The Founding of Harvard College.

At a time when Western European society was poorer in material goods than today, libraries were collected with great difficulty; but the indispensable role of the library was reflected in the remark of a monastic official that claustrum sine armario est quasi castrum sine armamentario. Monks looked upon a world very different from ours of today: the university of the present touches realms of education undreamed of by those educated in monasteries, in cathedral schools, or in the limited faculties of medieval universities; but, though university life and studies are less cloistered than they were of yore, the old observation holds good. It is not only true, it needs to be constantly stressed, for with the opening of new areas of intellectual effort, vastly increased resources have to be found to supply the very life blood that nourishes it.

It is a curious and significant fact that, despite the concern expressed by Americans, at the founding of the Republic, for the study of education as a most important phase of the life of man, and of the nation, so little was actually done to promote it. The study of education as a special field is only about a century old in the United States; and, on the university level, barring slight exceptions, it belongs to the present generation. And, even when this effort had be-
gun, the normal schools of a hundred years ago, and the universities of the late nineteenth and early twentieth centuries were like castles without armories, so far as literary equipment was concerned. The old materials pertaining to the subject had not been collected; and the new were still hidden in caverns of the mind. The dean of the most important of the early schools of education has frequently remarked on the poverty of sources and other materials of study, near the close of the nineteenth century when his institution opened. It is by consideration of these facts that the significance of Dr. Penniman's donation is best understood.
ENGINEERING:

CIVIL AND MECHANICAL ENGINEERING

By J. A. Prior

The Towne Scientific School Library contains practically all literature on the campus relating specifically to civil and mechanical engineering and a substantial portion of that relating to chemical engineering. Material on electrical engineering is concentrated in the library of the Moore School of Electrical Engineering. The proximity of these departmental libraries makes each of them reasonably convenient to members of other departments, while their division facilitates and promotes their general use, particularly by undergraduates.

The Towne Scientific School Library contains no special or memorial collections, and has received no large donations. Its accumulation has been governed by no rigid policy, except that of maintaining complete files of a few of the more important technical periodicals. Therefore its resources are uneven in quantity and quality; but the general opinion of users seems to be that the Towne Scientific School and Moore School of Electrical Engineering libraries, taken together, constitute one of the best sources of engineering materials in the Philadelphia area.

Preliminary to more detailed discussion, the resources of our Towne Scientific School Library may be classified and rated somewhat as follows:

Engineering theory - monographs, research reports, symposia, advanced or specialized textbooks. Our collection of such material is uneven in quality and quantity.

Periodicals - transactions of professional societies, regular reports of research organizations (e.g., Bureau of Standards), technical-trade journals. In this material, our library is strong.

Handbooks and compilations of engineering data. In view of the accessibility of such material in nearby departmental libraries, our collection is probably adequate, but its enlargement would be a real convenience.

Indexes, bibliographies, etc. Because of the wide coverage of the Engineering Index, our resources are probably sufficient.

Textbooks of elementary and medium (advanced-undergraduate) level, in which primary material is selected, organized and simplified for teaching and direct application. Our collection of such material is spotty but on the whole among the best in the local area.

Historical and biographical material relating specifically to engineering. Of this, we have little except that contained in periodicals.

Collateral and reference materials (e.g., texts in mathematics or economics, catalogues, dictionaries and encyclopaedias) assigned to our library for reasons of convenience. We seem fairly well supplied with such material.

The volume of engineering publications is so great that no engineering library of limited financial resources can hope to be uniformly excellent. Particularly in the Philadelphia area, it is logical for libraries to specialize, there being little point, for example, in main-
taining files of patents or collections in engineering history to rival those of the Franklin Institute. The Towne Scientific School Library has always been primarily a teaching library, reflecting the preoccupation of the staff with undergraduate instruction. Its policy has been simply to keep material most likely to be useful to students and faculty in a state of maximum accessibility, i.e., on open shelves in a convenient and comfortable place. Undoubtedly this has promoted the use of the library by undergraduate students, including many from other departments; but it has left the library somewhat weak in its service to advanced students, research workers, and practitioners. These latter needs are at present receiving attention and it is thought that with moderate funds its resources for research and graduate instruction can be brought to a satisfactory level of excellence, at any rate in the major fields of engineering.

In engineering, as in most rapidly advancing professions, the technical periodical is one of the most important sources of information not only for instructors, research workers and graduate students, but for undergraduate students as well. Nearly all theoretical developments and experimental findings are first reported in journals such as the transactions of professional societies and periodical reports of research agencies. The technical-trade journals, besides being hospitable to theoretical material of not-too-remote applicability, publish a great volume of technical material and data. Such data are not indispensable for general comprehension of principles, but are invaluable to the experimenter who must design and operate elaborate equipment, and to the instructor who enlivens his teaching by keeping up with the times in fields beyond his limits of special concentration. Moreover, periodicals are source material for research in industry and economics; our files of bound volumes are probably more used by students of these subjects than by our own.

The Towne Scientific School and Moore School of Electrical Engineering libraries together contain the current issues of at least one periodical covering each sub-classification of their respective fields, including the reports of major public research agencies (e.g., Bureau of Standards, National Advisory Committee for Aeronautics) and the transactions of the national engineering societies. Sets of bound volumes of most of these publications, complete over many years and in most cases from the beginning of publication, are available. Of foreign publications and particularly those in foreign languages, however, we have very few in the Towne Scientific School Library; but our list includes such important periodicals as Engineer (London), Engineering, and the Zeitschrift des Vereines deutscher Ingenieure. Practically no French or Italian publications are included.

The use of periodical publications has been greatly facilitated by the development of the Engineering Index. This work, published in annual volumes by an agency of the major engineering societies, covers the field of domestic and foreign publications so completely that special subject bibliographies are conveniences rather than necessities. The flood of periodical literature includes many superficialities and defects, but justifies absorption of considerable funds and of storage space by service to every one. Our relative strength in this class of material is equally beneficial to elementary and advanced students.

As has already been pointed out, the Towne Scientific School Library appears to be oriented to the undergraduate. The usual subjects of the curricula are fairly well represented by recent texts (with exceptions), although in many cases most of the current texts are quite dispensable because they cover essentially the same material with minor variations of treatment. In some subjects which have been dropped from the curricula, acquisition of new material has been stopped, leaving collections which might well be retired to storage. The library facilities of the area are such that we probably should feel no obligation to provide something about everything connected with our field. On the
other hand, we have respectable material in several subjects outside the strict boundaries of civil and mechanical engineering (metallography and aeronautics, for instance) in which courses are regularly given in these departments.

To the advanced student, our library may look strong or weak, according to his field of concentration. In fact, it is uneven, reflecting the interests of our more active faculty members, rather than any considered policy of maintaining a minimum level of adequacy to the probable needs of advanced workers in any major subdivision of our field. Such a policy, and the funds to effectuate it, are highly desirable. Delaying the acquisition of advanced material until someone finds urgent need of it is an economical policy but an unsatisfactory one, if only for the reason that such material is not always available on short notice. If the policy of the Towne Scientific School is to lay increased emphasis upon research and graduate instruction, the policy of its library should be not only to maintain its present strength in domestic periodical literature, but also to bring its resources of authoritative books in each major subdivision of the engineering field to an equal level of excellence.

ELECTRICAL ENGINEERING

By Charles Weyl

The primary intention of the Moore School of Electrical Engineering Library is to have available all worthwhile books on electrical engineering written in English; the more important electrical engineering books in foreign languages, and reasonably complete references in subjects cognate to electrical engineering. With electrical engineering in mind as the first consideration, the Moore School Library is one of the best, if not the best of its kind in the vicinity of Philadelphia. For simplicity I shall discuss this library under the following headings:

electrical engineering,
physics,
mathematics,
philosophy of science,
old texts,
miscellaneous.

Electrical Engineering

This heading will be subdivided into (a) textbooks, (b) reference books, (c) journals and periodicals:

Textbooks and Reference Books:

In this classification our library is unusually well stocked and quite up-to-date in English books. The collection of texts on communication is comprehensive. As there is very little call for foreign books on electrical engineering, very few of these are to be found. The same condition applies to reference books in electrical engineering.

Journals, Periodicals and Proceedings:

Journals of the principal American and English technical societies both in electrical engineering and related subjects will be found up to date and in most cases complete for many years back. This part of the library is reasonably well stocked. There are also a few of the more prominent French, German, and Japanese journals which are kept up to date. We subscribe to additional foreign journals when there is sufficient call. Journals, periodicals, and proceedings in foreign languages constitute one of the library's less complete sections.
In this vicinity our deficiency with respect to foreign journals is offset by the excellent collection to be found in the Franklin Institute Library.

**Physics**

The collection of general physics is unusually large for an electrical engineering library. Virtually all important contemporary texts and references in English and quite a number in French and German are purchased if they have any bearing on theoretical or applied electrical engineering. This section of the library is so good that persons from other schools and colleges are constantly applying to the Moore School Library for books on physics. The sections on modern atomic theory, quantum theory, relativity and wave mechanics are exceptionally representative as well as those on the mathematical theory of electricity, magnetism, and sound. Those subjects such as heat, mechanics, chemistry and others especially related to mechanical, civil, chemical and other branches of engineering are to be found in a few quite general books only.

**Mathematics**

Special attention has been given to the mathematics applicable to theoretical physics and applied engineering. In these fields the Moore School Library has a good collection of contemporary works in English and some of the more important works in French and German. As in the case of physics, application is constantly being made to our library by persons in other departments and in other colleges for reference to our books on the mathematics of physics and engineering. The major lack in this section is books written in Italian, Russian, and foreign languages other than French and German. One special section in the mathematical collection deserves attention. We have what is probably the most complete collection of texts on mathematical statistics to be found in any library in this vicinity.

**Philosophy of Science**

Under this heading the library contains many of the better-known books issued in English in the past ten years. We have no books on this subject in foreign languages.

**Old Electrical Engineering Texts and Journals**

We have an exceptionally large collection of important old texts and journals in English on electrical engineering, from the inception of the art. Owing to the lack of space and the infrequency of calls for them, many of these books are not displayed and have been put away in the storeroom. They are, however, fully catalogued and are available when requested.

**Miscellaneous**

In addition to the principal classifications discussed above, the library contains small collections of general engineering, economics, business, patents and patent law, biographies of scientists and engineers, ordinary dictionaries, technical dictionaries, yearbooks, handbooks and encyclopedias. These latter classifications contain carefully chosen volumes which are considered sufficient to give the student of electrical engineering references of general character in the arts and sciences closely associated with electrical engineering. Further texts on these subjects can be found in the other engineering libraries of the university.
Summary

The foregoing shows the library of the Moore School of Electrical Engineering to be adequate for most needs in textbooks, reference books, journals and periodicals in the English language.

It further shows the Moore School to have an unusually good collection of texts on mathematics and physics, as applied to engineering. What it lacks in these respects in general can be found in the Mathematics Research Library, the Physics Department Library, and in the library of the Franklin Institute.

The library also contains a reasonable number of texts on subjects cognate to electrical engineering.

The principal weakness of the library is in its comparative lack of texts in foreign languages, especially journals and periodicals.

In conclusion, the contents of the library are thoroughly indexed and cross indexed.
FINE ARTS (EXCLUDING MUSIC)

By John F. Harbeson

In the departmental library of the School of Fine Arts the university has an excellent collection of books for the study of professional architecture in its various phases, and particularly for work in architectural design. It compares favorably with those of other architectural schools, being surpassed in this regard only by the Avery Library at Columbia, the best in the country. To this book collection is added a classified loose plate file of architectural documents and an adequate collection of lantern slides for such professional courses.

The Pepper Hall Collection of the Free Library of Philadelphia, which may be used for reference by our students, has many books on the crafts which supplement our own collections.

There is also, in the departmental library, a small working collection for undergraduate courses in landscape architecture and the history of painting and sculpture, and some works on the fine arts in general and on interior decoration. These are not comparable with the resources for architecture. Since the establishment of the School of Fine Arts in 1920 there have been no appropriations to establish the library resources in those subject fields to the existing standard in architecture. Through a grant of the Carnegie Corporation additions were made to our collection of lantern slides, and to a reference file (now numbering about 7,500) of photographs and colour reproductions for the study of the history and appreciation of art; it is sufficient, however, only for such undergraduate courses as are now given.

The periodicals, about forty paid subscriptions and fifteen free or gift subscriptions, cover 65 percent of the important ones in the several subject fields, adequate for all undergraduate courses, and comparing favorably with most similar school libraries, excepting Harvard's landscape and city-planning sections, Columbia's Avery Library (architecture, housing, city planning) and Princeton's in fine arts and archaeology.

In discussing the resources for graduate study or for research we may divide the subject in three parts:

architecture, including interior design,
history of art and the philosophy of the arts,
landscape architecture and city planning.

By way of preface we may state that all books in the library of the School of Fine Arts are included in the catalog of the General Library, that there are in the General Library about the same number of books as in the Fine Arts Library on any subject division other than architecture — and the University Museum has much more than either on archaeology and on Oriental art, that the annual losses in the Fine Arts Library are small compared to those of the seminars of the General Library, that the resources of the library would be considerable greater if there were an adequate staff to classify and index for fullest use.

For graduate study in architecture there is the nucleus of a good collection on Italian Renaissance architecture. The University Museum has very good source material on Egypt, Assyria and Greece, and the Main Library on the classic period. For other fields we are not very well equipped.

For graduate study in the history and philosophy of the arts, the resources of the university library are quite inadequate in all fields.
save those of classical and Near Eastern archaeology to which the con-
tribution of the University Museum has been so great. In medieval
archaeology, the standard periodicals such as the Bulletin monumental
and the reports of the Congrès Archeologique for the French contribu-
tion, the Boletín de la Sociedad Española de Excursiones for the Span-
ish and the standard German scholarly periodicals such as the Jahrbuch
für Kunstwissenschaft, the Jahrbuch der preussischen Kunstsammlungen,
the Marburger Jahrbuch für Kunswissenschaft, etc., all are lacking.
A certain number of what might be termed secondary sources are avail-
able, such as the various volumes of the Pegasus Press publications,
but the fundamental monographs on monuments, styles, and individual
artists are not present for the most part. There is a certain amount
of material dealing with medieval illuminated manuscripts that has been
assembled for its bibliographical interest but here again such a funda-
mental work as the series of bulletins and monographs issued by the
Société Française des Manuscrits Illuminés is not available. For
Italian Renaissance art, there is a reasonable representation of the
older monographs but recent publications are lacking. For Flemish and
German and French Renaissance art, as well as the later periods of the
baroque and rococo styles, there are only very general discussions.
Modern art is represented only by a very few publications.

Bryn Mawr College has a better library on many fine arts subjects,
especially in the Spanish field. The library of the Philadelphia Muse-
um is admirable in its provision for the particular problems of con-
noisseurship as encountered in the administration of the collections of
such an institution. The most complete working library in the field of
art history within a hundred mile radius is that of the Department of
Art and Archaeology of Princeton University, one of the oldest in the
country and built up over a long period of time by very careful and
judicious buying directed along the lines of research carried on by
the members of its staff at one time or another. Many of the items it
contains are no longer available nor should any effort be made by the
university to duplicate such a collection. It should not be lost sight
of that the particular situation at Pennsylvania is one demanding its
own solution, one that would not necessarily be brought about by such
duplication or even by establishment of even more liberal regulations
concerning the exchange of books. The formation of a library adequate
for the purpose of advanced research in art history at Pennsylvania
would not necessarily involve competition with neighboring institutions
but rather should complement their activities.

To establish the library on a firm basis for such work would re-
quire the expenditure of $10,000 a year for five years. This should be
exclusive of subscription for periodicals or of the necessary augmenta-
tion of the library staff to care for the material. Nor would it put
the library on such a basis that it could be compared quantitatively
with those at Princeton or Harvard, but it would provide an adequate
foundation for the carrying on of research along the lines that could
be most profitably pursued with the source materials that are available
in the university and community.

In source materials -- paintings and art and archaeological ob-
jects -- we are rather well supplied: American paintings at the Academy
of Fine Arts, the English School at the Philadelphia Art Museum, the
Italian and Spanish Schools in the Johnson Collection are available at
all times, and the magnificent Widener Collection may be seen on occa-
sion. The University Museum is rich in African sculpture, and in
Babylonian, Assyrian, Egyptian and Oriental artifacts, and the Phila-
delphia Museum in the illuminated manuscripts of the Middle Ages, in
glass, porcelain and costumes of various epochs. And the Metropolitan,
Frick and other New York collections are only two hours away.

In landscape architecture and city planning, the library of the
School of Fine Arts contains a nucleus of basically significant volumes,
and a small collection of maps, plans, reports, and slides. These
FINE ARTS

resources are supplemented by the works in the Main Library, and in the departmental libraries of the related fields of engineering, architecture, law, political science, economics, sociology, etc.; notably the collection in the Institute of Local and State Government, in the university, for students of city planning.

In landscape architecture, departmental resources for graduate research are supplemented by the available resources of the Pennsylvania Horticultural Society, the Morris Arboretum, the Arboretum of the Barnes Foundation, and of a number of private collections.

For some months there has been under preparation a detailed bibliography on city planning and on housing by our faculty. This list will be ready soon after the first of the year, and will provide a basis for comparison of our resources with the best available material and with other institutions, and provide also a basis of study for urgently needed expansion.

MUSIC

By Otto E. Albrecht

The library resources in the field of music and musicology at the University of Pennsylvania are probably weaker than those in any other field of scholarship, since it has been only in recent years that any systematic attention has been given to building up collections in this field. However, certain divisions of the field are well represented, and present shortcomings in others are partially compensated for by the availability of other nearby libraries, and by the close co-operation of the curator of music in the library of the School of Fine Arts at the university with the other music librarians in the city, both for interlibrary loans and for avoiding duplications in the acquisition of important items. A small union catalogue of important titles in the field of musicology in the Philadelphia area is in progress.

The library resources in this field are not found in one building. The working library is housed in the library of the School of Fine Arts, on open shelves. Less frequently consulted works, together with others which library restrictions make it impossible to transfer, are kept in the Main Library. Other important works, of interest to the collections and the research at the University Museum, are found in its library. There are also a number of volumes in the Penniman Library, including some general works as well as those of a pedagogical nature.

REFERENCE WORKS. The collection of general reference works is a good one, the library has the encyclopedias and Handbücher of Adler, Bucken, Cobbett, Kretzschmar, Lavignac and Thompson, the eleventh edition of the Riemann Lexikon together with the later French edition; all editions of Grove's Dictionary and both of the Oxford History, and the Altmann biographical dictionary. Eitner's Quellenlexikon and Sammelwerke are both represented. Bibliography is represented by a file of the Peters Jahrbuch, the annual lists of Hofmeister, Lott and Taut, and by the various publications of the Library of Congress and of its first music librarian, Sonneck. Although we have the various music catalogues of the British Museum, the Bibliothèque Nationale, the Boston Public Library, and the Heyer, Scheurleer, and Fleisher collections, this field needs to be expanded. The list of copyright entries in music in the Library of Congress is also a valuable bibliographical tool, as is the Grosser Liederkatalog of Challier.

PERIODICALS. This is the weakest division in music library resources in the metropolitan area. Many important foreign periodicals in the field cannot be consulted in the Philadelphia area. The university, however, currently receives many more foreign periodicals than any other library nearby, and five of the sixteen received exist in complete files.
SOCIETY PUBLICATIONS. With few exceptions, learned societies in the field of musicology have limited their publications to periodicals and to music, and therefore do not lend themselves to a separate listing.

DISSERTATIONS. An excellent collection of foreign dissertations in musicology has recently been thoroughly catalogued, and author, title and subject entries made in the catalogue of the Main Library and in the music catalogue in the library of the School of Fine Arts.

DENKMÄLER and CRITICAL EDITIONS. The various series of critical editions of musical compositions, either national series or sets of complete works of individual musicians, of paramount importance to serious musicological studies, are chiefly remarkable by their absence in the university library. Some of the rare exceptions to this neglect are the recent volumes of the Austrian Denkmäler, the complete set of the English Madrigal School, Torchi's Arte musicale in Italia, and the Bordes Anthologie des maitres religieux. Although not quite comparable, the excellent modern series, Das Chorwerk and Nagel's Musikarchiv should also be noted. The absence of complete sets of critical editions is only partially offset by the collection at the Curtis Institute, which has roughly one half of the volumes in this category. It cannot be too strongly deplored that the following important sets are not available in the Philadelphia area: Monumenta musicae Belgicae, Die Erbe deutscher Musik, Publikationen älterer Musik, Old English Edition, Publications of the Musical Antiquarian Society, Instituizione e monumenti dell'arte musicale Italiana, Denkmäler der japanischen Tonkunst, Hispaniae schola musica sacra. Nor are the complete works of the following individual composers available: Berlioz, Bruckner, Byrd, Couperin, Gluck, Grétry, Josquin, Liszt, Lully, Mendelssohn, de Monte, Musorgski, Obrecht, Praetorius, Rameau, Scheidt, Schein, Sweelinck, Wagner and Weber.

THEORETICAL WORKS. The field of music is not strongly developed, except for standard modern works, and for the two collections of medieval theorists mentioned in the next section. Fields which overlap with other departments of instruction are in general better represented, such as aesthetics, acoustics and psychology of music.

HISTORY OF MUSIC. The library is reasonably well equipped in the historical field. The standard histories of music are represented, supplemented by the best works in particular fields. The collection of biographies of musicians is a good one, although better in works in English than in foreign languages. The library has a virtually complete collection of works dealing with Brahms. The field of medieval music, both religious and secular, is especially strong. We may note Coussemaker's and Gergert's series of Scriptores, the former's Histoire de l'harmonie au Moyen Age and his Drame Liturgiques, the Paléographie musicale, the Publications of the Plainsong and Medieval Music Society, Bannister's Monument Vaticani, Liuzzi's work on the Laudi, and the Early Bodleian Music. The library also has most of the published facsimiles of troubadour and trouvère chansonniers, and a photostatic reproduction of the Fleury play-book. The standard works on hymnology includes a complete set of the Analecta Hymnica.

Primitive music and the music of ancient civilizations are both adequately covered, thanks to the interest of the University Museum and the Department of Anthropology. The field of American music, in which so much could be done, especially in this area, is at present not adequately represented, but might be built up with the interest of the Departments of American Literature and American History. The uncataloged collections of early American music in the Library Company and the Historical Society of Pennsylvania are of interest in this field, as well as the large collection of early sheet music deposited by the
Musical Fund Society in the Free Library. The university's own collection of sheet music, particularly of American imprints from 1800 to 1860, has never been adequately explored, and is of great interest for the social historian as well as the musicologist.

The opera is well represented by a good-sized collection of vocal scores, but comparatively few full scores. These are supplemented by the standard reference works. Comparatively unstudied is a large collection, approximately 1,000 libretti of the period 1670-1860, in French, Spanish and German, a number of which, through sampling, have been found absent in the catalogue of the world's foremost collection in the Library of Congress.

Although the university's collection of orchestra scores is not large, it is admirably supplemented by the library of the Curtis Institute and by the very complete Fleisher Collection in the Free Library. This is also true to a certain extent of chamber music, but mention should be made of the existence in the Main Library of a collection of foreign imprints in this field in the first half of the 1800's a number of which are rather rare.

The university library, in common with most American libraries, has no important musical manuscripts, but this lack will be offset during the current year by the publications of the Microfilm Music Archive, to which the university library is the first subscriber.

Finally mention should be made of the Singer Collection of phonograph records, over 8,000 in number, which supplement the library's book resources and being largely of a historical nature, will one day be of inestimable value in tracing the history both of performance and of mechanical reproduction.
HISTORY

ANCIENT HISTORY

By W. W. Hyde

As a report on the resources of the university library on the Ancient Near East has already been made by the Department of Oriental Studies, the present report is confined to Greek and Roman history only. As the writer has given graduate seminars in these latter fields for many years and used the library facilities in his literary work he is reasonably acquainted with the resources and deficiencies of our library equipment. As for the resources of the library for studying Oriental history the writer would merely add that the facilities for study in that field at Pennsylvania are equal or even superior to those in classical history.

In addition to the collections in the Main Library notice should also be taken of the supplementary material in the form of books and periodicals in the University Museum. That collection, however, is more restricted than the one in the university library, for it is particularly strong in works dealing with classical archaeology in which the Museum is more vitally interested. Little can be added from other departmental libraries at the university, although the Penniman Library of Education contains important works on Greek and Roman education, and the library of the School of Fine Arts has many notable works on ancient art and architecture not duplicated in the Main Library. The present report, therefore, is confined to the latter.

At the outset it may be said that the university library collection of material on ancient history is in various ways deficient owing to the small amount of money available during the past few years to keep up its standard. However, we do have a good working library which compares favorably with similar collections in other eastern university libraries of equal size and importance. Thus, we have large collections of source materials in the form of books, dissertations, collections of inscriptions and papyri, periodicals, etc.

We have a full collection in duplicate of the Teubner texts of Greek and Roman writers including, of course, all ancient historical works; more recently we have collected, in triplicate, texts with English translations of all important classical writers in the "Loeb Library" which is still in progress. Thus we have carefully annotated texts of all the ancient historical writers and these are supplemented by the chief documentary sources, especially full for the more important Greek historians, (e.g., Muller's Fragmenta historicorum Graecorum, I-V, and Jacoby's Fragmenta der griechischen Historiker now appearing, Schaefer's Quellenkunde der griechischen Geschichte, Hills' Sources for Greek History, Cary's Documentary Sources for Greek History, Pöhlmann's Grundriss der griechischen Geschichte nebst Quellenkunde, and many others). We should not omit the "Pennsylvania Reprints", which reproduce for ancient as well as for other fields of history, important documents in English.

We have works on all major excavations since the beginning of the nineteenth century in Greece, Italy, Anatolia, Crete, etc., and all the major composite histories which have digested such finds (e.g., the Cambridge Ancient History in twelve volumes and many additional volumes of plates, Methuen's History of the Greek and Roman World in seven volumes, and all the chief general histories of antiquity, (e.g., those of Cavaignac, Duncker, Meyer, Glotz, etc.). We have a full line of histories of the various Greek and Italian city-states, of the Aegean Isles, sites on the coasts of Anatolia, etc., and many histories of
ANCIENT HISTORY

Graeco-Roman statesmen and of special periods.

As for Greek history in particular it may be said that the library possesses all the great histories from Mitford and Thirlwall down to Bury and Rostovtzeff. Here we are also especially rich in the later Macedonian period, Alexander's Empire and the Greeks under Roman sway. In Roman history we have all major histories from Gibbon down to Dessau, Niese, Seeck and Rostovtzeff, and countless special accounts of the Roman statesmen of the Republic and of the Caesars of the Empire from Augustus on.

Down to 1930, we possessed some 200 dissertations on ancient history divided about equally between Greece and Rome. Since that date we have more than doubled the number and in the same ratio. We have a great mass of supplementary material to history proper, such as the various corpora of Greek and Latin inscriptions. (Inscriptiones Graecae, Corpus inscriptionum Latinarum, the collections of Collitz, Dareste, Cagnat, Dittenberger, Dessau, Diehl, Tod, Rushforth), and numbers of sectional epigraphical material as well. We have all the collections of Greek papyri found in recent years in Egypt beginning with that of Grenfell and Hunt. As for periodicals the Main Library and the University Museum receive all the leading journals in various languages which deal with every phase of classical study, from those devoted primarily to ancient history as such (e.g., Klio), to those which garner discoveries in archaeology, art, literature, philosophy, law, politics, economics, numismatics and military antiquities.

Altogether, at the University of Pennsylvania one can study ancient history in all its branches to good advantage.

MEDIEVAL CONTINENTAL HISTORY

By Arthur C. Howland

For medieval history, the University of Pennsylvania Library contains most of the large standard secondary works in all fields and a large but insufficient collection of special works and monographs. As in English history, the secondary literature of the last twenty years is not as well represented as that of earlier days and should be largely added to. We have, however, an adequate collection of guides and bibliographies as well as an excellent equipment in the way of literary histories of various countries and of the monastic orders.

For research in the Middle Ages our equipment is excellent in certain fields, while in others it lacks important material. For the purpose of this survey the subject may be divided into (1) general collections, (2) church history, (3) special topics (law, Crusades, Inquisition) and (4) national history.

General Collections

We have nearly all the old miscellaneous collections of sources made in the seventeenth and eighteenth centuries by individual scholars, often containing material not to be found elsewhere; such as the collections of Pez, Martène et Durand, Mabillon, d'Achery, Goldast, etc. Many of these old collections are rare and difficult to procure even at very high prices.

Church History

Our resources in Church history are excellent. In addition to Migne's Patrologia (Latin and Greek), currently priced at about $2,500, the Vienna Corpus ($900.) and many of the old editions of the Fathers, we have:
(1) For papal documents, the *Regesta* of Jaffe, of Potthast, and of Kehr, the publications of the *Ecole française de Rome*, the Roman *Bullarium*, the *Bullarium* of the Franciscan Order and other smaller collections.

(2) For the Church councils, all the general collections - Labbe, Mansi ($1500), Harduin ($600) - the work of Hefele-Leclercq, those devoted to national councils such as Hartzheim, Aguirre, Spelman, Wilkins, Bouchel, etc., and various collections of provincial councils.

(3) For the lives of the saints, the Bollandist *Acta Sanctorum*, another expensive set ($1,500), and the smaller collections of *Acta*, except Habillon's work on the Benedictine saints, which should be added.

(4) For national churches, we have the *Gallia Christiana*, the *Italia Sacra* and the *España Sagrada*.

(5) For monasticism we have the most important sources on the history of the Franciscans and Dominicans, Wadding's Franciscan Annals, (Annales Minorum seu Trium Ordinum A. S. Franciscaco Institutorum Avctore), etc., but lack some of those dealing with other orders and congregations.

The Lea Library is particularly rich in the writings of pre-Reformation theologians and the works of the summists and the commentators on both theology and canon law. Many of these books are extremely rare and not to be found in most university libraries. A few prices have been added to show what it would cost us now for works which we acquired in the past for much less. Many other items mentioned above are almost equally expensive. Our own resources in Church history are supplemented in various directions by the valuable collections in the library of the Episcopal Divinity School of Philadelphia.

**Special Fields**

The chief sources for the Crusades, such as the *Receuil des historiens des Croisades*, now costing about $600 and difficult to obtain, and the publications of the Société de l'Orient Latin, are on our shelves, but we lack many recent monographic studies in this field, which ought to be procured.

For the history of medieval law, both Germanic and Roman, a large body of material is contained in the Lea library, supplemented by much additional matter in the Main and the Biddle Law libraries. In this field our equipment in source material is very satisfactory, but less so in regard to the modern secondary literature. In Scottish law we are reasonably well equipped. We have nearly all the government publications and those of the Scottish Historical Society and the Bannatyne Society. Our great need here is for full sets of the publications of the other learned societies of Scotland, many of which, however, are in other libraries in the Philadelphia region.

On the history of the Inquisition our library has probably the best collection in this country, consisting not only of nearly all the printed sources, but of a considerable body of transcripts from European archives; still more important is the extensive series of transcripts from the archives of the Spanish Inquisition. These are in the Lea Library, which also has a great collection on the history of witchcraft, second only to that of the Cornell Library.

**National History**

The library is well equipped for the study of medieval France and Germany. In addition to the principal secondary works, we possess most of the great collections of sources. For France, the old collections of Duchesne; nearly all the works produced by the St. Maurists,
including the Receuil des historiens de France and its continuations; the Documents Inédits ($800); the publications of the Société de l'Histoire de France ($850) and of learned academies. For Germany, many old collections, including that of Leibnitz; the Monumenta Germaniae Historica ($5100 for the original edition, which we have); the Chroniken der deutschen Städte; the collections of Böhmer and of Jaffé; the publications of the great academies. Our chief deficiencies are the lack of the newer editions of the imperial Regesta and of all but a few volumes of the Fontes rerum austriacarum.

For other countries our material is less satisfactory. We have Muratori's old collection of sources for Italian history and the revised edition so far as published; and also his Antiquititates italicæ and Annali d'Italia; but we do not have the highly important series published by the Historical Institute of Italy and we lack some of the recently published material on the history of the Italian cities. Spain is better represented with the Documentos Inéditos ($1,400), the España Sagrada, the publications of the Real Academia Española and other material in the Lea Library, but we still lack much in this field. For other continental countries, we are more poorly equipped, especially in regard to Belgium and the Netherlands. For most of the continent, however, as well as for Church history, we possess an unusually rich collection of works of erudition published in the eighteenth century. For Byzantine history our only large body of material is the Corpus ($775) of Byzantine historians published at Bonn.

Periodicals

Here we are supplied with complete files of most of the important periodicals dealing wholly or in part with the general field of medieval history, but are worse off for periodicals devoted to local history. Among our treasures is a nearly complete file of the Journal des Savants from 1665 on. It is highly desirable, if possible, to complete this set by filling in the missing years.

Conclusion

In the general field of medieval history the university library is by far the best equipped of any in this region, and because of our age we possess many books difficult or impossible to obtain at the present time. Our greatest weaknesses are: (1) the inadequate supply of recent secondary literature of a scholarly character, and (2) our lack of the publications of learned societies devoting their attention to the history of special regions or special topics. Such societies are numerous and publish a great amount of material not to be found elsewhere. Few fields of medieval research can be thoroughly cultivated without reference to their publications, comparatively few of which we possess.

THE LEA LIBRARY OF MEDIEVAL HISTORY

By Arthur C. Howland

The Henry C. Lea Library contains about 12,000 volumes devoted mainly to the history of the Middle Ages and the early modern period. The collection lays special emphasis on legal and ecclesiastical history and is devoted more to continental than to English development.

The collection was brought together by the late Henry Charles Lea during a long life of intellectual activity and represents the special interests to which he devoted himself. As he seldom borrowed or made use of books from other libraries, the general nature of his collection may be learned by referring to the citations and notes in his published works. Unless otherwise stated, all such citations are from material in his own possession. His library was essentially that of a research scholar. Nothing was purchased merely because of its interest to a
bibliographer or a lover of curiosities, though many rare and curious items found their way to his shelves.

The Lea Library is now housed at the University of Pennsylvania in a separate room of the Main Library constructed for that purpose. The room is an exact copy of Mr. Lea's own library, formerly attached to his residence on Walnut Street. This has made possible the transfer of the book cases and other woodwork of the original room to the new location. The books are now shelved exactly as Mr. Lea arranged them, thus preserving the appearance and atmosphere of a great scholar's workshop.

The collection was begun by Mr. Lea about 1849 with a rather full representation of Greek and Roman writers. Then followed in successive periods the French chronicles and memoirs, materials for legal history, the history of magic, of the medieval Inquisition, of the penitential and disciplinary system of the Church, of Spain and the Spanish Inquisition, of witchcraft. In all these categories, as well as in other fields, further material continued to be added by Lea down to the time of his death. A small endowment to the Lea Library enables the university to continue these purchases. No catalogue of the collection has been printed but there exists a separate card catalogue with duplicate cards incorporated in the general university catalogue.

The library is one of the outstanding collections of the country in those fields in which Lea was specially interested. Some of its important features may be thus indicated:

Early editions of the sources for medieval history, most of which are here represented. These old editions are often of much value not only for the material they contain but also for the notes of their learned editors. Among the older collections are those of Schilter, Mencken, Heineccius, Leibnitz, Eccard, Reuber, Freher and Struve, Pistorius, Langebeck, Duchesne, Sirmond, La Bigne, the St. Maurists, etc.

The writings of medieval theologians, the commentators and sum- mists, and many rare treatises on moral theology; a collection of forty-eight editions of the Index librorum prohibitorum, ranging from 1570 to 1900; extended histories of the Church written in the seventeenth and eighteenth centuries by French, German and Italian scholars; the most important treatises on canon law, both Catholic and Protestant, especially those dealing with the Lutherans; many old works on the history of the Jews and their relations with Christians, controversial works relating to Judaism and treatises on the Mishna and Talmud.

An extensive collection of material for the history of magic and sorcery, including the sacred literature of the East so far as it has been translated into European languages, and most of the literature of witchcraft from the fourteenth to the eighteenth century together with the controversial writings dealing with this subject.

The printed sources for the history of the Inquisition, both papal and Spanish. In addition, a unique collection of unprinted material: for the older Inquisition, original manuscript records of various trials, and sixteen large pamphlet boxes of transcripts, three of them from the Collection Doat of the Bibliotheque Nationale and the remainder from the Vatican and Venetian archives, the municipal archives of Piacenza and Florence and manuscripts deposited in the Ambrosian and the Victor Emmanuel libraries, and the Trinity College Library, Dublin, the last-named being a portion of the Vatican records carried off by Napoleon; for the Spanish Inquisition, in addition to four boxes of original manuscripts, there are sixty-six boxes of transcripts from the tribunals of Alcalá and Simancas, from the archives of other tribunals deposited in the national library and the national historical archives at Madrid, from the archives of the Crown of Aragon, the municipal archives of Seville, the Vatican, Venetian and Neapolitan archives, and
those in the Ambrosian Library, the state library of Munich, the Bibliothèque Nationale and the state archives at Brussels. Rarer even than many unprinted works is Cardinal Albizzi's *De Inconstantia in Jure*, dealing with the practice of the Roman Inquisition and, until a few years ago, unknown even to Catholic scholars not connected with that tribunal.

Many learned works by the scholars of the seventeenth and eighteenth centuries on the municipal and regional history of Italy, especially the Kingdom of Naples; manuscript material dealing with the papal history of that period and with the relations of Paul IV and Pius IV with the Caraffa family; fourteen of the eighteen manuscript volumes (folio) in which Chioccarelli collected the official documents relating to the conflict of papal and royal jurisdiction in Naples; Giannone's works and manuscript material concerning his troubles with the Church; a number of volumes of pastoral letters and other documents, partly broadsides and partly manuscript, addressed to their dioceses by the bishops of Piacenza, Padua, Vicenza, Bergamo, Verona and Venice during the first half of the eighteenth century.

A large number of works on continental legal history of the Middle Ages and early modern times: The writings of the jurists, treatises on criminal procedure, especially the use of torture, collections of laws, etc.

The Lea Library possesses many of the learned works of seventeenth and eighteenth-century scholars dealing with the history of the Church, with provincial history, the history of the Netherlands, the history of scholarship, the literary history of monastic orders and the like. The scholarly productions of the nineteenth century, however, are not so well represented. For such books one must turn to the Main Library of the university to supplement the Lea collection.

Among the larger collections, however, in the Lea Library are Migne's *Patrologia*, the Bollandist *Acta Sanctorum*, the collections of Church councils by Surius, Labbe, Harduin, Hartzheim, Aguirre and others, the Roman, Franciscan and Dominican *Bullaria*, the *Colección de Documentos Inéditos*, the *Recueil des Historiens des Gaules et de la France*, Muratori's *Scriptores*, his *Antiquitatis* and *Annali d'Italia*, the *Collection des Chroniques Belges Inédites*, the Magdeburg *Centuries* and the *Annales* of Baronius and his continuators, and various other series of publications.

**EUROPEAN HISTORY**

By Wm. E. Linglebach

The field of European history from 1400 to the present is manifestly much too extensive to admit of general statements as to the condition of the university library holdings for the period as a whole. There is, for example, the greatest difference between those on the Renaissance and Reformation and those on the French Revolution and Napoleon, or those on pre-war international relations. In general, the libraries have the essential materials, books, periodicals, guides, and collections of documents for graduate and undergraduate instruction in all the modern European history fields. In the latter fields, our collections of primary historical materials are large, much the best in the Philadelphia area. This is the case particularly with official and semi-official publications of foreign governments, and materials for the history of the domestic as well as the foreign affairs of the countries represented.
Ancient Regime, French Revolution and Napoleon

For the Ancient Regime, the French Revolution and Napoleon, our libraries have extensive and important primary source collections including such publications as the Bulletin des lois, the Procès Verbaux of the successive national assemblies, and of the Commune and the Municipality of Paris, proceedings and records of the great committees, etc., complete files of the Moniteur Universel, different collections of memoirs and contemporary correspondence. This also holds for the Napoleonic period, for which we have, of course, the Correspondance de Napoléon premier, published by the Second Empire, and the numerous volumes of letters published subsequently. Collections like the Archives parlementaires which supplement contemporary publications of the period are practically all to be found in our libraries.

Nineteenth Century

For the history of the nineteenth century the library collections are spotty. We have, for example, the parliamentary papers, journals, debates, etc., of France, Prussia, and Austria (complete for 1848 to 1914), but not for Italy, Belgium, Holland or Russia. The list of secondary works on the history of these countries is good for France, Germany and Italy, but those for the other countries are totally inadequate. They should be built up and strengthened by the purchase of the authoritative works in foreign languages.

International Relations

On European international relations, our collections rate among the best. They include the well-known publications of the various foreign offices, like the Livres Jaunes, British and Foreign State Papers, Documents diplomatiques, and Archives diplomatiques, Staatsarchiv, etc., on the history of their respective countries' foreign relations; also Die grosse Politik der europäischen Kabinette, 1871-1914, Documents diplomatiques français, 1874-1914, Oesterreich-Ungarns Aussenpolitik ... 1908-1914, most of the semi-official publications and the best secondary works on the diplomacy of the countries of Western Europe for the half-century before the World War; practically all collections of treaties, conventions, etc., especially the voluminous series begun by George F. von Martens, the different national treaty series, like those by Lewis and Sir Edward Herstlet for Great Britain, Alexandre and Etienne de Clercq for France; the League of Nations Treaty Series, 1920-.

Our libraries do not have the day-by-day files of any good newspapers. Since these are extremely bulky and difficult to obtain anywhere in this country, save in Washington, New York and Boston, a plan to supply the deficiency by microfilming several outstanding European journals for the period should be developed. At the moment we are very remiss in not subscribing fully to the photostat service for representative current newspapers. Among the annuals of historical significance, we have the Annual Register from its beginning in 1756, Europäischer Geschichtskalender by Schultheiss, and one or two others of international importance. The secondary literature in the history of international relations and diplomacy is very large and not adequately represented in our library. With a reasonable expenditure of funds on this field it could be developed into one of the best.

The World War

For the World War, apart from its diplomatic history, we have only an average documentation, supplemented by steady buying of the standard works, general staff histories, and the like. The Stotesbury Collection of Newspaper Clippings is of interest, but should be compared with the current War Documentation Service which bids fair to make our Philadelphia collection on the present war one of the very best in the country.
Post-War and Contemporary History

For the post-war period, the university libraries have a combined strength found nowhere else in this metropolitan area. Added to the collections of the Main Library are those of the Lippincott, Penniman, and Biddle Law School libraries, affording excellent opportunities for the study of contemporary political, economic and diplomatic history, pedagogy and law.

On the other hand, the libraries are not well supplied with current magazines. There are many scientific and semi-learned periodicals, both in English and in foreign languages, to which we do not subscribe. These represent not only a present disadvantage to students and readers, but an irreparable loss, unless corrected at heavy expense, in the future.

Renaissance and Reformation

For the history of the Renaissance and Reformation, our libraries do not have nearly as good a list of the best secondary works, especially those in foreign languages, as they should have. On the other hand, we do have the large collections of published documents, including the successive editions of Luther's work, notably the Kritische Gesammtausgabe (Weimar Edition); Calvin's Opera, etc. On the history of the Jesuits and the Counter Reformation we have the usual secondary works with some good primary materials and, of course, the collection in the Henry C. Lea Library. In the field of international relations for the seventeenth and eighteenth centuries we have Recueil des Instructions données aux Ambassadeurs et Ministres de la France depuis les Traité de Westphalie jusqu'à la Révolution Française, and other publications of this character. On the whole, however, the holdings in the field of the seventeenth and eighteenth centuries are anything but satisfactory, save possibly for the Ancient Regime.

Biography

Biographies of European statesmen, authors and men of affairs, written in English, are fairly representative; there are, however, important gaps among biographies written in European languages. Aids to research, bibliographical guides, yearbooks, etc. are nearly always adequate.

Smaller Nations

We are weak on secondary accounts of certain of the smaller nations. This is especially true of the Baltic and Balkan countries. Where possible, books in English should be added first, then books on these subjects in French and German.

Local History of Europe

Here there is a serious deficiency, especially when compared with the collection on English local history. But the ramifications in this field are so extended that it would be better at first to limit expansion to works on special aspects or topics.

Military and Naval History

About a hundred volumes are needed here to build up the secondary books on the subject. It would seem to be particularly appropriate for the R.O.T.C. to develop a good undergraduate division in our library in the field.
History of Science

There are so many specialized libraries in the Philadelphia area that no attempt should be made to out-do, or even duplicate, these collections. We need, however, certain basic books in this field.

Government Documents

In view of the great mass of official and semi-official publications by the different departments of practically all European governments, much of which is to be had for a nominal charge, if secured at the time they appear, there should be a member of the acquisition staff of the library, a person specially trained, to be on the look out for acquisitions, by purchase or otherwise, and to supervise the cataloguing and listing of this voluminous and very valuable material for the use of scholars and students.

We need: (1) more systematic building up of documents such as non-parliamentary papers (Great Britain) and European official documents, especially of France, Britain, Germany, not included in debates, laws, bills, official gazettes. They cover a great many subjects useful for other departments as well as for history; (2) strengthening in the documents (including legislation, debates, etc., pre-1870 foreign relations) of Italy, 1870 on, Holland, Belgium, Sweden, Switzerland, Russian wherever possible. In this connection it should be noted that apart from the Charlemagne Tower Collection, the Krasny Archiv and a small collection of newspapers of the early months of the Soviet Regime, our library is quite weak on Russian and Near Eastern history. This is also true of the history of the Scandinavian countries.

The special document librarian might also assume responsibility for proceedings and other publications of learned and scientific societies. In this field there is a special need to co-ordinate our acquisitions with those of the American Philosophical Society and other scientific libraries in the Philadelphia area. One of the objectives of the American Philosophical Society, for example, is to complete and round out its collection of the proceedings, reports, etc., of scientific and learned societies, which is already one of the best in the United States. Similar situations exist in other fields, such as the history of science, which is represented in the Philadelphia area by several excellent and highly specialized libraries.

ENGLISH HISTORY

By Conyers Read and Leonidas Dodson

Considering England alone and leaving out of account for the moment Scotland, Wales, Ireland and the dominions beyond the seas, the University of Pennsylvania libraries are rich both in printed source materials and in secondary works. I propose first to examine the collections on English history and then to say a word or two about collections on British history outside of England.

In dealing with our resources, I do not confine myself to the Main Library. At the Biddle Law Library there is a valuable collection of early printed books dealing with the history of English law and English political institutions.

There are no other departmental libraries at the university quite so important for the historian as the Biddle Law Library, although the Penniman Library contains a number of the standard books dealing with the history of education in England — such books, for example, as Mullinger's University of Cambridge, Malet's University of Oxford, and the writings of Leach and Foster Watson on English grammar schools. Whether it be desirable to bring all books of this sort to-
gather at one place or to leave them where they are, certainly it is very important that we should have a union catalogue of all University of Pennsylvania collections at the Main Library. This end is being achieved.

For purposes of appraisal it may be convenient to divide printed source material on English history into the following groups:

(1) Publications of the British government,
(2) publications of societies,
(3) private publications.

Publications of the British Government

These are very extensive for all periods, and the university has almost all of those which are definitely historical in character, though it does not maintain anything like complete files of British government publications in general, many of which are of great value in all of the social studies. In all of the important historical collections, like the Rolls Series, the Calendars of Patent and Close Rolls, the Calendars of State Papers, Domestic, Foreign, Spanish, Venetian, Roman, the Pipe Rolls, the Statutes of the Realm, the Rolls of Parliament, the Journals of Parliament, the Reports of the Historical Manuscripts Commission, the Parliamentary Papers, and Hansard's Debates, the library is very well equipped. We do not have a complete set of Parliamentary Papers, nor do we even have a complete index of them. We lack some volumes of Hansard, but otherwise our collection of British government historical publications is among the best in the country.

Unfortunately, all of the sets which I have enumerated above have been exposed to constant attrition. The volumes missing are much more numerous than they ought to be. For example, the Anglo-Saxon Chronicle and the Chronicles of Geoffrey of Monmouth, of William of Malmsbury and of Mathew Paris are missing from the Rolls Series. Three volumes are missing from the Calendar of State Papers, Foreign, Elizabeth, one volume from the Calendar of Papal Registers, one volume from the Close Rolls, Henry III, the first volume of the Irish Patent Rolls, the thirty-fourth volume of the Naval Record Society, three volumes of the Manorial Society publications, six volumes covering the important years 1909-15 from the Annual Register, three volumes from the Camden Society, etc.

Publications of Societies

These in turn might be divided into societies national in scope and those concerned with a particular locality.

The great national societies for the publication of historical material, such as the Camden Society, the Royal Historical Society, the Early English Text Society, the British Record Society, the Selden Society, Archaeologia, etc., are well represented at the library. We have complete sets of most of them. Societies dealing primarily with church history are not so well represented. We have the Parker Society publications, but we lack such standard collections as Patres Ecclesiae Anglicanae. In general, we are weaker in English ecclesiastical history than in political or economic history.

Local Societies. In this area of source material, which is very extensive, we are, as compared with our sources otherwise, notably weak. We have a number of the notable collections, but we lack the majority of them. Out of a list of seventy more important local historical publications, the library has complete files of twelve and scattered volumes of nineteen, but about forty are wanting altogether. To some extent our weaknesses in this particular are strengthened by the collections of Haverford College, at the Historical Society of Pennsylvania, and at the American Philosophical Society. But there are serious omis-
sions even in the resources of the metropolitan area taken as a whole. A check-up of the metropolitan resources in society publications and some concerted effort to supply the lacks are much to be desired.

Private Publications

On the whole these have diminished in proportion as government and learned societies have undertaken the work which was formerly left largely to private enterprise. We have at least some of the works of many of the older antiquaries, men like William Camden, Robert Cotton, William Dugdale, Thomas Hearne, Thomas Madox, and John Strype, but we lack a great many. We are also inadequately supplied with the historical publications emanating from guilds, trading companies, and quasi-public corporations of all sorts. Our collection of the published records of the London companies, for example, is a very imperfect one, even as compared with that of the Widener Library. Here again the important consideration is not that these books should be at the university, but that they should be somewhere in the metropolitan area. They are not used often, but they are essential for advanced research. It should be noted, of course, that many of these early source collections were privately printed in limited editions and are long out of print. The business of building up such collections is a long and difficult one.

Secondary Works

We subscribe to all the important national periodicals dealing with English history, though we get very few of the English local historical journals. We have all the important works of reference which are national in scope, such as the Dictionary of National Biography, Cockayne's Peerage, etc.; we have the most important bibliographical aids (though we are weak in local bibliographies), the most important books in the ancillary sciences, like palaeography, diplomatics, sphragistics, numismatics, and the like (though we lack Briquet's standard book on paper watermarks and Le Clerc's standard treatise on paper). We have the works of all the classical English historians, and we do not lack many of the important secondary books on all fields of English history published before 1900. Our great poverty is in the works published during the last forty years. It is a hopeless task to maintain anything like a complete collection of important works on English history with the slender resources at our command. Taking that into account, our collection is commendably rich and on the whole well selected. Since the former professor of English history and the present professor are both Tudor historians, it is not surprising to discover that we are relatively richer in the middle period of English history than in the early or late period. We are richer in economic and social history than in political or ecclesiastical history. We are weakest in local history. Though we have a complete set of the Victoria County History and some of the older county histories, we have little or nothing in the vast field of town histories.

The Empire Outside England

Scotland. We have most of the important government publications dealing with Scotland, but in general our resources for the study of Scottish history are weak. (See supplementary statement immediately following this report (page 80-82.)

Ireland. We are even weaker on Ireland. We have the historical publications of the British government but precious little besides. We do not even have the Annals of the Four Masters. We do not have more than a few scattered volumes of any of the Irish learned historical societies, such as the Royal Irish Academy, or the Royal Society of Antiquaries of Ireland, or the Cork Historical and Genealogical Society. And of Irish local history and clan history we are entirely innocent.
ENGLISH HISTORY

Wales. The same thing is emphatically true of Wales.

The Dominions Beyond the Seas. In appraising the resources of the university library from the viewpoint of the history of the British Empire, it is necessary to differentiate between the "Old" Empire and the "New". For the period prior to 1783 the situation is gratifying. The standard printed source materials are nearly all present, and are supplemented with a strong collection of secondary works. The invaluable Board of Trade papers, together with other British manuscript material which has not been printed (such as the British Museum MSS., the Fulham Palace MSS., and the archival material of the Society for the Propagation of the Gospel) are available in transcript, photostat, and microfilm form at the Library of Congress, a relatively short pilgrimage for the zealous historian. The presence of such strong resources here or within easy access is, of course, primarily the reflection of the interest which the American Colonial Period has (very properly) aroused as the formative era in the history of this nation. They are not, on that account, less useful for the study of the British Empire per se.

For the period since 1783 the situation is far less favorable. Much of the material for the history of modern England is equally useful for that of the empire, for there is of course no sharp cleavage between insular and imperial history. Hansard and the Parliamentary Papers are as essential (and the fragmentary nature of the university's collection of the latter is as unfortunate) for the one as for the other. But of strictly colonial source material, the university has very little to offer. Statutes of all the Dominions and of a number of colonies are to be found in the Biddle Law Library, most of them for the period since 1880, but the complete set of session laws of Canada for the period since the Act of Union of 1840 is in contrast to the general situation. Canada, again, is best represented in the matter of legislative journals and session papers, but these stop around the turn of the century. In short, the university's collection of printed source material is entirely inadequate for advanced work in the history of the modern British Empire. A bright side to the picture may perchance be found in the consideration that so much of the material for this period remains, and may well continue to remain, in manuscript. That which relates to British North America must for the most part be sought at Ottawa; that which concerns the rest of the empire, in London. It is thus as available to the student in Philadelphia as to any other American scholar.

If there were more room in the library, it would undoubtedly be possible for us to receive a good deal of governmental material from the various British colonies for the asking, or by exchange. This type of material has never been sought for because of the lack of room. The university already has a representative nucleus on the Empire in the nineteenth and twentieth centuries, which, one hopes, may be built up into a really adequate working collection.

CONCLUSIONS

In English history, particularly for the medieval and especially for the middle period, we have collections which compare favorably with the best libraries in America. We are reasonably strong in English history for all periods. We have, indeed, in English history the nucleus for an excellent library, and in any consolidation of library resources in the metropolitan area the university library would be the obvious centre around which to build the English history resources of the area. But in the British Empire outside of England a great deal of time and money would need to be spent to bring our collections up to the standard of a great university library. This is less true of Scotland than it is of the rest of the Empire, but it is true in general. Unfortunately, there are no adequate collections on these subjects elsewhere in the metropolitan area. It might be possible, it would certainly be desirable, to interest organized groups of Irish Americans or
Scottish Americans within the area in this problem and solicit their support. Considering the importance of the Irish and of the Scottish elements in American culture, and particularly in the culture of this part of America, it is rather distressing to discover that neither in the university library nor elsewhere within the metropolitan area can we supply the materials essential for an adequate understanding of Scottish or of Irish history. For the British Empire outside the British Isles we have, with the exception of Canada, almost nothing, not so much as we should expect to find in any third-rate college library in Canada or Australia or South Africa.

SCOTTISH HISTORY

By W. Stanford Reid

In dealing with the problem of material for the study of Scottish history it must be remembered that after 1603 to a certain extent, and after 1707 almost entirely, Scottish history becomes one with that of England. Subsequent to the union the main differences between the history of the two countries lie in matters of ecclesiastical and legal history, and in the rebellions of the '15 and '45. Thus most of the historical material dealing with the history of Scotland after 1707 comes under the general history of the United Kingdom.

The published bibliographical material on Scotland is extremely inadequate. And of this our library possesses no large quantity. We have, however, Black's bibliography of Scottish material in the New York Public Library, MacGregor's Sources and Literature of Scottish Church History, and the first volume of the Stair Society publications which deals with Scottish legal history. Then besides these we have one or two bibliographies of material relating to different shires.

Primary Sources

The important publications of the British government are in the library. There are the Acts of the Lords of the Council in Public, in Civil and in Criminal Affairs. The Registers of the Privy Council, of the Secret Seal, of the Great Seal, the Exchequer Rolls, Record Office Indexes of Deeds, Sasines, etc., the Rotuli Scotiae, and the Calendar of State Papers, Scotland. We have two complete sets of the Acts of Parliament, 1424-1707, one of them in the Biddle Law Library. Theiner's Monumenta Hibernorum et Scotorum and the publications of the French school at Rome (Lea Library) contain primary material on Scottish ecclesiastical history.

The collections of the learned societies are not particularly well represented in our Scottish sources. We have an almost complete set of the Bannatyne Club, but eight volumes are missing. We also have, except for the first thirteen volumes, the publications of the Society of Antiquaries of Scotland. These publications deal mainly with medieval and early modern material. The Scottish History Society (three series), however, covers nearly the whole field and this we have entire. The historical collections of the Ayrshire and Wigton Society numbering about fourteen volumes are also complete. Besides these we have occasional volumes from the Burgh Record Society, Spalding Club, Third Spalding Club and Grampian Club. There are also in the library the complete series of the publications of the Glasgow and Edinburgh bibliographical societies and of the Scottish Text Society.

This list of society publications is very meager compared with the number of societies publishing for the last seventy-five years. And what is worse, the university library's incomplete sets are often the only representatives of those publications in the whole area. The Bryn Mawr and Haverford college libraries, however, do a little to fill up the gaps. We lack entirely, however, such standard publications as
SCOTTISH HISTORY

those of the Abbotsford Club, Maitland Club and New Spalding Club.

Besides the society publications which we possess, we have a few of the privately published collections of sources such as the Laing Charters, Edinburgh City Accounts and the (old and new) Statistical Accounts of Scotland.

Secondary Works

When we come to secondary works the material is very spotty. The works of some of the standard authors are in our possession: Major, Bøeae, Brown, Barton, Laing, Innes and Balfour. We are, however, completely lacking other important authors such as Fordun, Bower, Lindsay, and the Liber Pluscardensis. In the matter of periodicals we have only the Aberdeen Journal, Notes and Queries, 1908-1915, and a complete set of the Scottish Historical Review (twenty-five volumes).

In the matter of legal and constitutional history our libraries are fairly adequate. Besides all the government publications valuable for constitutional history we have a number of the standard secondary works. In the Main Library we have Rait's Parliament of Scotland, MacKinnon's Constitutional History of Scotland, Craig's Jus Feudale and Erskine's Institutes. The Biddle Law Library has a much larger selection containing such works as Skene's edition of the Regiam Majestatem Scotiae, MacKenzie's Laws and Customs, Stair's Institutes, Kame's Statute Law of Scotland and Hume's Commentaries on the Law of Scotland. Besides this there are such works as Agnew's Hereditary Sheriffs of Galloway and Littlejohn's Records of the Sheriff Court of Aberdeen. In addition to the publications of the Stair Society there is a certain amount of legal material published by some of the other societies whose publications we possess. On the whole the libraries of the university possess a moderately adequate amount of material for the study of Scottish legal history.

In the matter of social and economic history the available secondary material is somewhat scarce. The library, however, seems to carry most of the standard secondary works such as MacKinnon's Social and Industrial History of Scotland, and the works of Grant, Rooseboom, Davidson and Gray.

In church history we have a considerable number of standard works such as those of MacPherson, Spottiswoode, Calderwood and others. We also have one or two histories of dissenting churches: Lawson's Episcopal Church of Scotland and Mackerraw's Secession Church. Then we have a few works such as Dowden's Bishops of Scotland. But we lack his Medieval Church in Scotland as well as Herkless and Hannay's Archbishops of Aberdeen, and similar works.

In rather close connection with the foregoing one might mention the histories of educational institutions in the Penniman Library. There one may find such works as Rait's Universities of Aberdeen and other university histories.

There is also a certain amount of local and family material in the library, but this is thin. Most of the standard county histories are missing, as well as nearly all family histories. There are a few histories of Edinburgh and Glasgow, but these are about the only burgh histories which we possess.

On the whole it would seem that the university cannot be considered as a great repository of Scottish historical material. Its greatest lack seems to be in the absence of many of the necessary society publications, and of much material relating to the families important in Scottish history. It would, for instance, be very considerable help if we had some of the family histories written by Sir William Fraser. They are particularly valuable for the many documents which they contain,
SCOTTISH HISTORY

and which, coming from family muniment chests, are very hard to dis­cover in their present repositories. The Library of Congress is the only repository in which I have been able to discover an almost com­plete set of these works.

In summing up, one cannot but notice that probably 80 percent of the Scottish material which our libraries possess is related to the medieval period. From the Reformation to the Union there is compara­tively little material except that in the Bannatyne Club or the Scot­tish History Society publications. It would seem advisable, therefore, that an effort should be made to build up this section as well as to trace down and purchase some of the important works on medieval Scot­land.

UNITED STATES HISTORY

By Roy F. Nichols

The American history section of the library of the University of Pennsylvania has had the great advantage of age and of the sustained in­terest of a long series of scholars from the days of McMaster and Thorpe. The accumulations were begun in the early days of the uni­versity when it was the College of Philadelphia and since the early 1890's its collections have developed along more or less scientific lines. The result is that the university possesses one of the strongest libra­ries for the academic study of American history in the country. Its re­sources may be divided into (1) published source material, national and local, (2) general collections, political, economic, social and cultur­al history, (3) state and local history, (4) biography.

Published Source Material.

National. The Main University Library has been a despository of the national government from the beginning of that system. The result is that we have an almost complete collection of the publications of Congress and the Executive Departments. In the Main University Library and in the Biddle Law Library are complete reports of the various federal and many of the state courts.

Local. From time to time during the last century, a variety of lo­cal organizations, states, historical societies and patriotic organiza­tions, have published source material in series or in individual vol­umes. The Main University Library has been careful to collect as many of these source collections as it has been able to secure. It has been successful in keeping up not only with the publications in this locali­ty, but it has an almost complete file of such as are published in the South and to a lesser extent in the West. We think it is safe to say that there are few important sources published within the United States relating to the history of the forty-eight states which the library does not possess.

General Collections

Political. The political history of the nation has been the chief interest of most of those who have been active in directing the collect­ing policies in American history. The result is a most comprehensive collection, with but few gaps in this field. All the general reference works, the great histories, and a great number of monographs have been assembled by purchase and exchange so that the student will find little in this field that he cannot command and should there be any items miss­ing, they are probably in the Historical Society or in some co-operating library unit in the vicinity.

Economic. As to economic material, unfortunately there has not been the same diligence in making a systematic collection that has been
shown in the assembling of works in political history. However, the interests of the various divisions of the economics group in the Wharton School have provided much material along this line. Furthermore, the publications in this division of history have been less numerous, probably, than in the other branches. We have a respectable collection, but by no means a comprehensive one.

The Stephen Colwell Collection of manuscripts is the most important, although it is made up chiefly of scattered items. For the eighteenth century and much of the nineteenth century primary printed sources are fairly satisfactory. These consist of British colonial and Parliamentary papers, statutes, proclamations, etc., as well as Colonial and state records and statutes. Further, they include contemporary works of economists, economic reports, census returns and travels. The Colwell and Carey collections of pamphlets also should be noted. Among secondary sources the publications of historical and economic societies are fairly complete. The same is true of economic histories. For the period since the Civil War the materials are not so complete. For the recent period, secondary materials in most fields of economic history, especially monographs, are lacking. The newspaper files, on the whole, are satisfactory.

Social and Cultural. The department has not, until recent years, emphasized the collection of specific materials relating to social and cultural history as such. Little has been done, for example, in the collection of church records and other items relating to so important a subject as the history of religion in this country. On the other hand, it will be recalled that Professor McMaster was the outstanding pioneer among American scholars in directing attention to social history in general; and under his direction newspaper files and other materials of considerable value to social historians were accumulated. Thus many of the publications listed below, under the heading "State and Local", are rich in the stuff of which social history is made. The publications of the Massachusetts Historical Society, or of the Pennsylvania German Society, for example, have obvious social and cultural significance.

In the very nature of the case, moreover, the collections in special departmental libraries in the university, and in some of the major depositories in the city, possess great potential value to the social historian. To a considerable degree, his function is not to find new materials never before assembled; but rather to consult special collections which have hitherto lain beyond the historian's pale. Law, medicine, theology, the fine arts, and various other fields have long been busy in building up their own libraries, and they all supply grist to the social historian's mill. It is here that we are particularly fortunate, in that the University of Pennsylvania possesses excellent professional libraries; while in the city of Philadelphia we have access in addition to some of the oldest and richest collections in the arts, sciences, and theology available anywhere in the United States.

In the university, for example, we possess such important general collections as that of the Biddle Law Library, and such unique special ones as the Edgar Fahs Smith Memorial Library for the history of chemistry and related sciences. In the city, such libraries as those of the College of Physicians, of the Academy of the Natural Sciences, and of the American Philosophical Society are among the nation's greatest collections in the literature of the natural sciences. The Library Company possesses a remarkable collection on the development of American architecture. Many other illustrations of the same sort could be added. The Library Company, the Historical Society of Pennsylvania and certain other local institutions, are particularly rich in all manner of materials which throw light on the whole social development of the American people from a very early period. This is true of manuscript as well as of printed items. Quite important is the fact that historical students can now "control" the printed material
through the new Union Catalogue, and the manuscript items through the
guides now being brought out by the Historical Records Survey, to a de-
gree never before possible.

The department, it should be added, has been fortunate in securing
excellent co-operation on the part of both the special libraries in the
university, and the great institutions in the city, so that we feel
that both the potential sources for social history, and the means
to exploiting them, are now centered with us to a degree that was
never possible in the past and that is most promising for the
future.

State and Local History

The fact that there are forty-eight states means that there is a
great variety of local historical publication. Each state has its his-
torical literature of its own, some of it obscure, difficult to obtain,
and in some cases almost impossible to discover. The collectors who
have made up the American history section of the library have done
their best to secure the most significant works in local history. Nat-
urally, their effectiveness has had geographic limitations. The col-
lections are strongest for the sections nearest Philadelphia, namely,
the Middle, New England, and Southern Seaboard states. However, it is
surprising how much has been secured relating to the Mississippi Valley,
the Southwest, and the Pacific shore. Our greatest weakness lies in the
Rocky Mountain states.

The second great division in local history is that made up of the
periodical publications of the many state and local historical societies.
There is a history magazine now being published in nearly every state
in the Union, and in some there are literally from ten to a score. The
library has a notable collection of these state historical periodicals
embracing in many instances complete files. These contain not only ar-
ticles of historical importance, but frequent publication of source ma-
terial. Such collections are, of course, augmented by the extensive
resources of the Historical Society of Pennsylvania, but it is interest-
ing to note that there has never been sufficient attention paid any-
where in Philadelphia to the extensive minutiae of local history, par-
ticularly of the West. For New England, the Middle States and the
South, however, there is a very wide range of material.

Biography

American biography has always been a principal interest of the de-
partment and the result is that there is a very comprehensive collec-
tion of biographies of the principal American political figures and of
those who are outstanding in other fields as well. There is also a
growing number of volumes devoted to the lives of less imposing person-
alities. With these biographies have been assembled the principal col-
lections of the letters and papers of the great and near-great in Ameri-
an history.

In conclusion, the character of the collections in American his-
tory at the university and the command which it has over the facilities
of neighboring libraries make the university library a natural center
for research in any field of American history.

LATIN AMERICAN HISTORY

By A. P. Whitaker

The University as a Focus of Library Resources in Latin American
History and Related Fields

It may be helpful if I begin this report by stating
the results of my own experience with the library resources of
this university in the field of Latin American history.
In the course of the past three years I have investigated several questions in the political, social, economic, and diplomatic history of Latin America from the middle of the sixteenth century to the present. It has been my experience that in every part of this wide field our university libraries contain important materials for the research worker as well as for the undergraduate; that in every part of the field there are important gaps in our materials that have to be filled by borrowing; and that in practically every case it was possible to borrow the needed material either from neighboring libraries in the Philadelphia area or from the nearby libraries of New York and Washington.

All things considered, this university has built up an unusually good library of Latin American history, for it is comprehensive and its quality is high. This achievement is all the more notable in view of the fact that "history" is here used in the broader, more modern sense of the word. By this I mean two things: first, the recent trend, common to all fields of history, towards the study of the cultural, intellectual and social development of Latin America, as well as the older themes of its political, economic, ecclesiastical, and diplomatic history; and second, the recent trend towards placing the indigenous civilizations of America (such as the Maya, Aztec, and Inca) alongside the civilizations of Spain and Portugal in the study of the background of Latin American history, as well as towards studying the Indian element as a continuing factor in Latin American history from the conquest to the present. Add to this the fact that Latin America was colonized more than a century earlier than the United States and consists of twenty independent states, which contain a population nearly equal to our own and cover an area about three times as large as the continental United States, and it will be easy to understand what a formidable task it would be for any library in this country to make adequate provision for the study of every aspect of Latin American history.

I have stressed this newer conception of Latin American history and the difficulty of realizing it in terms of library facilities because it is only by such a standard that we can measure our own achievement. That is characterized by comprehensiveness rather than by any special distinction, by moderately good representation in the whole field rather than by superlative excellence in a few corners of it.

In this connection, I wish to call attention to the fact that, in addition to our resources for Latin American history as "history" is commonly understood (political, economic, ecclesiastical and diplomatic history), our Main Library and special libraries also have important resources for the other aspects of history as more broadly defined above. The latter will probably be described in the reports of other departments; but they are so important from the point of view taken in this report that it would not be complete without a reference to them. Among these closely related fields represented in our libraries are Latin American literature, the fine arts, sociology, geography, education, law, and science; and in the field of Amerindian anthropology and archaeology the combined resources of our Main Library and the University Museum (one of the best institutions of its kind in the world) give the university a very high standing. Further improvement in these related collections may be expected in view of the lively interest that is being manifested in the fields they serve. For instance, a new course in Latin American literature will be offered next year; a new course in Latin American education is expected to be offered in the near future; and it is to be hoped that the History of Science Society recently formed by members of our faculty will extend its beneficent influence to the Latin American field.

Another important supplement to the university's resources in Latin American history is provided by those of other libraries in the Philadelphia metropolitan area. These are open and easily accessible to our students and faculty. The utilization of their resources has been greatly facilitated by the establishment of the Union Library.
Catalogue of the Philadelphia area, and the utilization of this cat­
ologue is in turn greatly facilitated by our own excellent bibliographi­
cal resources in the Latin American field.

Among these neighboring institutions, special mention should be
made of the following: The American Philosophical Society, the Academy
of Natural Sciences, and the Mercantile Library have periodicals, Span­
ish and Portuguese Americana, and other items of a rather miscellaneous
character but not obtainable elsewhere in the city; and the first-named
has a rather large collection of Mexican imprints of the nineteenth
century, mainly on economic and religious subjects. The Historical So­
ciety of Pennsylvania has a large collection of books and newspapers
that contain information on relations between Latin America and the
United States (especially, of course, the Philadelphia region, which
has always played an important part in our relations with Latin America)
The Commercial Museum has books and periodicals on the recent economic
development of Latin America not available in our own libraries.

Latin American History (Political, Economic, Religious, and
Diplomatic) in the Main Library of the University

Bibliographical Guides

We are fortunate in having an excellent collection of the outstand­
ing bibliographical works relating to Latin American history. For in­
stance among those of a more general character, we have R. H. Keniston,
List of Works for the Study of Hispanic American History, B. Sánchez
Alonso, Fuentes de historia española e hispano-americana, R. Fouiché-
Delbosc, Manuel de l'hispanisant, J. H. Medina, Biblioteca hispano­
americana, Maggs Bros., Bibliotheca Brasiliensis, and Velho Sobrinho,
Dicionário Bio-Bibliográfico Brasileiro.

Among the important topical guides we have Robert Streit, Biblio­
teca Missionum (indispensable to students of religious history; devotes
two volumes to America), C. H. Haring (editor), Guide to the Economic
Literature of Latin America; and E. G. Cox, Reference Guide to the
Literature of Travel (to 1800), which has about 200 pages on Latin
America. We also take the annual Handbook of Latin American Studies
and most of the important periodicals, domestic and foreign, that pub­
lish bibliographical information about the Latin American field.

Printed Sources

For the colonial period and the wars of independence (1492-1830)
we have a good collection, which includes such standard items as the
Spanish series of Documentos Inéditos, Navarrete's Viajes y
descubrimientos de los españoles, and Lecuna's Cartas de Bolívar; an
unusually good collection of the memorias of the viceroys of Peru; and
the Libros de Cabildo of Lima and Mexico City (the latter complete and
therefore a rare item). There are some conspicuous gaps; for instance,
we do not have the six-volume Archivo diplomático da Independencia
(Brazil). Our collection of Brazilian and Spanish Americana is spotty,
but contains some important items and is supplemented by the other
Philadelphia libraries mentioned above.

Possibly for prudential reasons, Latin American historians have
shied away from the national period, with the result that for this
period there are few great source collections comparable to those for
the earlier period discussed above. The two main groups are current
government reports and the writings of prominent Latin Americans. We
have a number of items in both groups, among the latter being the Obras
of D. F. Sarmiento and Joaquín González.

Special mention should be made of travel literature, which is an
important source for the historian of Latin America. We have a good
collection of these, including such classic accounts as those of
Juan and Ulloa, Humboldt, and Darwin; and many more are available to us in the other libraries of Philadelphia.

Secondary Works

Our combined resources in the Main Library (including the Lea Library) and the University Museum are particularly strong for the background of Latin American history (especially the Spanish, Aztec, and Inca background).

For Latin America since 1492 we have a large collection of general histories, special histories, monographs, and biographies, which contains some important item for almost every region in every period. For instance, we have the sixteenth-century Las Casas and Oviedo, the seventeenth-century Herrera, the eighteenth-century Clavigero and Sahagun, and the nineteenth-century Prescott, Southey, Mitre and Alaman; and we are receiving important works now in course of publication, such as the monumental Historia de la Nación Argentina and the Inter-American Historical Series (English translations of Latin American national histories). Generally speaking, however, lack of adequate funds has prevented us from keeping up with current publication in recent years. In the large field of local history we have only a few miscellaneous items.

Periodicals

Fortunately, we have complete or nearly complete files of four of the most important historical periodicals published in Latin America; the Revista do Instituto Historico e Geographico Brasileiro (the oldest institute of its kind in Latin America, founded in 1837), the Revista Chilena de Historia y Geografía, the Boletín del Instituto de Investigaciones Historicas (Buenos Aires), and the recently established Revista de Historia de América (Mexico City). We also receive the Hispanic American Historical Review, the Ibero-Amerikanisches Archiv, and several other leading American and European journals that deal more or less frequently with the history of Latin America. We are, however, weak in periodicals dealing with related subjects. A sample check of the five hundred periodicals listed in the latest Handbook of Latin American Studies indicates that we receive less than one-tenth of them.

Works of Reference

We are reasonably well equipped with works of reference and are keeping up with current publication. Among our important works of this kind are the Enciclopedia Universal Ilustrada (81 vols.), ("Espasa"), Mendiburu's Diccionario histórico-biográfico del Perú (revised edition), and the Enciclopedia Hispano-Americana. We are receiving both the Grande Enciclopedia Portuguesa e Brasileira, and also the Dicionário Bio-Bibliográfico Brasileiro, now in course of publication. Thanks to the enlightened policy of the library authorities and the special interest of the Department of Romanic Languages, we are well equipped with Spanish and Portuguese dictionaries, old and new, which are often valuable tools for the historian.

Conclusion

The resources of our Main Library in the field of Latin American history, in the narrow conventional sense of the term, are comprehensive but uneven; but if we take the broader definition of the term suggested at the beginning of this report and if we consider the total resources of the university and the Philadelphia area, we shall at least have to change the emphasis and say that our resources are uneven but comprehensive. We may even be justified in saying that they are excellent, for in the aggregate resources Philadelphia is surpassed by only three other cities on the Atlantic seaboard—Washington, New York, and Boston-Cambridge; and two of these are so close and so easily accessible to us that, from our point of view, they may be regarded as supplementing our local resources.
Translating this into academic terms, our own local resources are adequate for undergraduate work at every stage, and for graduate work in the preliminary stage, in every branch of Latin American history; they are also adequate for graduate and faculty research in several branches; and in most cases any deficiency on our part can easily be supplied by the libraries of New York and Washington.

With a moderate increase in our library funds and some further coordination of the various activities of the university in this field, we should be able to make the University of Pennsylvania an outstanding center of Latin American studies - or perhaps better still, of Ibero-American studies, integrating the study of Spanish and Portuguese civilization with that of Latin America.
LANGUAGES AND LITERATURE

INDO-EUROPEAN PHILOLOGY

By Roland G. Kent

The subject of Indo-European philology may for practical purposes be here divided as follows, wherein we have included some closely allied topics not falling within the fields of other departments except as noted:

(1) General linguistics: phonology, morphology, etymology, syntax, semantics,
(2) Linguistic psychology,
(3) General Indo-European linguistics,
(4) Indic studies (see report of Oriental studies, page 152.),
(5) Iranian studies,
(6) Armenian studies,
(7) Albanian studies,
(8) Slavic studies,
(9) Baltic studies,
(10) Greek linguistics, including the ancient Greek dialects (see report of the Greek Department, page 90-92.),
(11) Latin linguistics, with the ancient Italic dialects (see report of the Latin department, page 92-3.),
(12) Romanic linguistics (see Romanics Department report, p.125-138.),
(13) English linguistics (see report of the English Department, page 100-119.),
(14) German and Scandinavian linguistics (see report of the Germanic Department, page 93-108.),
(15) Celtic studies.

In general linguistics the University of Pennsylvania Library has a very good collection, including all or most of the general and special linguistic series published by Winter of Heidelberg, all those published by the Linguistic Society of America, most of those issued by the Société de Linguistique de Paris, complete sets of almost all the important periodicals, and a complete series of the Indogermanische Bibliothek, with its indispensable bibliographies. Many of these, in fact virtually all of them, belong also in part to the divisions of the subject, but the proper place for their mention is here.

Linguistic psychology, in a number of its phases, has for many years been a subject of interest to the Department of Psychology at the University of Pennsylvania. That department's special interest has been in the detection and correction of speech defects; but of necessity attention has been given also to the nature of speech and to the speech mechanism, and to the development of and the pedagogy of reading. As a result, there is an adequate but by no means complete collection of reference works on linguistic psychology in general, and an almost complete reference library for matters of abnormalities of speech. Most of the research material is scattered among the various psychological journals; a smaller part of it is published in book form. A considerable part of this is kept in the special library of the Department of Psychology, in College Hall. (Report based on data from Professor Samuel W. Fernberger.)

In general Indo-European linguistics the resources of the university library are definitely very good; cf. the collections mentioned above. Gaps are few, and not serious.

Iranian studies: The materials for comparative Iranian and for Old Persian are virtually complete; those for Avestan are almost as good, except for an occasional older volume.
For Middle Persian, or Pahlavi, the standard collections, such as the volumes in The Sacred Books of the East, are available, as well as many others. For modern Persian, the standard grammars, dictionaries, and etymological dictionaries are available, but there is no large collection of literary and artistic works. This gap is, however, filled to a considerable extent by the remarkable collection of manuscripts and miniatures in the John Frederick Lewis Collection at the Free Library of Philadelphia: such a collection cannot be made by a research library because of its great expense, and can be secured only by gift or bequest from a wealthy collector who has devoted years to its formation.

Armenian studies: The collection is small, but includes the most important grammars and grammatical treatises.

Albanian studies: There are a few volumes, including the most important grammars and dictionaries, but the facilities are limited.

Slavic studies: The library has the important grammars and dictionaries, including the etymological dictionaries, but lacks the periodicals. The Charlemagne Tower Collection of Russian books (belles-lettres, political history, general literature) is a very valuable tool for students of Russian.

Baltic studies: For the Baltic languages (Lithuanian, Lettish, Old Prussian), the facilities are definitely good, except for a lack of the periodicals.

Celtic studies: The most important grammars and dictionaries are available, and a considerable number of other volumes, texts, etc., but the periodicals are poorly represented, and there is no copy of A. Holder's Altceltischer Sprachschatz.

The reports on Slavic, Baltic, and Celtic studies have been made with the co-operation of Professor Alfred Senn.

It is to be noted that the University of Pennsylvania has never had a specialist in Armenian, Albanian, Slavic, Celtic, and that there has been no incentive to build up the holdings in these fields apart from the important grammars and dictionaries. It would not be difficult, however, to build them up if there were a specialist at hand with funds at his disposal.

The remaining sections of the field are covered in the reports of other departments, whose provinces, in their linguistic aspects, overlap that of the Department of Indo-European Philology.

CLASSICAL GREEK

By H. Lamar Crosby

A proper survey of the materials available for the study of Greek in the University of Pennsylvania libraries would require more time than has been at my disposal. In the first place, Greek is a subject with many ramifications, not a few of which touch very closely other fields of varied nature. In consequence, materials of likely interest to the student of Greek are often located in sections of the library devoted primarily to those other subjects. Secondly, materials expressly set apart for the use of Greek students are so scattered throughout the stacks and are so cramped for space as to make a thoroughgoing examination a task involving much time and labor. For these reasons this report represents in part past experience in handling the materials in question and partly such fresh inspection and appraisal as I have been able to devote to our survey in the week that is past.

The impression gained from this week's study of our situation is
that there are no outstanding gaps in the Greek equipment in our library. Because of the prominence of Greek in the curriculum of the University of Pennsylvania throughout the nineteenth century, it manifestly received a generous share of the funds available for the purchase of books and periodicals. Accordingly we have numerous early editions of Greek authors, many of the standard translations then available, and a liberal collection of the dictionaries, grammars, handbooks, commentaries, and other helps current in that day. During more recent years our supply has been augmented to no small degree through the income derived from a special fund created by the children of the late Professor Lamberton and through the personal interest and generosity of Dr. Charles W. Burr.

Without going into undue detail regarding the contents of our apparatus for the study of Greek, I would make the following observations.

So far as I am aware, no extant Greek writing of the classic period is lacking; the Alexandrine and early Roman periods are adequately cared for; we have Migne's *Patrologia Graeca*; and for the Byzantine era we have at least the *Corpus Scriptorum Historiae Byzantinae*.

In Greek literature our greatest strength appears to be connected with Aristotle and Plato, the dramatists, and Homer and the epic. In those fields our collection seems to be truly notable. For example, we possess not only the standard texts of the writings of Aristotle and of his ancient commentators, but also a very extensive collection of monographs. The subject of literary criticism also, of which Aristotle may be regarded as the founder, is richly provided for through treatises both ancient and modern.

Reference should be made in passing to material on Plutarch. That author is represented by an unusual number of editions both of the *Lives* and of the *Moralia*; a wealth of translations of the former, both in English and in French; and many commentaries and monographs.

In the field of papyrology we are well equipped. I doubt if there is anything of real significance in that department which we lack, either with regard to the publication of Greek texts or with regard to methodology or interpretation.

Before passing entirely from the subject of Greek authors, it should be added that we have maintained our subscription to the Loeb Classical Library, by reason of which we are constantly adding to our supply of modern texts and translations of Greek classics.

We are strong also in the field of epigraphy: Besides the monumental volumes of the *Inscriptiones Graecae* and the handbooks essential to the scientific use of such source material, we possess many special works devoted to the inscriptive product of individual districts throughout the ancient world.

The Greek work at Pennsylvania has for many years given a prominent place to archaeology. The Main Library is rich in material on that special subject, some of it very costly; and that collection is supplemented by the resources of the University Museum Library, consisting sometimes of duplicate copies of works that are in great demand and sometimes of works of much value but not found in the Main Library because less frequently required.

An indispensable tool for the student of Greek consists of the learned journals in his field. Here our Library is peculiarly rich. A hasty survey reveals that we possess complete sets of thirty-five or more learned periodicals representing all the varied aspects of Greek studies. In some instances these sets go back for their beginning to the early years of the past century, and the earlier volumes would be difficult to obtain in the case of the younger universities.
In concluding this brief synopsis of our resources, it seems fitting to add that, although I personally have had little occasion to draw upon the library resources of our sister institutions in the neighborhood, I feel sure that at Bryn Mawr, Haverford, and Swarthmore there are valuable collections of material bearing on Greek studies. This must be true especially of Bryn Mawr, where since its founding there has been a consistent tradition of scholarly activity in that field and where a conscious effort has long been made to foster graduate study.

LATIN LANGUAGE AND LITERATURE

By H. B. Van Deventer & G. D. Hadzsits

It is our belief that Greek and Latin should be considered together as "Classical Philology", and that the report submitted should include the two together. Since, however, the Greek Department is preparing its own report, this will be limited to the Latin side. For the present purpose, as should be the case for all purposes at all times, we understand "Latin" to mean Latin or Roman philology. Philology is of course now recognized to include everything having to do with the life and civilization of a nation or country, i.e., its language, literature, history both political and cultural, life of its people public and private, religion and every other phase of its activities and achievements, and our report will be on this basis.

Our collection naturally falls into the following groups:

1. Texts of Latin authors, both annotated and unannotated,
2. Inscriptions,
3. Handbooks and monographs,
4. Periodicals and journals.

Texts of Latin Authors

This group is probably the best. Our library contains practically all the editions, both text editions and annotated, of all the Latin authors that are ever read or referred to. All new books of this sort are acquired as soon as published. This is due partly to the comparatively small number published and also to the fact that the needs of the two classical departments are somewhat more amply met by several endowed funds than is the case of most other groups. We have complete sets of the Loeb Classical Library with several duplicate copies of the more widely used titles; of the French Bude series; and a set nearly complete of the very extensive Teubner Series; as well as all the Oxford classical text volumes. Our collection of older editions of authors is particularly good. This is due partly to the purchase in 1890 of the Library of Professor E. L. von Leutsch, of the University of Goettingen. This collection consisted of 20,000 volumes and was a general classical library, but was particularly rich in editions of authors, mostly published in the first half of the nineteenth century. Many of these are still valuable.

Inscriptions

We have the Berlin corpus Corpus Inscriptionum Latinarum and several handbooks and monographs in epigraphy. The number of these might be greatly increased. In fact this might be considered one of our weak sections. However, it provides a reasonably effective means of carrying on any ordinary study or research of this sort.

Handbooks and Monographs

In this division more books are published each year than in any other and it is of course impossible to buy anywhere near all the new publications. However, we do try to acquire the best and most important books, as they are issued. We have all the standard works of
reference, dictionaries, most of the books and monographs of importance, and are strongest in Latin literature.

**Periodicals and Journals**

The library has for many years subscribed to most of the scholarly periodicals and journals, American, English and foreign and thus possesses complete sets of these for many years back. This collection is probably more extensive than at most universities and is something to be proud of. Here also might be mentioned the collection of theses and dissertations. This is only fair and not to be compared with the accumulations in several other university libraries, e.g., Princeton, which claims to have practically all which have been printed in all countries for many years.

A weak point is Roman archaeology. Monographs and handbooks in this branch are relatively few. This is undoubtedly due to the fact that the University of Pennsylvania has no professor of classical archaeology and few courses in this subject. Such a professor, such a department and such a library are greatly to be desired, though our lack in classical archaeology is probably offset by the University Museum.

Medieval Latin properly belongs to a separate field, which might be termed "Medieval Studies", i.e., medieval history, civilization, etc. Doubtless such departments as English, History and Romance Languages are reporting on whatever texts, source material and other books in medieval Latin they may have.

On the whole the university library has in Latin philology, we think, a better than average collection of books and journals. Though it can in practically every division be enlarged and improved, it has for years been successfully used by our faculty and graduate students, with the advantage also of being housed in a single building.

**GERMANIC LANGUAGES & LITERATURES**

By Alfred Senn, Axel J. Uppwall, and Adolf D. Klarmann

The research activities of the Department of Germanic Languages and Literature are mainly divided into three groups; namely, (1) Germanic philology, (2) German literature, and (3) Scandinavian languages and literature.

Our library facilities must be compared with the library of the Department of German of the University of Wisconsin which is generally regarded as the best-equipped library in this country. If we compare the appropriations available to the two departments, we find that our finances are not even half of those appropriated to the Wisconsin Department of German which furthermore does not provide for Scandinavian since they have a separate Department of Scandinavian at Wisconsin. In spite of this disadvantage our library facilities are more than adequate for graduate students of Germanic philology and German literature and especially since the beginning of the academic year 1938-39 our department has been pursuing a systematic plan of building up our library to the highest possible standard.

It is one of our aims to become the center of studies dealing with all the linguistic and literary aspects of the Pennsylvania-German area and of German-American language and literature in general. For this specifically American-German enterprise, the basis was laid by the late Oswald Seidensticker and M. D. Learned. The latter's research apparatus is stored in our library but not yet catalogued. The German Department is also the owner of the research apparatus left by Ludwig Bechstein who was an eminent scholar in the field of Middle High German.
All leading journals dealing with Germanic Philology are to be found in our library such as:

Archiv für das Studium der neueren Sprachen,
Beiträge zur Kunde der Indogermanischen Sprachen,
Beiträge zur Geschichte der deutschen Sprache und Literatur,
Germanisch-romanische Monatschrift,
Indogermanische Forschungen,
Literarisches Zentralblatt,
Literaturblatt für germanische und romanische Philologie,
Deutsche Literaturzeitung,
Rheinisches Museum für Philologie,
Zeitschrift für die österreichischen Gymnasien,
Zeitschrift für deutsche Philologie,
Zeitschrift für deutsches Altertum und deutsche Literatur,
Zeitschrift für deutsche Wortforschung,
Neophilologus,
Zeitschrift für Mundartforschung,
Zeitschrift für hochdeutsche Mundarten,
Teuthonista,
Alemannia, etc., etc., as well as all professional publications appearing in this country.

Periodicals which are not at the present time in our library (those could only be second or third rate journals) will be acquired in due time under our present departmental plan of library expansion.

It is easy to find gaps in our library equipment as far as individual publications are concerned, but here too we have to state the fact that all basic publications dealing with all aspects of Germanic philology are represented; for instance, all the publications of Müllenhoff, Förstemann, Zeuss, Graff, Socin, Grimm, Hoops, Schrader-Nehring, etc.

In recent decades Germanic philology has been primarily active in the field of dialect studies. In this too we are adequately equipped. We possess all important dialect dictionaries and grammar series, some of which were ordered during the last year. The study of German dialects is of primary importance for us since, as stated above, we expect to become the center of Pennsylvania-German studies. Our efforts during the last year were centered around the Alamannic dialects. There is at the present time no other German department in this country better equipped than we in this specific domain. We are continuing our plan of filling gaps which are still numerous. In the next few years we shall pay special attention to Middle German and Low German dialects, as well as to Dutch (Netherlandish and Flemish).

A second field of Germanic studies centers around the German Middle Ages with special attention given to the Middle High German language and literature. This has long been a favorite with our department, and consequently the library equipment compares favorably with any other library. However, we do not have F. Wilhelm: Corpus der deutschen Original-Urkunden bis 1300.

The field of German and Germanic folk-lore has been rather neglected so far. Thus we look in vain for such an important publication as Hoffman-Krayer: Volkskundliche Bibliographie.

This might also be the place to name a few important publications which have disappeared from our stacks:

Muth, Die bairisch-österreichische Mundart;
Weinhold, Alemannische Grammatik;
von der Hagen, Gesammtabenteuer, volume 1-3;
E. G. Graff, Diutiska, volume 1; Several volumes of Karl Goedeke, Grundriss zur Geschichte der deutschen Dichtung; Deutsche National-Litteratur and Deutsche Texte des Mittelalters.

German Literature

The collection of and on German literature also compares favorably with the other universities in the United States. The library possesses a very complete collection of works of literature of all periods. Among its treasures are first editions of some or all the works of such authors as Wieland, Lessing, Klopstock, Goethe, Schiller, Lenz, Jean Paul, Tieck and many others in the nineteenth and twentieth century. In the last year or so a very concerted effort has been made to fill some of the gaps existing in the contemporary field which were caused by the relative paucity of funds appropriated.

The collection of works on the literature is very satisfactory. While it may be said that the library has more than adequate facilities in all phases of literature, certain periods and authors are especially well represented due to a definite policy of the department to build up to a fair degree of completeness in fields dealt with either in graduate courses or doctoral research. We thus have very fine collections on Goethe, Schiller, and the other classics; Romanticism, Kleist, Keller, Meyer, Heine, Hauptmann, George, Werfel, Wassermann, Thomas Mann, Expressionism, etc.

As mentioned above there is a revival in the interest in German-American studies. The library has a very good collection of some of the representative authors as Sealsfield, Rattermann, Armand, Heinzen, etc., and a fine collection of magazines and journals of the past century; as for instance, Der arme Teufel, Atlantis, Deutsch-Americanische Monatshefte, Deutsch-Amerikanisches Magazin, Der deutsche Kirchenfreund, Der deutsche Pionier, Der Hausfreund, Die neue Welt, Der Tagliche Pittsburger Courier, etc. The library also has complete sets of Americana-Germanica and German-American Annals. It may be said here that some material is still to be catalogued, as for instance, parts of the Bechstein Collection, the entire Handapparat of the late Professor Learned.

In this connection the library of the German Society of Pennsylvania must be mentioned, which in addition to books by authors of all periods, contains in its archives valuable manuscripts of German-American authors. Other important sources for German-American studies are the Historical Society of Pennsylvania containing the collection of Abraham H. Cassel, the German Society, the Free Public Library, Philadelphia Turngemeinde, the Lutheran Theological Seminary, the Moraviana at Bethlehem, the Lutheran Seminary at Gettysburg, and the State Library at Harrisburg.

All modern and older histories of literature of importance as well as collections, (Kürschner, Reclam), publications of the various academies, encyclopedic and lexicographical works are available in the library; so are important compendious collections, as for instance, Bau- steine zur deutschen Literatur, Scheible's Kloster, Palaestra, Publications of the Literarische Verein in Stuttgart, etc., as well as the valuable collection of theses from the Bechstein Collection.

The research worker is greatly aided by an unusually well-equipped collection of periodicals, journals, and magazines dating from the late seventeenth century to the present; as for instance, Monatliche Unterredungen einiger guten Freunde von allerhand Büchern und anderen annemlichen Geschichten (1691), Wieland's Teutischer Merkur, Jacobi's Iris, Schiller's Horen, Goethe's Propyläen and Über Kunst und Altertum in der Rhein- und Maynengegend, Athenäum, Fichte's Philosophisches Journal, Neue Bremer Beiträge, Nicolai's Allgemeine deutsche Bibliothek, Kritisches
Of especial interest to the student of the nineteenth century are a number of rarer journals of scientific or belletristic nature, as for instance, K. E. Franzos' Deutsche Dichtung, Lewald's Europa, Hoffmann von Fallersleben's Weimariisches Jahrbuch, etc. While the presence of such periodicals is gratifying, it must be regretted that others of great programmatic value are lacking, as for instance, Die Gesellschaft, etc., which would aid the scholar who is interested in the theories of the various literary movements. However, this is quite a common failing of libraries. A good many of the series of periodicals are incomplete.

In the field of current publications, journals and periodicals of American or foreign origin are very well represented. In addition to the ones mentioned above, the following might be added as samples:

Deutsche Rundschau,
Deutsche Vierteljahrschrift,
Das deutsche Wort,
Dichtung und Volkstum,
Deutsches Dichten in Amerika,
German Life and Letters
Goethe-Vierteljahrschrift,
Göttingische Gelehrte Anzeigen,
Die Literatur,
Die neue Rundschau,
Neuphilologische Monatschrift,
Wörter und Sachen,
Zeitschrift für Deutschkunde, etc.

Important journals of contemporary interest as Hochland, Das innere Reich, Mass und Wert are unfortunately not included in the subscriptions. There is also a regrettable lack of current newspapers and magazines of general nature.

Scandinavian Languages and Literatures

The study of Scandinavian languages and literatures in the University of Pennsylvania began in 1895. Except for an interruption during the academic year of 1920-21, courses in Old Icelandic, Dano-Norwegian, and Swedish have been given regularly and with steadily increasing attendance.

The Scandinavian section is an organic part of the German Department. It is financially dependent on the Germanic Department for the maintenance and upbuilding of its library facilities, i.e., it has received regularly in the past and continues to receive an unspecified percentage of the annual appropriation granted to the German Department for the acquisition of books. As the said grant is rather modest, the new accessions per annum for the Scandinavian section are fewer in number than would be the case under more favorable circumstances.

In spite of this the book collection of the Scandinavian section has grown gradually during these forty odd years so that at the present time it contains some 1,500 volumes. Included in this number is a small percentage of Scandinavian books in English translation which have been acquired by the English Department.

The remainder of the collection is made up largely of standard lexicographic and biographical works; fundamental philological works; leading learned (professional) periodicals, foreign and domestic; literary history, medieval and modern; and literature of the several periods.

It goes without saying that the collection is incomplete and that,
as a consequence, major work in the field is limited.

Urgently needed are works dealing with prehistoric time in the Scandinavian North (archeology), runology, dialectology, works dealing with place names, history of the Scandinavian peoples, medieval and modern, geographical and cartographical works; the publications of Svenska Fornskriftsällskapet and corresponding publications by Norwegians, Danes and Icelanders; and finally the works of outstanding Danish, Icelandic, Norwegian and Swedish authors from the sixteenth century to the present time.

Conclusion

From this sketchy report the following conclusion may be drawn in the opinion of the department:

The Germanic collection at the University of Pennsylvania offers more than ample opportunity for efficient scholarly work. It is beyond any doubt the most complete in this region and a natural center for Germanic studies in Pennsylvania. There exist, to be sure, numerous regrettable gaps, some of which can and will be filled as soon as the funds permit it. Some of the gaps; as for instance, broken first sets, missing volumes of periodicals, etc., can, however, be replaced only with great difficulty. The University of Pennsylvania's German-American collection ranks among the most important in the world.

THE BECHSTEIN COLLECTION

By Adolf D. Klarmann

The Bechstein collection, which was acquired for the university for the sum of $7,000 and was officially opened on March 21, 1896, consists of the library of the late Professor Reinhold Bechstein of the University of Rostock, one of the leading Germanic philologists and folklorists of the late nineteenth century. This collection made by Professor Bechstein has been supplemented by the purchase of other valuable works relating to German and contains approximately 1,500 volumes and 3,000 pamphlets. The collection was originally housed in a separate room in the Main Library, known as the Bechstein Room. Soon after the turn of the century the collection was moved partly to the German Seminar Room in the library and partly placed in the regular stacks so that today it has practically lost its individual character.

The book collection was not catalogued as a separate unit, but the titles were incorporated in the general library catalogue. There is a card index of the collection of pamphlets which, however, contains also titles of monographs added since the acquisition of the library.

The Bechstein Collection was at the time of its acquisition one of the most complete and outstanding libraries in Germanic philology and its related fields. The printed sales catalogue as prepared by the antiquariat Gustav Fock of Leipzig at the time of purchase divides the collection into eight subgroups:

1. periodicals, works of reference, collective series,
2. general works relating to philology and literature,
3. histories of German literature in general,
4. German antiquities, culture, and folk-lore,
5. German language, dialects, metrics, and names,
6. Gothic, Norse, Old High German and Middle High German literature,
7. German literature from 1500-1750,
8. modern German literature since 1750.

The collection is rich in periodicals of the nineteenth century
both in the field of Germanic Philology and more or less related fields. The following is a list of complete sets to 1894 inclusive:

Germanistische Abhandlungen, (ed., K. Weinhold)
Acta Germanica, Organ für die Philologie, (ed., R. Henning)
Alemannia, Zeitschrift für Sprache, Litteratur, und Volkskunde der Elsässer
Archiv für Anthropologie, (ed., J. Ranke)
Internationales Archiv für Ethnographie, (ed., Schmeltz)
Archiv für das Studium der neueren Sprachen und Literatur, (ed., Herrig)
Arkiv für Nordisk Filologi
Neue Beiträge zur Geschichte des deutschen Alterthums, (ed., Brückner)
Berichte des freien deutschen Hochstiftes zu Frankfurt
Bibliographie de la France
Bibliothek des Literarischen Vereins in Stuttgart
Centralblatt für Bibliothekswesen, (ed., Hartwigh)
Chroniken der deutschen Städte
Lewald's Europa
Geschichte der Wissenschaften in Deutschland
Gymnasium, Zeitschrift für Lehrer, (ed., Wetzel)
Jahrbuch des Vereins für niederdeutsche Sprachforschung, und Korrespondenzblatt
Jahrbücher der deutschen Geschichte
Jahrbücher der Alterthumsfreunde im Rheinlande
Jahresberichte über das höhere Schulwesen, (ed., Rethwisch)
Literaturblatt für germanische und romanische Philologie, (ed., Behaghel und Neumann)
Literaturdenkmale, Deutsche, (ed., Sauer)
Deutsche Literaturzeitung, (ed., Max Roediger)
Quellen und Forschungen, ("ten Brink", Martin, E. Schmidt)
Schriften des Vereins für meiningische Geschichte und Landeskunde
Schriften des Vereins für Reformationsgeschichte
Phonetische Studien, (ed., Vietor)
Untersuchungen zur deutschen Staats- und Rechtsgeschichte, (ed., Görke)
Verhandlungen der Direktoren - Versammlungen in den Provinzen des Königreiches Preussen
Verhandlungen der Versammlung der Philologen und Schulmänner
Zeitschrift für Ethnologie und ihre Hilfswissenschaften, (ed., Bastian)
Zeitschrift für den deutschen Unterricht
Zeitschrift des Vereins für Thüringische Geschichte und Alterthumskunde
Westermanns Monatshefte

In addition to this list there is a large number of valuable periodicals in incomplete sets. Practically all the reference works and collective series of Bechstein's time are part of the library:

Very complete collections of works of general or introductory nature on Germanic philology; on bibliography, typography; music history, art history, architecture, pedagogy; general linguistics, histories of the various languages; dictionaries, encyclopedias, grammars, dialects, names, paleontology, phonetics, orthography; historical monographs on universities and some scholars.

A very large number of general histories of literature as for instance: Aretin, Barthel, Biese, Ettmüller, Gervinus, Goedeke, Gottschall, Horst, Koberstein, Koenig, Kurz, Laube, Leixner, Menzel, Oltrogge Rammer, Schäfer, Scherer, Scherr, Stern, Wilmar.
Also a large group of specialized histories of the drama, novel, lyric, prose, theatre, dramaturgy, etc., in general as well as of the separate periods.

Many works on mythology, Germanic and Indo-Germanic religions, folk-lore, folk-lyric, folk-books (Faust), numismatics, armor, national costumes, religious sects in Germany, proverbs, old German law, general and specialized histories of culture and customs, German history of the various periods, particularly the earlier ones.

Practically a complete contemporary output on the German language in all its aspects, metric, rhythmic, poetic, prosody, dialects of all the sections of the German speaking peoples, etc.

A complete collection on Gothic, Old High German, Middle High German languages and literatures, particularly impressive in the Middle High German field; old Scandinavian languages and literatures, runes, literary monuments of the above periods. A very fine collection on the medieval church and lay-plays and their literatures.

A very fine collection of works of and on humanism, Reformation, and Barock including valuable first and rare editions of the sixteenth and seventeenth centuries as for instance contemporaneous prints of Luther's works, with the author's signature, the Heussler folio edition of Hana Sachs, first editions of some works by Gottsched, Henrici-Picander, Moscherosch, Opitz, etc.

A representative collection of the authors of the eighteenth and nineteenth centuries in complete sets and individual works, some of these in first or early editions as for instance: Burger, Gleim, Goethe, Grillparzer, Heine, Herder, Iffland, Klopstock, Lavater, Leisewitz, Lessing, Schiller, Voss, etc., as well as a group of valuable literary and bellettristic almanacs; a fine collection of non-German authors in German translation and theoretical writings on them, particularly Shakespeare.

Of particular interest and importance is the Bechstein Handapparat consisting, as mentioned above, of about 3,000 pamphlets, brochures, theses, and monographs. Their scope generally corresponds to the subject matter of the book collection. It contains specialized studies on: the major and minor documents and authors of the early Germanic literature and philology; Latin commentaries; legal institutions; chronicles; dialect-studies, dialect literature, dialect authors, according to localities and vocalism; culture and custom; folk-lore; nature symbolism; church and lay drama; literary drama, school drama, stage, history of the theatre; general, provincial and periodic German history; mythology, numismatics, names, English grammar and philology, English influences on German literature, German cities, legends, folk-lore, lexicographic papers, metrics, lyric, prose, fairy tales, runes and runic inscriptions, witchcraft, literary problems and motives, old Norse literature and law; methods of German grammar and pedagogy; translations; typography, history of art and music; universities and academies.

It also contains a large number of reprints of the fifteenth, sixteenth, and seventeenth centuries.

The following list of names contained in the Handapparat will give a fair idea of its scope:

Alfred the Great
Jacob Ayrer
Karl Bartsch
Beowulf
Berthold von Regensburg
Boner
Hermann von dem Busche

Carl der Gross
Cynewulf
Annette v. Droste-Hülshoff
Edda
Eichendorff
Ezzolied
L. Feuerbach
It would be very desirable to arrange a complete and accurate cataloging of both the book collection and the Handapparat, particularly since the latter contains additions acquired since 1896.

Unfortunately the collection is not endowed and therefore not self-perpetuating or even self-supporting.

OLD ENGLISH

By R. B. Allen

The amount of scholarly work done in Old English exceeds in quantity many times the bulk of literature surviving in the period, and most of Old English criticism and study has been, and still is, published in periodicals and series of studies. It is pleasant to report, therefore, that the university library has unusually complete files of these periodicals and studies. It would be a prohibitive task from the standpoint of both time and expense involved to build up such a collection again.
We have all the bibliographies in the field, Brandl's, Wulker's, the Cambridge, Kennedy's, Jahresbericht, Literaturblatt, etc., totaling a minimum of 900 volumes and including such items as the Bibliographie der deutschen Zeitschriften-Literatur (81 vols.), important for German periodicals; Bibliographischer Monatsbericht über neues erschienene Schul- und Universitäts-Schriften (49 vols.), of particular value for dissertations; and Bibliographie der Rezensionen und Referate, containing indexes to reviews.


Even more valuable than the periodicals is our collection of series of studies appearing as annals, learned serials, etc., and comprising, among its 5,000 volumes, such items as the Early English Text Society (333 vols., 1 missing), Berliner Beiträge (37 vols.), Bonner Beiträge (25 vols.), Bonner Studien (34 vols.), Lunds Universitets Arsskrift (72 vols.), Münchener Beiträge (54 vols.), Palaeastria (217 vols.), Studien zur englischen Philologie (Morabach's, 94 vols.), Yale Studies (91 vols.), Wiener Beiträge (60 vols.), etc. Of special note is the completeness of our collection of the publications of the learned societies associated with continental universities, the so-called royal academies of learning at Berlin, Leipzig, Vienna, Heidelberg, Göttingen, Munich, and Strassburg.

In paleography much material is available in the journals mentioned above - such an invaluable study, for instance, as Keller's in Palaeastria - but we have, in addition, all the important and valuable studies of the Runic and Roman alphabets: G. Stephens' The Old Northern Runic Monuments of Scandinavia and England (4 vols.) with hundreds of illustrations of crosses, inscriptions on weapons, etc.; Wimmer's Die Runnenschrift, (translated by Holthausen), the best work on runes; Wattenbach's Das Schriftwesen im Mittelalter, the best work on the general history of medieval book production; E. M. Thompson's 'History of English Handwriting' (Transactions of the Bibliographical Society, V) and his Handbook of Greek and Latin Paleography; H. F. Moore's A Classified List of Works Relating to the Study of English Paleography, etc. In addition to the facsimiles in Thompson and Keller, above, we have all the other facsimile editions: J. O. Westwood's Facsimiles of the Miniatures and Ornaments of Anglo-Saxon and Irish Manuscripts; Facsimiles of Ancient Charters in the British Museum, with its 144 plates; Skeats' Twelve Facsimiles of Old English Manuscripts; the Paleographical Society's Facsimiles of Manuscripts and Inscriptions, (5 vols.), containing 455 plates; and the New Paleographical Society's publications, being a continuation of the preceding. These books are extremely valuable and often difficult to obtain.

For the study of Old English philology, we have all the histories of the language, Jespersen, Wyld, etc.; all the grammars (Cosijn, Wyatt, Sievers, Wright, Koch, Kaluza, Luick, and others); all the important phonological studies, such as Luick, Sweet, Büllbring, etc.; and all the dictionaries, Bosworth-Toller, Hall, Sweet, and Grein-Holthausen.

In books relating to the history of the people themselves and their institutions, our library is adequate, but is not so complete as it is in the philologica, and literary subjects considered in this report. We have, of course, works like Traill's Social England, the
Cambridge Medieval History, Gross's Sources and Literature of English History, the English Historical Review, etc. The history of Old English times will be considered in a report by the History Department, but I should like here to comment upon some special and related matters.

In ethnology, we have Zeuss's Die Deutschen und die Nachbarstämme and Ripley's The Races of Europe, for instance, but not the equally important R. Much's Deutsche Stammeskunde, Peake's English Villages, or Fleure's The Races of England and Wales. We have all the editions and important studies of Anglo-Saxon laws. For the history of the Church, we find Plummer's Venerabilis Baedae opera historica, W. Hunt's The English Church from its Foundation to the Norman Conquest, but not Plummer's The Churches in Britain before A.D. 1000. In the arts and archaeology, typical works include De Baye's Industrial Arts of the Anglo-Saxons; J. F. Payne's English Medicine in Anglo-Saxon Times; G. B. Brown's The Arts in Early England (6 vols.); Aberg's The Anglo-Saxons in England; and C. Singer's A Review of the Medical Literature of the Dark Ages.

The equipment for general study of the literature includes all the standard works in the field, notably the studies of Earle, Brooke, R. W. Chambers, Ker, Ebert, "ten brink", Wulker, Schroer, etc.

In verse we have all the facsimile editions: Gollancz's Caedmon MS; The Exeter Book of Anglo-Saxon Poetry; Wulker's Codex Vercellensis; Forster's II codice vercellesce; and Zupitza's Beowulf (vol. 77 of the Early English Text Society); all the complete collective editions, such as Grein-Wulker's Bibliothek der angelsächsischen Poesie, supplemented by F. Holthausen's Kleinere altenglische Dichtungen, and the new standard collective editions known as Anglo-Saxon Poetical Records begun by Professor Krapp and issued by the Columbia University Press; important translations, such as Kenned's and Thorpe's Caedmon poems; Thorpe's Codex Exoniensis; scores of Beowulf, etc.; outstanding historical and critical studies, such as Heusler's Lied und Epos, his comprehensive Die altgermanische Dichtung, Chadwick's The Heroic Age; standard studies in versification, such as Siever's Altgermanische Metrik, Schipper's Englische Metrik; special studies or editions such as, Sweet's Oldest English Texts (Early English Text Society, vol. 87), Napier's Old English Glosses Chiefly Unpublished; R. W. Chambers', Klaeber's, W. W. Lawrence's Sedgefield's, Wyatt's, Heynes' and Holthausen's editions and studies of Beowulf, Krapp's Andreas, Cook's Christ, Cook's Old English Elene, Tupper's Riddles of the Exeter Book, Sedgefield's Battle of Maldon, etc.

In prose we have the Grein-Wulker Bibliothek der angelsächsischen Prosa (11 vols. to date), and Cockayne's Litchdoms, Wortcunning, and Starcraft of Early England; of Aelfric, Stevenson, W. H., Early Scholastic Colloquies, Zupitza's Aelfric's Grammatik und Glossar, Thorpe's and Sweet's works on the homilies, etc.; of Alfred, J. A. Giles's The Whole Works of King Alfred the Great, Sedgefield's King Alfred's Version of the Consolation of Boethius, etc.; of the Chronicle, Plummer's Two of the Saxon Chronicles, etc.; of the laws, all the editions and translations; of the Gospels, J. W. Bright's The Gospels in West Saxon, Skeat's The Holy Gospels in Anglo-Saxon, Northumbrian and Old Mercian Versions, etc.; of the homilies, R. Morris Old English Homilies and Homiletic Treatises, etc.; of miscellaneous studies and subjects, J. Stevenson's Anglo-Saxon and Early English Psalter, J. W. Bright and R. L. Ramsey's Liber Psalmorum, etc.; of charters, Codex diplomaticus aevi saxonicii, Birch's Cartularium saxonicum, Napier and Sevensonts The Crawford Collection of Early Charters, etc.

In conclusion, I should like to say that we have a detailed report of all the numbers required to complete our files of periodicals, annals, etc. We know what we need (about 800 volumes or issues) to add to our collection of approximately 9,400 volumes in order to make it essentially complete. We have, in addition, a library of roughly 8,000 books in the Old English field, comprising works on history,
criticism, the general literature, philology, ethnology, law, church, arts, crafts, etc. We lack some 350 titles (the majority of them books about the people and their institutions, some dissertations, and a few "Festschriften") to make this part of our Old English library practically complete.

It is a source of gratification to me to have revealed through the preparation of this report the quality of our Old English resources, and to have noted likewise the numerical strength of our collection - some 17,000 titles.

MIDDLE ENGLISH 1100-1500

By MacEdward Leach

The University of Pennsylvania Library is distinctly superior in its resources for the study of Middle English language and literature. It possesses all of the important reference books, catalogues, important special critical works, all of the modern texts. Its deficiencies are in the less important works, in the special fields, in the older works of criticism. Some idea of the general resources of the library can be had by checking the Middle English books in the library against a standard critical bibliography of this material. This was done four years ago when the library was carefully surveyed to determine its needs in the Middle English field. Wells' Manual of the Writings in Middle English, the standard bibliography of Middle English literature, was used along with others for this check. The university library was found to contain all the works listed in the Wells bibliography except 344 books and 221 dissertations. Many of the 344 are anthologies, or collections, represented in the university in other form; many of them are early nineteenth-century critical works, now rendered unimportant except in the history of criticism by new discoveries or new advances in scholarship. About seventy-five of the most necessary books on the list have since been purchased by the library. In short, the university library contains practically all of the texts, critical works, and reference works, (except dissertations) listed in the most important Middle English bibliography.

Checking a library against a good selective bibliography is another useful way to measure it, for the greatness of a library does not consist in mere numbers of books but in the kinds of books it contains. A further survey of the University of Pennsylvania Library by this method was made for this report by checking the Library against Loomis's Introduction to Medieval Literature chiefly in England, just issued. The purpose of this bibliography is very different from that of Wells. It is designed to guide graduate students in their reading and research work in Middle English, and so it lists the most important general works and the most important specific works for each author and subject. That all of the books and periodicals on this list except four are accessible in the library is proof of general excellence in the field of Middle English literature.

A discussion by categories and departments will give a more detailed picture of the resources of the library in Middle English.

Periodicals and Scholarly Journals. Most of the periodicals listed in the Old English section of this report are invaluable for Middle English scholars as well. In addition to these the library possesses the important publications devoted more or less exclusively to the medieval field. The university subscribes to and maintains complete files of Speculum, Medium Aevum, the English Historical Review, Journal of English Literary History, Publications of the Institute of Historical Research, Progress of Medieval Studies in the United States and Canada, Novi Studi Medievali, Studi Medievali, Le Moyen Age, Bibliothèque de l'Ecole des Chartes, etc. In addition to these Pennsylvania

Bibliographies. All of the standard bibliographies of Middle English are to be found at Pennsylvania: Wells' Manual, John Lewis Paetow, A Guide to the Study of Medieval History, Potthast, Bibliotheca historica medii aevi, Tucker and Benham, A Bibliography of Fifteenth Century Literature, Laura Hibbard, Medieval Romance in England, Brown's Register of Middle English Religious and Didactic Verse, etc.

Catalogues. The University of Pennsylvania is fortunate in owning all of the catalogues of medieval manuscripts of British libraries with the exception of part three of the Phillipps Collection (private). In ordinary cases, a student at Pennsylvania need not go abroad to copy or study MSS., for by using these catalogues and the modern methods of photostat and film process he can have at slight cost representation of almost any MS. desired.

Paleography and Printing. Books concerning paleography and printing, of importance to the student of Middle English, are not as well represented as one would wish. The lack is in the books dealing with the subject in general, however, rather than with printing in England. The University of Pennsylvania Library contains all of the important works about Caxton and microfilms of each of the books he printed as well as facsimiles of many of them. The library possesses the important paleographical works of Hilary Jenkinson, Charles T. Martin, Charles Johnson, E. Gordon Duff, Henry R. Plomer, Falconer Madan, Skeat, Keller, Greg, etc. At the university will be found the important catalogues of incunabula and books describing them, such as Hain's Reper­torium with the Copinger and Reichling supplements, Peddie's Conspectus incunabulorum, and Pollard and Redgrave, A Short-Title Catalogue. Many important books in this field are included in the Bibliographical Society's publications, all of which are to be found at Pennsylvania.

The student of incunabula and early printing will find nearly 350 incunabula at the university, representative volumes of almost all the presses, and of a wide variety of authors. Few of them are English, however; the most important English incunabulum is Trevisa's Translation of Bartholomaeus, Wynkyn de Worde, 1495. This lack of English incunabula is not serious though, for the university possesses on microfilm many of the English incunabula. In addition, the library has the publications of the Facsimile Text Society, the Bibliographical Society, and many of the Grolier Club books.

Folk-lore. The student interested in medieval story and folk-lore will find large collections of such material at the University of Pennsylvania. The invaluable Folk-lore Fellows Communications is complete, as are Folk-lore, Volkskundliche Bibliographie, The Grimm Library, etc. Pennsylvania has the standard critical works and collections in this field, Frazer's Golden Bough, Bolte und Polivka, Ammerungen zu den Kinder- und Hausmärchen der Bruder Grimm, Thompson's Motif Index to Folk Literature.

Dissertations. The university maintains card indexes of dissertations, American and foreign. The standard printed catalogues of dissertations and of work in progress can also be consulted. Although the university has a great many dissertations in the Middle English field, it lacks many. The most serious gap is German dissertations of the period 1880-1900.

Texts and Critical Works. As was noted at the beginning of this account the University of Pennsylvania Library contains all of the
important texts, books of criticism, and general histories of Middle English literature. Here are to be found all of the Early English Text Society publications, some 330 volumes, many of them represented by more than one copy. The publications of most of the other publishing societies are possessed in their entirety: The Camden Society, Scottish Text Society, Percy Society, Surtees Society, Chaucer Society, and the Caxton Society. These publications constitute an adequate medieval library of texts in themselves. We have some of the scarce Roxburghe Club publications and also many of the Wiltshire Club and Bannatyne Club books.

The various scholarly series of texts and monographs, such as the Albion Series, the Belles Lettres Series, Bonner Beiträge, Yale Studies in English, Columbia University Studies in English and Comparative Literature, Harvard Studies and Notes, and Palaestra are complete. Mention may be made in passing of the importance for the student of Middle English literature of such collections as Migne's Patrologia Latina and Patrologia Graeca, the Acta Sanctorum, the Rolla Series, etc.

ELIZABETHAN AND JACOBEAN LITERATURE

By M. A. Shaaber

Our library is very well equipped for research in sixteenth and early seventeenth-century English literature. Except for containing only a small number of original and other early editions, its collections afford practically all the tools required for literary research in all its branches. Even the limited number of early printed books available includes some worth mention. We have the four Shakespeare folios (and an extra copy of the fourth), the two Jonson folios, and the two Beaumont and Fletcher. We have the third and fourth quartos of Hamlet, four of the Shakespeare quartos of 1619, an apparently unique quarto of Macbeth (1674), and approximately 110 contemporary editions of early seventeenth-century plays. We are also the custodian of a small collection of Shakespeare quartos belonging to the Shakespeare Society of Philadelphia. We have, moreover, a collection of Elizabethan chronicles and histories, including both editions of Holinshed, a collection of early dictionaries, three sixteenth-century Bibles, and a number of early translations in the original editions, including Erasmus's Praeae of Folly (1549) and Golding's Ovid (1567). We are also acquiring the series of microfilms of all English books printed before 1550 which are listed in the Short-Title Catalogue now in process of manufacture; when completed (in about two years) this will provide reproductions of about 4,000 books. This is supplemented by a few photostats and microfilms of books printed between 1550 and 1640. We also have photostats of the Hunter Chorus Vatum MS. in the British Museum.

As far as modern reprints of literary works, books of biography, literary history, and criticism are concerned, our facilities compare favorably with those of any other library in the country; indeed, there are probably not more than half-a-dozen that could put as much or more material at the disposal of the student. This collection is well rounded and has been kept up to date. It includes the standard edition of every Elizabethan author who has been reprinted and most of the superseded editions as well. It includes also the publications of all the societies which have been active in this field, publishing either reprints or critical articles, viz., the Shakespeare Society (reprints and criticisms, 20 vols.), the Percy Society (mainly reprints, 30 vols.), the Chetham Society (mainly historical, but including a few reprints, 213 vols.), the Parker Society (theology and church history, 55 vols.), the Hunterian Club (reprints, 18 vols., limited), the Spenser Society (type-facsimile reprints, 54 vols., limited), the Bannatyne Club (reprints, 127 vols., lacking a few), the Ballad Society (reprints, 38 vols.), the New Shakespeare Society (transactions and 32 vols. of re-
In books relating to Shakespeare and the Elizabethan drama we are particularly strong. The Furness Memorial Library of Shakespeareana contains about 10,000 volumes. This includes all the important scholarly editions of Shakespeare, a number of translations (but by no means all), and a variety of acting editions of the plays, besides a large assortment of critical and source material of every kind, which, though not exhaustive, is ample for almost every purpose and can probably be duplicated only in the Folger Shakespeare Library. A notable feature of the Furness Library is its collection of eighteenth-century criticism of Shakespeare in the original editions; though by no means complete, this is very well selected and includes practically everything of the first importance. It also includes a considerable amount of scarce and even unique material collected by and presented to Dr. Furness, all of it interesting and some of it valuable, and much of Dr. Furness's correspondence with other Shakespeare scholars. This library was collected and is maintained for the editing of the New Variorum Shakespeare and is entirely adequate for that purpose. It also includes books on related subjects, such as stage history, English medieval and Elizabethan history, the English language, London, historic costume, and a collection of reference books. The chief weakness of the Furness Collection, the lack of learned journals, is compensated for by the files of the Main Library. The apparatus for the study of the early drama, either in the Furness Library or in the Main Library or in both, includes Farmer's set of photographic facsimiles of early plays (152 vols.), the series of Materialien zur Kunde des älteren englischen Dramas (type-facsimile reprints of plays, etc., 59 vols.), the Jahrbuch of the German Shakespeare Society, all the plays edited by Bullen, including his Collection of Old English Plays and Old English Plays, New Series, many of them issued in limited editions, etc.

In the field of Elizabethan literature outside the drama our resources are less remarkable, but in reprints and critical material we can supply everything needed by any student but the most exceptional. We have all of Arber's reprints of Elizabethan literature, some issued by subscription in limited quantities, Collier's scarce reprints (20 vols.), all of the reprints of the indefatigable Grosart, including the Fuller Worthies Library, the Miscellanies of the Fuller Worthies Library, the Chertsey Worthies Library, the Occasional Issues, and the Huth Library, some limited to as few as forty copies, but still the only modern reprints, and some of Halliwell's. Our collection of critical material is not so extensive as in the field of the drama, but is nevertheless comprehensive and many-sided. It includes a large number of dissertations.

We also possess a few special facilities for the researcher in the Elizabethan field. For example, our MS. index to Genest's History of the Stage repairs the serious omissions of the printed index. We have a file of cards transcribed from the Short-Title Catalogue and rearranged in chronological order which, when finished next year, will prove a most valuable tool. We have a file of the catalog cards of the Folger Shakespeare Library which will be extended as the cataloging of that collection is carried forward.

We have practically no MS. material pertinent to research in this field.
FURNESS MEMORIAL LIBRARY OF SHAKESPEAREANA

By M. A. Shaaber

The Furness Memorial Library is a collection of about 12,000 volumes of Shakespeareana and works on Elizabethan literature and related subjects, being the Shakespearean portion of the library of the late Horace Howard Furness, the distinguished editor of Shakespeare, which was bequeathed to the university, as a memorial to his father, by Horace Howard Furness, Jr., in 1930. According to the terms of the bequest, it is maintained as a unit, and it is housed in a wing of the Main Library built on the model of the library of Merton College, Oxford. The bequest included a fund for maintenance, a portion of which is devoted to acquiring new books for the collection. Accessions amount to about 150 volumes a year.

The collection, from several points of view, is quite remarkable. In the first place, it is entirely a working library. Dr. Furness's only criterion in buying books was apparently their usefulness in his work. He had none of the book collector's interest in rarity and value. Consequently his library is more remarkable for comprehensiveness than for choiceness. Because he kept in mind all his life his project of editing all the plays of Shakespeare on a monumental plan, he collected assiduously everything which he might some day need for that purpose, and thus the collection is extraordinarily well-rounded. It is not complete, partly because the literature on the subject is so large that there is no complete collection anywhere and partly because Dr. Furness refused to buy foolish and idle books, but it contains virtually everything, except the quarto editions of the plays, which any scholar would be likely to require. As a working library, it is probably the equal of any other Shakespeare collection in existence.

The interests and outlook of Dr. Furness are impressed upon the collection in other ways. It includes, for example, a group of relics, among them certain wooden objects said to have been made from portions of a mulberry tree planted by Shakespeare in 1609, a pair of gloves which a tradition almost three hundred years old tells us were worn by Shakespeare, memorials of celebrated actors, etc. Of more interest to the scholar are many association copies of books and a considerable amount of Dr. Furness's correspondence. Some of his books have his own pungent annotations.

Although Dr. Furness was not much interested in rare books merely because of their rarity, he acquired a small but very interesting selection of early printed books illustrating, from various points of view, the subject to which he was devoted. The collection includes all four of the Shakespeare folios (and an extra copy of the fourth). The Furness copy of the First Folio has part of the title-page and the last leaf in facsimile, but is otherwise a very sound copy. There are also twelve seventeenth-century Shakespeare quartos. None of these is of very great value, the most interesting being a 1611 quarto of Hamlet and four of the quartos of 1619. The Furness Library is also the custodian of seven quartos belonging to the Shakespeare Society of Philadelphia. It also possesses twenty-two seventeenth-century acting versions of Shakespeare's plays (in addition to two more belonging to the Shakespeare Society). The most notable of these is a 1674 Macbeth which is possibly unique. There is also a copy of the 1640 Poems.

The half-dozen quartos of other Elizabethan plays in the Furness collection are supplemented by a series of 111 seventeenth-century editions of plays written before 1642 in the Main Library. There are no great rarities among them, but the collection is fully representative of the later phases of the Elizabethan drama and thus most useful. The earliest issues included are Gwinne's Nero (1603), Chapman's Sir Giles Goosecap (1506), and Greville's Mustapha (1609). The collected editions of Jonson (1616 and 1640), of Lyly (1632), of Beaumont and
Fletcher (1647 and 1679), of Cartwright (1651), of Killigrew (1664), and of Davenant (1673) are all here. Chapman is represented by four publications, Heywood by four, Middleton by four, Beaumont and Fletcher by five, Ford by two, Massinger by ten, and Shirley by ten.

The other early printed books in the Furness Library are of various kinds, but all will be found in some way or other to illustrate Shakespeare and the literature of his time. There is one incunabulum, the Sphaera mundi of Joannes de Sacro Bosco (Venice: 1491). There are three sixteenth-century Bibles. There is a very comprehensive group of dictionaries of the time of Shakespeare: Hulsoet's (1572), Cooper's Thesaurus (1580), Florio's Firste Fruites (1591), Sainlien's (1593), Florio's World of Words (1598 and 1611), Withal's Latin dictionary (1616), Hinsheu's (1617), Bullokar's English Expositor (1621), Percival's Spanish dictionary (1623), Rider's (1626), and Cotgrave's (second edition, 1632). Most of the chief historical writers of the sixteenth century are represented: John Major (Historia majoris Britanniae, Paris, 1520), Lanquet (Coopers Chronicle, third edition, 1565), Grafton (second edition, 1569), Holinshed (1577 and 1587), Hayward (Henry IV, 1599), Stow (Annals, 1600; Survay of London, fourth edition, 1618), Bacon (Henry VII, 1622), Dugdale (Antiquities of Warwickshire, 1646), and Baker (1650). The Main Library has also Lanquet (Epitome, 1549), Stow (Summarie, 1611), Speed (fifth edition, 1632), and Raleigh (History of the World, fourth edition 1621). A few narratives of travel are included: Purchas His Pilgrimage (1614), Moryson's Itinerary (1617).

There are also a few examples of Elizabethan literary publications, such as an incomplete copy of the second edition of Chaucer's Canterbury Tales (1532), Wilson's Art of Rhetoricke (seventh edition, 1584), Sidney's Arcadia (third edition, 1598), Warner's Albion's England (sixth edition, 1602), the 1610 collection of The Mirror for Magistrates, the Works of James I (1616), an imperfect copy of Overbury's Characters, Heywood's Rape of Lucrece (1638), Ford's Parismus, Alexander's Recreations with the Muses (1637) The Main Library has also A Petite Palace of Petitie His Pleasure (fourth edition, 1608), Fletcher's Purple Island (1633), Greville's Workes (1633) and Remains (1670), Quarle's Divine Fancies (1632), Stanley's Poems (1647), Sherburne's Salmacis, Lyrian, and Sylvia (1651), and King's Poems (1657).

The collection of Elizabethan translations, from both the ancient and the modern languages, is very well selected. It includes Erasmus's Praise of Folie, translated by Chaloner (1549), Golding's Ovid (1567), Appianus's Auncient Historie (1578), Greneway's Tacitus (1598), the Tenne Tragedies of Seneca (1581), Holland's Livy (1609), Plutarch's Morals (1603), the Lives (fourth edition, 1612), Lodge's Seneca (1614), Vergili's Aeneid (fifth edition, 1620), Sandys's Ovid (third edition, 1632), Holland's Pliny (second issue of the second edition, 1635), Guicciardinis Historie (1579), Guazzo's Civil Conversation (1586), Silvyns Orator (1596), Montemayor's Diana (1598), Contarini's Commonwealth of Venice (1599), Fairfax's Tasso (1600), La Primadaye's French Academie (fourth edition, 1602), Henri Estienne's World of Wonders (1607), an undetermined edition of DuBartas, Comines's Historie (third edition, 1614), Harrington's Orlando Furioso (third edition, 1634). The Main Library has also North's translation of Guevara's Diall of Princes (1557). There is also a group of foreign books in Latin, Italian, French, German, and Spanish, including the eclogues of Mantuan (1502), Pomponazzis Tractatus de animae immortalitate (1534), Hippocrates (1546), Aretinos Verginia (1535), the Hecatommithi of Cintio (1546), Secchi's Inganni (1582), Belleforest's version of Bandello (7 vols., 1544-95), Boastiuau's Histoires Prodigieuses (1574), Jodelle's Oeuvres (1583), Aurelio et Isabella by Juan de Flores (1638), Garnier's Tragedies (1616), Goulart's Thresor d'histoires admirables (1620), Montemayor's Cancionero (1571), Englische Comedien und Tragedien (1620 and 1624), Daniel Casper's Cleopatra (1661), and Ayler's Opus Theatricum (1678).
Another group of books may be described as illustrations of Elizabethan manners and ideas. Some illustrate Elizabethan sports (Vincent Savioło His Practice, 1595; Manwood, A Treateise ... of the Laws of the Forrest, second edition, 1598); some are legal (Plowden, Commentaries, second edition, 1578; St. German, Dialoges, eighth edition, 1580); some illustrate husbandry and related interests (Googe, The Whole Art of Husbandry, 1577; Tusser, Five Hundred Points, fifteenth edition, 1614; Markham, Cheape and Good Husbandry, third edition, 1623; Dodoens, A Niewe Herbal, 1578; Gerarde, The Herball, second edition, 1633); some have to do with medicine and natural science (Cornelius Agrippa, Of the Vanitie and Uncertaintie of Artes and Sciences, 1569; The Secretes of Alexis, 1569?; Batman uppon Bartholome, 1582; Viret, The Demoniacke World, 1583; Huarte, Examen de ingenios, 1596; Wirsung, Praxis medicinae universalis, 1598; Topsell, Four-footed Beasts and Serpents,1608; Crooke, A description of the Body of Man, 1615; Melton, Astrologaster, 1620; Gesner, Historiae animalium, Liber V, 1621; Heresbach, A Thousand Notable Things of Sundrie Sortes, seventh edition, 1627; Hall's Select Observations, 1679). Others are Latimer's Twenty-Seven Sermons (1562) and Seven Sermons (1571), the Flowers of Terence (fifth edition, 1581), Segar's Booke of Honor and Armes (1590), Politieuphia (second edition, 1598), Allott's Wits Theatre (1599), Vertegans's Restitution of Decayed Intelligence (1605), Dallington's Aphorismes (1613), Newes from Parnassus (1622), Favyn's Theater of Honour and Knighthood (1623), Guillim's Display of Heraldrie (second edition, 1632), Heywood's Gynaikeion (1624) and Hierarchie of the Blessed Angells (1635), Prynne's Histrio~Mastix (1633), John Wilson's Cheerful Ayres (imperfect, 1660).

This portion of the Furness Library is not the most important or even perhaps the most valuable part of it, but it deserves special mention because no other equally varied and useful collection of the same kind is likely to be found in another library in the Philadelphia area.

The main strength of the collection lies in its modern Shakespeareana and books on other phases of Elizabethan literature. These include all the important scholarly editions of Shakespeare and of all the other Elizabethan dramatists and non-dramatic authors, a considerable number of acting editions of Shakespeare's plays, and a wealth of material bearing on their sources, stage history, vogue, and influence, as well as all important critical works. There are also many books on such related subjects as English medieval and Elizabethan history, the English language, London, and historic costume, and a valuable collection of reference works. The selection is so wide and many-sided that it is difficult to single out component parts deserving of special notice, but mention may be made of two groups in particular. One of these is an excellent series of eighteenth-century critical and explanatory works in the original editions. The other is the extremely useful collection of sets published by subscription or issued in limited editions. This includes the publications of virtually all the societies active in the field of Shakespearean or Elizabethan scholarship, such as the Shakespeare Society, the Percy Society, the Hunterian Club, the New Shakespeare Society, the Villon Society, the Malone Society, the Shakespeare Association, the Oxford Bibliographical Society, and the reprints of such editors as Brydges (Restituta, 4 vols., 1814-6), Grosart (84 vols. in all, including the very scarce Occasional Issues, 17 vols., 1875-81), Arber (English Garner, 8 vols., 1877; English Reprints, 14 vols., 1869-71; English Scholar's Library, 16 vols., 1880-4), Bullen (Old Plays, 4 vols., 1882-5, and editions of various contemporary dramatists), and Farmer (13 vols., 1905-8).

The Furness Library is not the largest collection of Shakespeareana, but in it a scholar working on almost any conceivable Shakespearean or Elizabethan project would be practically certain of finding all the printed material required.
Like most major libraries which underwent a great period of expansion and growth during the nineteenth century, the library of the University of Pennsylvania did not make, at that time, any particular effort to build up its collection representing the period in English literature which extends from 1650 to 1800. Here as elsewhere was operative the prejudice against that period which continued to develop in intensity during most of the nineteenth century. Such scholarly interest as was manifest was not ignored. We acquired, as they appeared, the Saintsbury edition of Scott's *Dryden*, Leslie Stephens's edition of Richardson, the Courthope and Elwin *Pope*, and current new editions of other major poets and dramatists. But no effort was made to acquire original editions or make any collection of the pamphlets, minor publications, or other material so valuable for explaining the major writers, or illustrating manners and trends in those times. The deficiency, however, which such neglect might have occasioned has been obviated by various circumstances.

The formation of the university library goes back to the middle years of the eighteenth century. Many valuable books acquired in the first purchases, and subsequently, are with us still. We may cite, in illustration, the case of Milton. We acquired amongst our first books a Tonson folio of Milton's poems (1695), the English prose works (1697), and the History of Britain ascribed to him (1678). Practically all the editions of Milton which appeared during the eighteenth century down to Warton's (1785) are on our shelves. Also among such original texts are found many works of criticism, history, philosophy, and divinity, important for studying the intellectual background of the age, though these were sometimes acquired at a later period. We may mention Davennant's *Gondibert*, with the famous critical prefaces (1650-51), in quarto and octavo, and in the folio of the complete *Works* (1673); Temple's *Essays* (1690); many of the works of Dennis and Rymer; Warton on *Pope*, first and second editions; *Reynold's Discourses* (1779); the *Histories* of Clarendon (1732), of Burnet, Eachard, etc.; Hobbes's *Leviathan* (1651 and 1678); a sumptuous edition of Locke's works (1714); Shaftebury's *Characteristicks* (1711, 1713, etc.); *Bolingbroke's Letters on History* (1743); the editio princeps of Chesterfield's *Letters to His Son* (1774), and Maty's edition of the same writer's *Miscellaneous Works*, with the Memoir. Of sermons, whose social and literary implications have been too little regarded, our Main Library and the *Penniman* Library contain a vast number, including one large, interesting group delivered in Ireland, original editions of Tillotson, etc. We are also particularly fortunate in possessing, with a scattering of other magazines, complete files from their first issue until the end of the century of those first successful examples of their kind, *The Gentleman's Magazine* (1731) and *The Monthly Review* (1747), indispensable works of reference. Available, and complete (except for one number) to 1794, is an interesting counterpart of *The Gentleman's Magazine*, *The Lady's* (1770).

The gift from time to time by individuals of their whole libraries or of parcels of books, has necessarily, in so old and cultivated a center as Philadelphia, added many valuable original or early texts. We have acquired, especially through gifts by Dr. Burr, upwards of half a hundred contemporary quartos, mostly firsts, of plays such as Otway's *Venice Preserved*, five of *Fielding's*, some of Thomson's, *Foote's*, *Cumberlander's*, and others. Among these are nine of Dryden's plays, published during his lifetime, but only *The Duke of Guise* is a first. We have the Tonson folios (1701) of *Dryden's* collected plays, and many other first or early collected editions of other dramatists. There are also most of the eighteenth-century *omnium gatherums*, such as *The British Theater*. Some of these, like the eighteenth-century editions of...
Shakespeare in the Furness Library, especially that of Rowe (1709), are valuable, amongst other things, for their plates, which are an interesting guide to contemporary methods of staging. Besides the plays, we have all the old contemporary histories and memoirs of the stage of the time. Of Langbaine and Davies we have original editions. There is a rich series of Collier's publications, including the original issues of all his blasts against the stage except the first edition of the Short View; we have the revised and enlarged second and third editions of that work. Incomplete as it is, this collection is of no small interest and value. It is augmented, of course, by the reprints and histories of the last fifty years in this field.

By far the most important special collection, and an outstanding one in the country is the Godfrey Singer Memorial of eighteenth-century fiction. This is especially rich in the epistolary fiction stemming from Richardson, but contains amongst its more than 500 titles of rare novels, many other unusual and valuable works. It is more fully described in the following report.

The existence nearby of such collections as those of the old Philadelphia subscription libraries, foremost among them being that of the Library Company of Philadelphia provides an unsurpassed reservoir of contemporary editions of major and minor writers. These include much pamphlet and miscellaneous material. Besides those of the Library Company, especially in its Ridgway Branch, there are the treasures of the Historical Society of Pennsylvania, and some at the Free Library in special collections. Remarkable opportunities for research are offered by collections, at present inadequately housed and cared for, in the Mercantile Library and at the Athenaeum. A feature of special interest in these collective resources is the great fund of early American editions of the contemporary English. Altogether it should be noted that on the campus, or within walking distance of it, there are opportunities for study of the literature of this period in its contemporary editions hardly to be approached anywhere else in this country. With reference to original texts, the chief weakness of the area is in the lack of the early periodicals. We find, of course, numerous late editions of some, but original copies are rare, and many minor periodicals are not to be found at all.

In the possession of administrative officers and members of the faculty are some large and important collections of literature of the period, especially of its fiction. These are, under proper conditions, available for research, and most, if not all of them, are destined to find their way into the University of Pennsylvania Library.

Since the great renewal of interest in Restoration and eighteenth-century literature during the last two decades, the university library has kept fully abreast of developments. All modern editions and reprints, including such monumental undertakings as the Columbia edition of Milton, the Facsimile Text Society's reprint of Defoe's Review, and the eighteen volumes of the Boswell papers in the collection of Colonel Isham have been acquired for the library. The university library is on the whole an adequate scholar's library in eighteenth-century literature.

THE GODFREY FRANK SINGER MEMORIAL OF EIGHTEENTH-CENTURY FICTION

By John C. Mendenhall

The Godfrey Frank Singer Memorial was established in March, 1934, by Mr. and Mrs. Jacob Singer of Philadelphia in memory of their son, Godfrey Frank Singer, of the Class of 1928 College. Young Mr. Singer was a scholar, and teacher of great promise. He loved to have his own books about him, and in the course of his studies gathered a notable
library containing most of the important books mentioned by his instructors, others suggested by them, and still others which represented his own developing tastes and interests. After taking his A.B. with distinction, he proceeded to graduate study, and in 1933 received from this university the degree of Ph.D. His dissertation, The Epistolary Novel: Its Origin, Development, Decline and Residuary Influence, published by the University of Pennsylvania Press in 1933, won wide-spread recognition. From 1928 until his untimely death in January, 1934, he was an assistant instructor in the Department of English at the University of Pennsylvania.

The Memorial, specially housed, and suitably marked, consists of an original gift of 1,547 volumes, comprising 821 separate works. The bulk of it consists of those novels, in their first form and in great part unique, which had been collected by Dr. Singer for the writing of his dissertation. With the novels in letters and their forerunners (such as The Post-man Robb'd of his Mail, The Love Letters between a Nobleman and his Sister, and The Lining of the Patch Work Screen), were associated a number of other fine examples of the outstanding fiction of the century, such as first editions of Fielding's Tom Jones, Smollett's Peregrine Pickle, and Sterne's Tristram Shandy, the latter bearing in several of its volumes the author's autograph. The first editions of Richardson's Clarissa and Sir Charles Grandison are in particularly good condition, and the latter unique in containing the original of a page cancelled during the run of the first issue, of which other known copies contain but the substitute. There are fine copies also of early American fiction, especially of Charles Brockden Brown. Minor novelists, who wrote one or more works in epistolary form, are sometimes represented more or less in entirety, as for instance Sarah Fielding, Mrs. Eliza Haywood, the Miss Winifies, Mrs. Brooke, Henry Mackenzie, Robert Bage, Charlotte Smith, and Mary Robinson.

Through the generosity of the donors, an annual gift has made possible the purchase of other items, such as hitherto unrecorded examples of early novels in letters; two manuscript novels of the eighteenth century; some interesting manuscript material of Sophia Burney, a niece of the famous Madame d'Arblay; a splendid copy of Parthenissa, the best English exemplar of that seventeenth-century type of romance known to us as "Heroic," to add to the rare Almahide, Cassandra, and Clélie, French prototypes, in early English translations, already included; and, at the time of this writing, an unusually fine and early issue of Swift's Travels of Captain Lemuel Gulliver. Besides accession through purchase by this means, a few appropriate gifts of similar sort have been deposited in the collection. In all, sixty-eight choice and appropriate works, comprising 127 volumes, have been added to the Memorial since its foundation, making the present total 889 works, in 1,674 volumes. They have all been entered in a special card catalogue, minutely described, as well as in the general library catalogue.

Besides those works which may be called works of pure literature, 810 altogether, of which 801 are fiction, there are seventy-nine works of reference, bibliography, and biographical or autobiographical character, ranging from sets of the Cambridge History of English Literature and the Dictionary of National Biography to more specialized material such as the various histories of fiction, beginning with Clara Reeves Progress of Romance, in its first edition (1785), and coming down to Ernest Baker's elaborate History of the English Novel.

The works other than fiction in the Singer Memorial comprise a few isolated but interesting rarities such as a first of William Cowper's Olney Hymns; Cottage Poems by the Rev. Patrick Brontë (Halifax: 1811); and a bulky autograph manuscript of poems by J. K. Paulding (1843).

The Memorial has already demonstrated its worth in having been con-
suited by students who have found in it items not duplicated elsewhere. It thus worthily perpetuates the ideals of the promising young scholar to whom we owe its foundation. It is to be hoped that it may continue to grow until it illustrates and makes available for scholarly use, in original editions, the whole of that fiction of which at present it constitutes so unique and extraordinary a part.

NINETEENTH-CENTURY AND CONTEMPORARY ENGLISH POETRY

By Russell K. Alspach

The interest in early nineteenth-century poetry taken by professors of English at the university from the time of Henry Reed to the present, has resulted in the acquisition by the library of an admirable collection of books dealing with that period. Much of Henry Reed's Wordsworthiana came, after his death, to the library, and succeeding purchases have greatly enriched our resources in this field.

Wordsworth, Coleridge, Keats, Shelley, and Byron, the most important of the early nineteenth-century poets, are more than adequately represented in so far as critical and popular editions of their work go. Many of the latter have been gifts from Philadelphians whose families, always staunch friends of our library, have from time to time made gifts of parts of their libraries to the university.

Of critical works dealing with this early nineteenth-century period, we have likewise adequate representation. Especially is this true in the cases of Wordsworth, Coleridge, and Keats. Henry Reed at an earlier period, and Professor Penniman at a later period, were particularly anxious to have at the University of Pennsylvania Library good representation of historical and critical work dealing with Wordsworth for use by their graduate students. Their efforts, and those of Professor Laurie who is now directing graduate work in Wordsworth, have resulted in our library's being well equipped with bibliographical works for the study of wordsworth published from the earlier years of the nineteenth century to the present. Naturally, the growth in our items dealing with Coleridge has kept pace with the growth of the Wordsworth material.

Of course there are omissions. We lack, for instance, Wordsworth's A Description of the Scenery of the Lakes in the North of England, etc., (the edition of 1823); Hale White's Description of the Wordsworth and Coleridge Manuscripts... (of) ... Mr. T. Norton Longman (1897); William Johnston's The Earlier Poems of William Wordsworth (1857); Wordsworth's Memorials of a Tour on the Continent (the first edition, 1820); and a few others. But their importance is comparatively minor.

The increasing interest of late years in the life and work of Keats has found reflection in our library in a growing number of volumes dealing with that poet. Not many important Keatsian volumes of the last fifty years are missing from our collection and research work in most of the problems dealing with Keats can be carried on at the university with but little recourse to outside libraries. We do not have The Keats Letters, Papers, and Other Relics... (in the) ... Dilke Bequest in The Hampstead Public Library..., (1914); John Gilmer Speed's edition of The Letters and Poems of John Keats (1883); the Mosher edition of Odes, Sonnets, and Lyrics of John Keats, 1922; G. T. Drury's edition of the Poems (1896). These, and some other Keats works we lack, are being purchased, however, as they turn up in booksellers' catalogues.

Comparative only is any weakness in critical apparatus dealing with Shelley and Byron. Just as the increasing appreciation and interest in Keats found reflection in our library, so the dwindling enthusiasm for Shelley and Byron found reflection. But it must in all
fairness be pointed out that a slight expenditure only is needed to bring the material dealing with Shelley and Byron to adequate proportion.

Of such minor poets as Scott, Southey, Landor, Campbell, Moore, Peacock, Hood, Praed, Beddoes, Darley, Hunt, the library has, generally, good representation in standard and critical editions. The plays of George Darley we lack; those of Thomas Lovell Beddoes we have: It would be more difficult to acquire Beddoes' plays than Darley's.

The collection of periodicals for the early nineteenth century is treated elsewhere in this survey in some detail. It must, however, be noted in passing that it is unusually complete, and those items we do not have are not of primary importance. Our file is complete, for instance, of such periodicals as Blackwood's, the Quarterly Review, and the Edinburgh Review, in which much original and critical work of the period was published.

The latter part of the nineteenth century, by which I mean roughly the period from the heyday of Tennyson to about 1890, has benefited from an interest that might be described as "constantly contemporary". Tennyson, Browning, Arnold, Swinburne, Clough, Patmore, Rossetti, Dobson, etc., are represented not only by standard and critical editions, but in many cases by first editions and all subsequent editions that provide an excellent basis for collation. No important critical works are lacking: especially good, in this respect, is our collection of the works of the important essayists, who were also critics of note, such as Leslie Stephen and Walter Bagehot.

Wise and shrewd buying of books, that looked beyond contemporary estimates of a man's worth, has resulted in a fine and very nearly complete series of editions of minor and less than minor poets. A few among a great number are Hawker, William Bell Scott, Dobell, Thomas Gordon Hake, Allingham, Mangan, Barnes, David Gray, Arthur Munby, Buchanan, Edward Carpenter, and William Canton. There are scores of others.

The contemporary field, or the period from about 1890 to the present, is I believe, as well represented in our library as in any other great library. Professor Weygandt has made it a practice during these years to purchase new books of English poetry, whether by recognized names or by newcomers, as they were published. Hence, omissions are few indeed. Henley, Binyon, W. H. Davies, Dowson, Francis Thompson, 'A. E.', Gibson, Sturge Moore, etc., and, of course, Kipling, Hardy, James Stephens, Noyes, A. E. Houseman, Hasefield, Ralph Hodgson, De La Mare, Yeats, and poets of like stature are represented by their complete works. It should be emphasized that these men of the contemporary period are represented not only by standard or collected editions, but also by individual volumes bought on their publication. This practice has resulted in the acquisition of volumes that are already quite rare and valuable, as, for instance, Hasefield's Salt Water Ballads, Yeat's The Wanderings of Oisin, etc.

Besides the better-known poets listed immediately above, a great number of lesser poets could be mentioned whose works we have. The works of these lesser poets, while not particularly valuable, are in most cases out of print and libraries that lack them find it a long and arduous task to pick them out from booksellers' catalogues. Gordon Bottomley, Abercrombie, Alfred Williams, Charles Doughty, Richard Rowley, Francis Ledwidge, Henry Newbolt, Katherine Tynan, Herbert French, Lionel Johnson: the list could run on and on. The scholar of the future, doing his research in what is now the contemporary period of English poetry, will find, I venture to say, almost unrivalled facilities at the University of Pennsylvania's Library.
Included in contemporary English poetry is, of course, poetry of the Celtic Renaissance. Professor Weygandt was the first in America to offer a course in this field, and because of his enthusiasm the library has an exceptionally full collection of the poets of modern Ireland. Yeats, for instance, is represented not only by his Macmillan publications, but also by the extremely fine and rare Cuala Press editions. These should especially be noted, for Yeats made many changes in his work between the time of their issuance by the Cuala Press and their issuance by his trade publisher. Little-known Irish poets, such as Eva Gore-Booth, Nora Hopper Chesson, Emily Lawless, and Ethna Carbery, are available to our students.

All standard critical books dealing with modern poetry are in the library; nothing of any moment, critically, is published that we do not buy. Our periodicals for the modern period include the files of the Yellow Book, John O’London’s Weekly, The London Mercury, The Dublin Magazine, and all current periodicals that contain original work or criticism of any worth.

To sum up: the library is thoroughly equipped in the field of nineteenth-century and contemporary poetry. It offers to either the young or mature researcher facilities for his work unrivalled in the metropolitan area of Philadelphia.

BRITISH FICTION OF THE NINETEENTH CENTURY AND AFTER

By T. E. M. Boll

The University of Pennsylvania Library has an exceptionally inclusive collection of British fiction of the nineteenth century and after.

It is strong in complete sets and complete collections. Ainsworth, Mme. d’Arblay, Austen, Barrie, Beaconsfield, Bennett, Blessington, Borrow, the Brontës (including the Shakespeare Head series of their juvenilia), Buchanan, Bulwer-Lytton, Wilkie Collins, Conrad, DeMorgan, Dickens, Edgeworth, "Eliot", Ferrier, Galsworthy, Mrs. Gaskell, Gissing, James Grant, Hardy, Hewlett, Hudson, G. P. R. James, Douglas Jerrold, C. Kingsley, Kipling, Lever, Locke, Machen, Marryat, Marshall, "Trevana", Whyte-Melville, Meredith, Merrick, Moore, Peacock, Phillpotts, Schreiner, Scott, Mrs. Sherwood, Stephens, Stevenson, and Thackeray are each represented by at least one complete collection of their works.


The value of the novel as a mirror of society has been kept in mind by those responsible for the recommendation of book accessions, and an attempt has been made to obtain a topographical representation of writers of the whole Empire.
Bibliography

The bibliographical apparatus in the field of fiction is up to date. The general bibliographies include those by Baker, Brussel, Sadleir, The Cambridge History of English Literature, and the many others enumerated in the section on bibliographical resources. The latest exhaustive bibliographies of individual writers are at hand, such as the bibliographies of Barrie, the Brontës, Dickens, Bulwer-Lytton, "Eliot", Galt, Mrs. Gaskell, Hardy, C. Kingsley, Kipling, Lawrence, Lever, Meredith, Scott, Thackeray, the Trollopes, and Wells.

Specialized fields are adequately treated in such bibliographical and critical volumes as those by Brown and Krans on Irish fiction; by Singh on Anglo-Indian fiction; by Madeleine Cazamian on scientific ideas in fiction; by Shepperson on the burlesque novel; by Rosa on the fashionable novel; by Baker and Nield on historical fiction.

The collection of critical works is excellent. Every important critical work treating British fiction of the nineteenth century and later is to be found here.

The biographical resources are very good. Nearly every significant biographical work on the leading and lesser figures of fiction is in the library. There are also periodicals of biographical interest specializing in individual authors, such as the publications of the Brontë Society, and The Dickensian, published by the Dickens Fellowship.

The library is fully equipped with studies in the technique of fiction. The works of Beach, Grabo, Lathrop, Lubbock, Muir, and Shepherd are among those to be found here. Easily accessible are also the many dissertations in this department that the library has received from abroad on its exchange privileges.

The learned publications listed in another section of this report contain valuable bibliographical and critical materials on fiction.

Periodicals

Of periodicals contributing either original works or criticisms of British fiction the library has an extensive collection. Unfortunately the wide distribution of these periodicals is not equalled by the completeness of the sets.

The chief literary periodicals containing original works of fiction are represented as follows: All the Year Round (complete); Bentley's Miscellany (complete); Blackwood's Edinburgh Magazine (complete); Chambers's Journal, series 2-7 (incomplete); Cornhill Magazine (complete); The Dome (new series V.1,2); Dublin Magazine; (new series incomplete); Dublin University Magazine (vol. 7-50); The Eagle (St. John's College, Cambridge, 1859-1919); Fraser's Magazine (complete); Golden Hind (no. 1-8 incomplete); Good Words (vol. 5-36 incomplete); The Graphic (vol. 1-60; 64-66); The Gypsy (vol. 1, no. 1,2); Household Words (complete); English Illustrated Magazine (vol. 2-17 incomplete); Leisure Hour (vol. 3-50 incomplete); London Society (vol. 1-70 incomplete); Longman's Magazine (complete); Macmillan's Magazine (old series 1-92 incomplete; new series complete); The Mirror of Literature (vol. 1-30); The Modern Scot (vol. 1-6); The Odd Volume (complete); The Pall Mall Gazette (vol. 2-6; 8-10); Punch (vol. 1-82; 84-88, 90, 92-185); The Strand (vol. 1-8); Temple Bar (vol. 1-66) 82-132 incomplete, straight run vol. 107-132; new series v. 1-2); The Town (1837-1839, incomplete); Yellow Book (complete).

Periodicals containing criticisms of fiction of the period are represented by the following: Academy (vol. 1-89); Adelphi (vol. 1-4; new series vol. 1-3; series 3, vol. 1 on); Athenæum (no. 219-4,737 incomplete); Bell's Life in London (1865-67 incomplete); Bookman, London,
While there are many obvious omissions of worthwhile texts, these omissions are constantly being reduced. Expanding steadily in accordance with plans that consider topographical and thematic values as well as purely aesthetic ones, the library offers rich quarries for the researcher into British fiction of the nineteenth century and after.

**Conclusion**

Modern general prose is not, in the scholar's understanding, a genuine field of research. It presents few problems of text or editorship for which an elaborate apparatus is necessary. Those it does present: the derivation of the essayist's art from classical or Renaissance sources; the relative importance of writers and their influence upon one another; how far they have followed traditional forms or boldly innovated, require only an intelligent reader and an adequate supply of books. The first is providential; the second the university library, with others in its neighborhood, the Philadelphia Free Library, the Library Company of Philadelphia, and the Mercantile Library can furnish.

**NINETEENTH-CENTURY AND CONTEMPORARY ENGLISH NON-FICTIONAL PROSE**

By E. C. Bolles

Naturally the major writers of the nineteenth century are well represented, usually by the definitive editions such as: Borrow, Norwich Edition, Clement Shorter, editor (16 vols., London: Constable, 1923); Hazlitt, Waller and Glover editors (17 vols., London: Dent, 1912); Landor, T. Earl Welby editor (15 vols., London: Chapman and Hall, 1927); Ruskin, Library Edition, Cook and Wedderburn editor (38 vols., London: Allen, 1933). These with accompanying biographies, bibliographies and criticism afford an ample basis for study. Carlyle, for example, is represented by four editions of the collected works, including the Standard (31 vols., London: Chapman and Hall, 1904), three bibliographies, (Shepherd, R.H., London: 1881; Wend, H.E., Ann Arbor: 1919; and Dyer, I.W., Portland, Me.: 1928) and over thirty titles each of biographical and critical studies. For Charles Lamb there are biographies ranging from the early studies of Talfound (1837 and 1848) and Proctor (1866), to those of Lucas (1905 - the definitive biography) and Blunden's Charles Lamb and His Contemporaries (Clark Lectures, Cambridge: 1932) as well as Lucas' three volumes of The Letters of Charles and Mary Lamb (London: 1935), Bertram Dobell's Sidelights on Charles Lamb, W. C. Hazlitt's Lamb and Hazlitt, etc. For Leigh Hunt, Blunden's two works, Leigh Hunt's Examiner Examined, 1928, and Leigh Hunt and His Circle, 1930, as well as Brewer's collection of holograph letters, My Leigh Hunt Library, 1928. In general the library possesses the most recent
studies of leading authors such as Eaton's and Sackville-West's lives of DeQuincey (1936) and Richard C. Beatty's Macaulay, Victorian Liberal, 1938. Such examples could be extended to greater length than the report permits.

In addition to the major writers there is an excellent collection of such Victorian wallflowers as Laman Blanchard, William Maginn, John Wilson ("Christopher North"), Thomas Hood and Alexander Smith. Minor and uncollected writings of leading authors can be pursued, as Thackeray in Lewis Melville's bibliography, Sultan Stork and Other Papers, Stray Papers, The Orphan of Pimlico, Thackerayana, and numerous periodical articles.

Recent and contemporary writers (1900-1930) are to be found in collected editions where these exist or in an ample number of leading titles as in the case of the following essayists: Belloc, fifty-nine titles; Chesterton, seventy-three; Lucas, fifty-three; Cunninghamham Graham, twenty-seven; Robert Lynd, twenty-four; W. H. Hudson, twenty-eight. Lytton Strachey's writings are complete, and Max Beerbohm's, with the exception of Works, his first volume. There is an especially fine collection of Sir Richard Burton's works, some of the volumes being in the Main Library, others in that of the University Museum. Other recent and contemporary authors well represented include: Aldous and Julian Huxley, Dean Inge, Charles Whibley, Philip Guedalla, H. M. Tomlinson, and William McFee. In general the collection of contemporary essayists, biographers, and critics has been well kept up, though there are occasional gaps in the publications since 1930.

Literary Periodicals

Reviews and magazines containing the first publications of the best essays and criticism of the period are remarkably complete. There are complete runs of the Edinburgh Review (vol. 1-249, 1802-1929) and of the Quarterly Review (vol. 1-271, 1809-1938). The London Magazine, to which Lamb, Hazlitt, DeQuincey, Carlyle, and Landor contributed, is in the collection (vol. 1-10, 1820-24 and the new series vol. 1 and 2, 1825). Blackwood's is complete (vol. 1, 1817 to date). Leigh Hunt is represented by The Indicator and The Liberal, but The Examiner is wanting except for a photostat of the first number. Of Cobbett's Political Register there is only a five-volume abridgement made by his sons. Other reviews are the Westminster (vol. 1-181, 1824-1914), the Saturday (vol. 11-164, 1861-1938), the Fortnightly (vol. 1-150, 1868-1938), and the Contemporary (vol. 1-154, 1866-1928). The later numbers of the Illustrated London News contain much of the work of Chesterton and Punch of Thackeray, Lucas, and A. P. Herbert. More recent publications include Sir John Squire's London Mercury, (vol. 1-39, 1919-1939), The Nation (vol. 17-28, 1915-1921), The Nation and Athenaeum (vol. 29-48, 1921-31) with W. H. Massingham, H. M. Tomlinson, C. E. Montague, Aldous Huxley and Edmund Blunden among its company, and The Criterion (vol. 10-18, 1930-1937).


"Background Books"

The social and literary aspects of the period are illustrated by a widely inclusive group of biographies, autobiographies, letters, and memoirs. In addition to such "understood" items as The Greville Diaries, Crabbe Robinson, the Memoirs of Harriet Wilson, and the "Lives and Letters" of Southey, Jeffrey and so on, there are the Hazlitt Memoirs, the Autobiography of Henry Taylor, and memoirs of Augustus
Hare, T. A. Tollope, William Jerdan, Charles Knight, and Harriet Martin­
eau. Autobiography and literary gossip by Squire (The Honeysuckle and
the Bee), Lucas (Reading, Writing and Remembering), Chesterton (Autobi­
ography), F. M. Ford (The Return to Yesterday, etc.) and others cover
the past forty years. An interesting group of books dealing with pub­
lishers includes: Mrs. Oliphant's William Blackwood and His Sons, two
studies of the Murrays (Murray, John Murray III, 1802-1892, and Paston
At John Murray's), the Journals of T. J. Cobden Sanderson (of the Doves
Press), Merriam's Edward Moxon and Whyte's William Heineman.

Important to the study of writers closely associated, as have been
these general prose men, with metropolitan journalism, are some 5,000
volumes, directories, histories, guides, and local color studies cover­
ing every aspect of London in the nineteenth and twentieth centuries.

Bibliography and Criticism

There is notoriously a lack of first rate critical apparatus for
the study of modern general prose men, but reasonably adequate aids are
available in the university library. The best criticism of the period
is to be found in the essays and studies of such men as W. P. Ker,
Saintsbury, Gosse, Birrell, Leslie Stephen, and Frederick Harrison, all
of whom are fully represented. There are further the publications of
the Royal Society of Literature, complete from 1827 to date, and of the
English Association (vol. 1-23, 1910-1937) which contain some useful
material. The same may be said of the publications in English of Har­
vard, Columbia, and Michigan, and the Ford and Romanes lectures of Ox­
ford. In addition to those already mentioned there are individual bib­
lographies for most of the major authors including De Quincey, Borrow,
Landor, Pater, Cunningham Graham and W. H. Hudson. Bibliographies of
Modern Authors published by The Bookman's Journal include Leigh Hunt,
A. Symons, Max Beerbohm and Hewlett.

The Wilson Essay and General Literature Index, 1900-1933, covering
40,000 essays and articles, is an exceedingly useful reference. The
supplements are kept up to date. Less important Wilson publications
are Bibliographies of Twelve Victorian Authors, British Authors of the
Nineteenth Century, Authors of Today and Yester­

In this brief report no more has been attempted than to show by
the citation of representative names and titles a good all-round pro­
vision of books, periodicals, and works of reference touching all sides
of the field of study. Among the University of Pennsylvania disserta­
tions since 1930 there are several pertinent titles: Law, Marie Hamil­
ton, The English Familiar Essay in the Early Nineteenth Century; Elkin,
Felice, Walter Savage Landor's Studies of Italian Life and Literature;
Schneider, Elizabeth, The Aesthetics of William Hazlitt; Sechler, R. P.,
George Moore, Disciple of Walter Pater; Clarke, J. E., Peter Porcupine
in America; Young, L. M., Thomas Carlyle and the Art of History. They
are evidence that the library facilities have been adequate to the pro­
duction of some very good work.

AMERICAN LITERATURE

By Sculley Bradley

The University of Pennsylvania Library affords exceptional facil­i­ties for the study of American literature. Our library is well supplied
in the various departments related to the general subject: literature,
literary history and biography, periodical literature, American archae­
ology, and bibliography.

The most valuable organized accumulation lies in the field of Ameri­
can drama. Endowed as the Clothier Collection, this includes rare manu­scripts, printed volumes, playbills, prompt copies and actors' scripts
from the beginnings of our drama to the present time. A separate report
on the Clothier Collection has been made by Professor Arthur Hobson Quinn, under whose supervision this, and all other fields of American literature in the Library, have been persistently developed for many years.

The library is also very well supplied with American poetry from the Colonial Period to the present. Almost all reprints of the important seventeenth and eighteenth-century poets have been acquired, and the facsimile editions of early writers have been added as soon as published. Earlier anthologies, many of them quite rare, like Kettell's Specimens of American Poetry (1829), are well represented. Among the major American poets, many are represented in original editions, and almost without exception the collected works in modern editions are available. The collection of minor poets previous to 1890 still needs further development, although even here many rare items are to be found. From 1890 to the present even minor poets have been faithfully collected.

In the field of fiction, the library is especially strong in its collection of major authors from the beginnings of the American novel in the late eighteenth century to the present. This includes many first editions, as well as reprints. Many of the minor novelists of the nineteenth century are well represented, although the collection is by no means complete. In the field of the novel since 1870, however, the emphasis has been primarily upon major authors, most of whom are to be found in complete collected editions and duplicate copies. The minor authors are represented unevenly. In the field of humorous fiction there is a good selection, with hiatuses which are being filled as opportunity arises. There is some weakness, also, in the field of comic almanacs, frontier newspapers, and other such sources of Western and Southwestern literary beginnings.

In the field of the essay, the library collection stresses the major essayists of the nineteenth century, although there are also a good many rare and unusual volumes of minor figures in this field. Original publications of the eighteenth-century essayists are less plentiful, although there is a good collection of modern editions. As a matter of fact, the collection of American literature in all departments is least strong in seventeenth-century and early eighteenth-century Americana. In the acquisition of books for the university library, however, it has apparently been the custom to avoid too frequent duplication of rare works which are available in other libraries in Philadelphia, like the Library Company and the Historical Society of Pennsylvania. This, in some measure, explains the absences of certain works of fiction and essays in the earlier period.

In literary history the library is remarkable for its excellent collection of major works. It is weaker, however, in the minor historical studies of the nineteenth century. While criticism of all sorts is represented, there is no completeness in this field except in the case of authors of major importance, like Emerson, Poe, Longfellow, and Whitman. The collection is excellent in every department of American biography.

The emphasis which has been placed upon American archaeology by the close association of our library with the University Museum and the Commercial Museum, each with its own library, has strengthened our collection in this field. We are particularly strong in American Indian archaeology and in Spanish and South American sources.

The university library's collection of periodicals is good, although few of the earlier periodicals are represented by complete runs. However, a comparison of our periodical collection with Mott's list of American periodicals reveals the fact that we possess at least partial series of most magazines of interest to scholars in American literature. From the founding of The North American Review (1815) to the present,
many of the important literary magazines are represented in unbroken series. Again, in respect to eighteenth-century periodicals, the library policy has frequently been affected by the availability of such sources in the Ridgway Branch of the Library Company and the Pennsylvania Historical Society. However, we have eleven magazines dating from the eighteenth century, and these are among the most valuable published in that period, including The American Magazine, The American Magazine and Historical Chronicle, The Columbian Magazine, the Pennsylvania Magazine, or American Monthly Museum, The Proceedings of the American Philosophical Society (from the beginning), The Analectic Magazine and the Massachusetts Magazine. We have 195 magazines published in the nineteenth century, including almost all of the important literary periodicals. We have 119 magazines whose run began in the twentieth century.

A very important resource of the University of Pennsylvania Library is the Bibliography of Printed Materials for the Study of American Literature now being prepared under the direction of Mr. Edward H. O'Neill, of the English Department. This index will ultimately include a complete bibliography of every available American author whether important or unimportant. In its first eighteen months of operation, the project has catalogued 8,000 authors' names and has brought to completion the bibliographies of nearly 100 important American authors. The process employed involves the breaking down and re-assembling of all existing bibliographies; the accumulation of data from works of biography and literary history, and from encyclopedias; and finally, a survey of all important literary and critical magazines in various periods. This bibliography is a project of the Federal Works Progress Administration, and is sponsored by the Pennsylvania Historical Commission, the University of Pennsylvania acting as co-sponsor. From fifty to sixty workers have been continuously employed, and their work is constantly supervised by qualified scholars. The bibliography is already in use, having been consulted not only by graduate students in this area, but by more mature scholars at work on a variety of subjects in various sections of the country. It is planned to make any desired portion of the bibliography available through microfilm after it has been brought to completion.

In American bibliography and bibliographical aids the library is very well supplied. It may be said that almost every available tool for scholarship has been procured as the need arose. All of the important periodical indexes, including those of scholarly publications, are available. The files of all the learned periodicals in the field are almost complete, including valuable publications in foreign languages. The library has also all of the lists of American dissertations, which are kept up to date.

Many of the catalogues of other libraries and special collections in the United States are available for consultation, including such important collections as the American Antiquarian Society, the Huntington Library, the John Carter Brown Library, and the Newberry Library. Besides the usual standard lists, such as the Publishers' Weekly and American Book Prices Current, the library has many special bibliographies. Almost all existing bibliographies of American authors are available, as well as such special bibliographies as Wegelin's Early American Fiction and his Early American Poetry, Wright's American Fiction, the bibliographies of Foley, Johnson, and Evans of American first editions and early works, and Mott's History of American Magazines. Earlier American encyclopedias and collections, such as Duyckinck, are well represented. The large number of dissertations in American literature prepared at this university has enabled the university library to build a valuable collection of such works, increased, through the university system of exchanges, by many dissertations prepared at other universities.

In summary, it may be said that American literature has been,
since 1904, an important field of active research at this university. At the same time, the field of American literature has been most heavily drawn upon by a large student body of general readers, with the consequent necessity to acquire contemporary literature at a rapid rate. As a result, the library at present is a well-equipped scholar's library, and, at the same time, a remarkable reader's library in the field of American letters.

CLOTHIER COLLECTION OF AMERICAN DRAMA

By Arthur Hobson Quinn

The American drama collections began to be assembled in 1912. The late Provost Edgar F. Smith became very much interested in my courses in the American drama, and he, in his turn, interested Mr. Morris L. Clothier, a trustee of the university. Mr. Clothier generously provided the funds to purchase a collection of American plays which had been made, during a period of twenty-five years, by Mr. Joseph Jackson, of Philadelphia. Mr. Jackson had intended writing a history of the American drama, but gave up the project and wished to dispose of his collection. Fortunately for us, Mr. Jackson had secured items which were becoming increasingly rare, and, in fact, in some cases, could no longer be procured at all. The collection became known as the Clothier Collection of American Plays, and through the generosity of its donor and of the late Mr. Joseph G. Rosengarten, chairman of the library committee of the board of trustees, constant additions were made to the Clothier Collection. In 1917 my class, 1894 College, at the suggestion of Dr. Cheesman A. Herrick, established a fund to be invested and provide through its income for the continued purchase of plays.

At the present time, the collections include eleven bibliographies, seventy-six collections of special kinds, 360 histories, biographies and kindred material, and 6,138 plays, making a total of 6,585 works, including 7,149 actual volumes. From the beginning our efforts have been devoted especially to the securing of plays. The library, however, has been the recipient by gift of theater programs in considerable quantities, and it is estimated that there are about 10,000 such programs now in the library. They have recently been surveyed and indexed under the auspices of the Works Progress Administration, and are now available to students.

The American drama collections have been designed primarily for the use of graduate and undergraduate students. Completeness, and, at the same time, quality have been the goals at which we aim. There are, for example, twenty-six out of the twenty-eight extant printed plays by William Dunlap, and thirteen out of fifteen of those by John Howard Payne. In the plays dealing with the Revolution, we are glad to have both The Adulator and The Group, by Mercy Warren, two of the rarest of all Americana. We have also the plays of Hugh Henry Brackenridge, and of John D. Burk. As the funds at our disposal have always been limited, some of our acquisitions have a flavor of romance about them. Toward the end of one academic year when there were a few unexpended balances in library accounts, Miss Katherine S. Leiper, then assistant librarian, to whose devotion the building up of the collection owes so much, called me up and told me she had just received a sales catalogue from a London firm which contained the rare Dialogue Between a Southern Delegate and his Spouse (1774). After my assuring her that we wanted the Dialogue very badly and I hoped she would write for it immediately, she replied, "Write? I'll Cable."

"What are the night rates?" I continued.

"I won't wait for the night rates, I will cable at once," she replied.

In two weeks we received the Dialogue from London, in fine condition, with a letter from the London bookseller telling us there had
been nine other cables from the United States for the Dialogue, but since the others had waited for the night rates, he sent it to us. Incidentally, we paid $36 for the Dialogue, and I had the pleasure of seeing another library pay $150 for it a year later at the Wendell Sale of American plays.

On another occasion we found that Mercy Warren's The Adulateur was to be sold in New York at auction. There was no way of ascertaining the proper sum to be paid, as the play was so rare that there was no record of sale for many years. Miss Leiper collected $250 and Professor Baugh, of the English Department, who has a well-deserved reputation for his coolness in an auction, went to New York on our behalf. He came back with The Adulateur, having paid $245 for it, and having apparently scared out of the bidding one of the best known antiquarians in New York, when Dr. Baugh was within $5 of his limit. It would seem that in the building up of a library the well known motto, "L'Audace - toujours l'audace" applies as well as in any other department of life.

We secured an original copy of The Contrast, Royall Tyler's comedy of 1790, from Mr. Jackson. There were only six copies of The Contrast in existence, and we were very proud to have one, especially since our copy had the cuts made by Thomas Wignell, the great low-comedian for whom the play was written. It was not, however, a perfect copy, since it did not contain the print of one of the scenes as the frontispiece. Some years later a library was offered to the university, and from the description of the books which were mainly collections of sermons, it seemed as though shelf room might be more valuable than the collection. Again, however, Miss Leiper decided to run the risk and the library was accepted. In it was found a perfect copy of The Contrast. The library, therefore, has two copies of this rarity, and according to Frank P. Hill's new bibliography of American plays, the only other copies are at the American Antiquarian Society, the Huntington Library, the Library of Congress and the University of Vermont. Tyler's play was, of course, the first American comedy to be performed.

We have, naturally, a copy of the first American play to be performed by a professional company, Thomas Godfrey's The Prince of Parthia, 1767, but that is not such a rarity. One of the most interesting groups of plays in early American drama consists of those plays written by the Charleston group of playwrights early in the nineteenth century. Pennsylvania is fortunate in being the only library to have a copy of Isaac Harby's The Gordian Knot, printed in Charleston in 1810. The only other copy known to exist is in a private library. We also have the only known copy of John Blake White's Modern Honor, performed in Charleston and printed in 1812. The whimsical nature of dramatic rarities is illustrated by the fact that while there are seven copies known of George Cocking's The Conquest of Canada, published in 1766, and acted in Philadelphia in 1773, the library has the only known copy of the edition published in Philadelphia in 1772, which contains many changes from the first.

The library has been fortunate in securing manuscripts of plays which had remained unpublished due to the indifference, or even the active opposition of actors or managers who controlled the acting rights. The plays of Robert Montgomery Bird, such as The Gladiator and The Broker of Bogota, acted for many years by Edwin Forrest, had been withheld from publication by Forrest's selfishness. They were found in the possession of the grandson of Dr. Bird, also named Robert Montgomery, who generously gave not only all his grandfather's manuscripts to our library, but also the voluminous and interesting correspondence of Dr. Bird.

I have emphasized the early American drama in this brief review, but only because of the rarity of many of its items. This scarcity, particularly in cases like The Contrast and the Revolutionary plays, was due to the great popularity of the plays, which were literally read to pieces. In the period from 1870 to 1900 the plays were kept from
publication for fear of piracy. Consequently, some of the best-known American plays from the point of view of production have not been published, except in anthologies, or, in some cases, not at all. Again I have been fortunate in obtaining manuscript plays, sometimes through the generosity of playwrights and managers, sometimes through sheer accident. Through the late Mr. Belasco and his executor, we obtained copies of The Wife, Lord Chumley, The Charity Ball, Men and Women, The Girl I Left Behind Me, The Grand Army Man, The Rose of the Rancho and Under the Polar Star.

I obtained a number of manuscripts of Clyde Fitch in an amusing, if irritating way. Miss Elizabeth Marbury, the vice president of the American Play Company, had made an appointment with me to discuss the copying of certain of Fitch's plays for which she had been the agent. When I called on her in New York, she refused to help me in any way, although she knew the purpose of my visit, and directed me rather rudely to "see Mr. Rumsey" if I wanted anything. By accident I turned in the wrong direction after leaving her office, in order to find the Mr. Rumsey to whom she had referred me. I went instead to the office of another Mr. Rumsey in the American Play Company, who took the greatest interest in our problems, and not only furnished me with manuscripts of Clyde Fitch, but permitted me to copy other manuscripts, such as those of Mark Twain. It was a source of quiet satisfaction to find not long ago a student who was working upon Clyde Fitch and who had had to come to Pennsylvania to find some of Fitch's plays that are not available anywhere else. Among the Fitch manuscripts are Frédéric Lemaître, Bohemia, Girls, The Happy Marriage, and others. One of the treasures of the collection is Mr. William Gillette's revision of Secret Service. Mr. Gillette took the printed copy of the play and literally rewrote it for us. Through the kindness of Mrs. James A. Herne and Miss Julie Herne, the library has manuscripts of the Minute Men of 1774-5, Mary the Fishermen's Child, early plays of Herne, and, of greater importance, the only act in existence of The Reverend Griffith Davenport, one of Herne's greatest plays. The manner in which this was obtained is of singular interest. Herne never published his plays, for reasons given below. At the death of William Archer, the English critic, Professor Brander Matthews happened to be in England and was asked if he would like to have the manuscript of the fourth act of Griffith Davenport. Knowing that Griffith Davenport had been burned up in the fire at Herne Oaks, he eagerly accepted the gift. On his return to Columbia, he offered to let me make a copy of the manuscript. I had a copy made for him, for Mrs. Herne, for the Pennsylvania University Library, and for myself, and then returned the original manuscript to Dr. Matthews. He had told me he intended placing it in the Brander Matthews Dramatic Museum at Columbia. On inquiring after his death, I found that the manuscript had disappeared and had never been at Columbia. If Dr. Matthews had not permitted me to make the copies, the fourth act would have disappeared again, this time forever. To mention only a few of the manuscripts unique from the point of view of the library, we have Augustus Thomas's Surrender and The Capitol, and Edward Sheldon's Salvation Nell, none of which have been published.

The library has several items of stage history of particular value. To mention only one, we have Charles Durang's History of the Philadelphia Stage up to 1855, which was never published in book form, but appeared only in the pages of the Sunday Transcript. Thompson Westcott cut up and pasted these newspaper articles in five large volumes, and illustrated them with a remarkable collection of theatrical prints and photographs. This chronicle is of inestimable value to the student of the early American theatre.

The collections have never been fully described in print, nor has any catalogue been published. I have endeavored in this rapid sketch to give an indication of its range and extent. What is needed is a larger endowment to make possible the purchase of every play now published in America, not only one copy, but several. It is hardly
necessary, at a university where the first course in American drama was
given, to stress the fact that plays wear out, and that constant use
by both graduate and undergraduate students may someday make a modern
play as rare as The Adulterer or The Contrast are now. This statement
may seem at first glance absurd, yet anyone familiar with the character
of the paper used in our modern books of all descriptions will under­
stand what is meant.

ROMANCE LANGUAGES AND LITERATURES

By a Committee of the Department

The general foundations of the library's collection of works in
Romance philology and literary history were laid by Professor Hugo Al­
bert Rennert, who in 1893 became the university's first professor of
Romance languages. From the time of his appointment until the out­
break of the European War in 1914, Dr. Rennert very consistently ob­
tained for the library the outstanding texts and philological tools in
the various Romance languages and dialects. We therefore have such
journals as Romania, Zeitschrift für romanische Philologie, Kritischer
Jahresbericht über die Fortschritte der romanischen Philologie, Gesell­schaft für romanische Literatur (Dresden), Literaturblatt für german­ische und romanische Philologie, etc.; we have also the basic philo­
logical works such as Gröber's Grundriss, the Du Cange Glossarium, the
Raynouard Lexique Roman, the works of Diez, Gaston Paris, Paul Meyer,
Meyer-Lübke, Rajna, Milá, Menéndez y Pelayo, Menéndez Pidal, etc.

An idea of our bibliographical strength may be gained, for example,
from a listing of outstanding items for French. The library possesses
the Catalogue de la Bibliothèque Nationale, the Lorenz Catalogue de la
bibliothèque française, the Librairie française de tous sujets, Quédard's La
France littéraire and his Les supercheries littéraires dévoilées, Bar­
bier's Dictionnaire des ouvrages anonymes, Nicéon's Mémoires, Brunet's
Manuel, Graesse's Trésor, Thémerzine's Bibliographie d'éditions origi­
nales et rares, Le Bibliophile français, the Catalogue général de manus­
crits des bibliothèques publiques de France, the manuals of Lanson
Thieme, Talvart and Place, etc. For reasons of space, this report does
not list analogous general works for Spanish and Italian, noteworthy as
these are, especially for Spanish. The following subdivisions of the
department's report will give a survey of our resources under the head­
ings of French (including Provençal), Spanish, Italian, and Portuguese.

FRENCH

Old French

In the field of Old French the university library has practically
a complete collection of the necessary periodicals and serial publica­
tions. Not only are the better-known journals all here, but the libra­y also has complete files of some of the less usual periodicals, such
as the Revue des patois galloromans, the Revue de philologie française,
the Neophilologische Mitteilungen, and the Neophilologus. Naturally the
equipment in Old French dictionaries is complete, including Godefroy,
La Curne de Sainte Palaye, Tobler-Lommatzsch, and von Wartburg.

A considerable number of Old French texts are accounted for in the
university's files of publications by various learned societies. The
Société des anciens textes français and the Gesellschaft für romanische
Literatur, the two most important society publications, are complete.
The smaller sets, such as the Classiques français du moyen âge, the
Altfranzösische Bibliothek, the Bibliotheca Normannica, the Anciens
poètes de la France, and the Romanische Bibliothek, are also complete.
A considerable number of Old French texts are also available in the
Bibliothek des Literarischen Vereins in Stuttgart; and there are even
some of the exceedingly rare Old French texts published by the Roxburghe Club.

In the individual genres of Old French literature, the university library is probably strongest in the field of the epic. Practically every published Old French epic is represented. For the Chanson de Roland, the editions seem to be complete, with the exception of Bertoni's recent editio maior (1936). Even the princeps, published by Francisque Michel in 1837, is here. A particularly gratifying feature of the collection of Old French epic material is the fact that almost every one of the texts is represented not only in the latest modern critical editions, but also in the now very scarce nineteenth-century editions, many of which were printed in very small quantities. These editions are still frequently needed to fill in the gaps in the critical apparatus of even the best modern editions. Among the rare works in the epic collection is Jonckbloet's Guillaume d'Orange, which is not in the Library of Congress.

The library is at present somewhat less well equipped in the field of Old French romances. Here the early and scarce first editions are almost as well represented as in the collection of epics; but some of the more modern editions are lacking. However, it may be pointed out that the library possesses a set of Potvin's Perceval le Gallois, a very rare work, which only a few other American libraries have. It must be remarked that the deficiencies of the library in the matter of modern editions of the romances are noticeable only in the case of isolated editions. Those works published in the series mentioned above are of course here, and these series account for a fair percentage of the total number of modern editions.

For Old French drama, the fabliaux, and didactic works, the library shows a rather smaller number of books. One reason for this is undoubtedly that the proportion of works published in these fields is small compared with those of the epic and the romance. However, the fundamental works, such as those by Petit de Julleville on the drama, and by Bedier on the fabliaux, are here; as well as practically all the older editions of the texts.

Critical studies dealing with individual Old French works are fairly numerous, with the best showing probably again in the field of the epic. It may be noted that Pio Rajna's very rare Origini dell'epopea francese is here, and of course all the general works on the epic by Gautier, Bedier, Paris, etc. In general the collection of critical studies can be described in about the same terms as the collection of Old French romances: it has an excellent representation of the older and rarer books; but has occasional gaps among the more recent studies.

Old Provencal

In Old Provençal language and literature the university library has all of the basic works, such as those of Raynouard, Diez, and Levy; with an excellent collection of serials and periodicals. The Annales du midi for instance are complete, and most of the volumes of the Bibliothèque méridionale are here. Separate editions of most of the published works of Old Provençal literature are available, with the largest number represented in nineteenth-century editions, although there are some few gaps among the modern critical ones. Modern Provençal literature is the weak spot, with comparatively few texts and critical works, aside from those in serial publications.

Modern French

Until the end of the nineteenth century, the books that found their way into our library were mostly gifts from friends of the University of Pennsylvania. These were of uneven value, some very valuable, as for example some sets sent by King Louis XVI of France (in-
cluding a first edition of Buffon's *Histoire naturelle*, and did not form a systematic collection. One can date from the days of Professor Rennert (1885-1927) and Professor Crawford (1906-1939) the building up of a regular French collection. The influence of Dr. Joseph Jastrow, as librarian, was also very great. Dr. Jastrow was greatly interested in French culture, and throughout the period of his service (1898-1919), he contributed more than any other to building up a collection of French books of interdepartmental interest.

All told, our collection of reference books in French could be much worse, and certainly is equalled in no institution in the Philadelphia area.

**Sixteenth Century**

For the historical background and the very important "memoirs" of the age our shelves are not very rich. The Lea Collection contains many valuable works not only for the earlier period, but also for the Reformation period, the Inquisition, etc.; but essential tools are lacking. To give only one instance, one does not find the standard work of Doumergue on the Reformation in general—centering in France and around the figure of Calvin. Not even the more modest work of Gautier has yet found its way to our shelves.

For the poetical revival of the century (Group of the Pléiade: Ronsard, DuBellay, Baif, Desportes, etc.) we are provided, but not particularly well. The Marty-Laveaux edition is incomplete. Some of the recent studies on the subject—when not too expensive—have been bought. Several very valuable recent editions are published by the Société des textes modernes to which we subscribe, and more are due.

There is one chapter of that domain where we can boast of a definite advantage. Thanks to the Francis Campbell Macauley Collection, which specializes in Renaissance Italian poetry, the often close relation of Italian and French poetry and the influence of the first on the second can be studied with profit in our library.

No advanced course has ever been given on Rabelais, which accounts for our lack of what could be justly called a really good collection of Rabelaisiana. Still we have the volumes that have been published of the magnificent edition of Abel Lefranc and his brilliant disciples—magnificent especially from the scholarly point of view. We own also the Gustave Doré edition.

Montaigne is much better represented than Rabelais on our shelves. We own about fifteen editions—some of the best in French and in English—and most of the capital studies on Montaigne that have come out in the past twenty-five years.

**Seventeenth Century**

The University of Pennsylvania has never had a specialist in the classical age of France, and this fact appears in the relative weakness of our collection of seventeenth century books. Fortunately we own the indispensable editions of the *Grands Ecrivains de la France* (Corneille, Racine, Molière, Pascal, La Bruyère, Sévigné, Bossuet, Fénélon, Retz, Saint-Simon, etc.). For Descartes, we have relied on the Philosophy Department, which has some valuable material on the great French philosopher of the seventeenth century. In another domain, the French Government offered us in 1938 the fine recent edition of *L'Astree* in nine large volumes. Various publications on *L'Astree* and the fiction of the century have been bought during the last ten years (Magenie, Magne, Mongrédién, etc.), but not enough to warrant a student of that domain to come to the University of Pennsylvania.
Eighteenth Century

While not complete - and hardly richer than that of any large university library in America - our eighteenth century collection is good. There are gaps, but, to compensate, we own some items that may not easily be found elsewhere (e. g., the early edition of Condillac's works, the sumptuous Buffon edition, presented by King Louis XVI, not to mention the recent great edition of the latter offered us by the French Government in 1938. We have some volumes of the Encyclopédie of Diderot and D'Alembert. We acquired not very long ago the indispensable Correspondance littéraire by Grimm and his collaborators (some volumes missing). Among curiosities let us indicate an eighteenth century edition of Madame de Genlis, of Abbe Prevost (39 vols.), and of Bernardin de Saint Pierre. Our Montesquieu collection is not bad. The Assezat edition of Diderot is in the Seminar Room. There also we keep the Beuchot-Moland edition of Voltaire.

Several Voltaire editions are in the stacks with a pretty satisfactory collection of Voltaire literature. Our Rousseau collection is one of the outstanding ones in the country (along with Harvard and Smith).

Of great interest for this century is the Répertoire du Théâtre français listed below under "Varia".

Nineteenth Century

The literary production is vast for this period. Since we started at a relatively recent date only to build up our French collection, we cannot be expected to show a systematic growth. However, we have most of the modern series of critical articles constructed on the model of Sainte-Beuve's Lundis: Brunetiére's Etudes critiques, Faguet's Propos littéraires, A. France's Vie littérale, Lemaitre's Contemporains, and many others.

For many years, courses were given on Chateaubriand and Madame de Staël; we are fairly well equipped up to date regarding the first. Recently a fine edition of Joseph de Maistre was bought.

We are deficient in Taine and Renan, and have been unable to get an edition of Sainte-Beuve's Portraits littéraires. The French Government gave us recently the valuable collection of Flaubert's Correspondance. We are rather strong on Balzac (although not able to compete with Princeton or Chicago), Stendhal (although we have not the Champion edition), and all the Realists - up to Huysmans.

The Parnassian poets are well represented, and to a lesser extent the Symbolistes. For both groups we have been able to draw on collections of neighboring institutions.

Twentieth Century

We have kept up as well as we could with the constant deluge of books thrown on the market; we have tried to lay stress on works on literary history, and on valuable editions. Mention should be made of a fine set of Charles Péguy's works, and a beautiful edition of Paul Claudel's plays (given by the French Government).

Modern Drama

In the general field of the modern drama the library is well provided in both texts and critical works. Most of the published texts are available. In the sixteenth century, besides the plays of Jodelle, Grévin, de la Taille, la Péruse, Desmazures, Montchrestien and Garnier, the library possesses the valuable 1616 and 1618 editions of Garnier's tragedies and practically everything published on Montchrestien.

In the seventeenth century all the major critical editions (in the Grands Écrivains de la France series) of Corneille, Racine and Molière
are available, besides all singly published plays by various editors and in various series (Société des textes français modernes).

Because of the Théâtre français collection, we are fairly well implemented with eighteenth and nineteenth-century texts. This group is further enhanced by the Répertoire du théâtre français (ca. 150 vols.) which contains many modern reprints of plays of the seventeenth, eighteenth and nineteenth centuries.

As for the twentieth century we are also short of completeness. There are many playwrights, particularly those who contributed to the Théâtre libre and Théâtre de l'Oeuvre, whose works are not available. The Petite illustration makes available many of the lesser present-day works but not many of those of the various vanguard movements such as those of the Théâtre du Vieux-Colombier and Charles Dullin among others. In general, the acquisition of texts in all periods is greatly needed to strengthen the present store of plays in the library.

In the matter of critical works there is very little to be desired. Many such items have been recently ordered and there is no doubt that we are not lacking in such material.

Of the important bibliographical aids we have the rare and valuable Histoire and Dictionnaire by the Frères Parfaict and the Dictionnaire de Léris. It would be of inestimable value if we could add such works as those of Beauchamps, Goujet, de la Croix du Maine and du Verdier, Maupoint, Soleinne and Pont de Veale.

Spanish

For over fifty years the University of Pennsylvania has been a distinguished center of Hispanic research and from it have gone forth numerous contributions of prime importance for the advancement of knowledge in the field of these studies, in linguistics, in the editing of texts and in literary history.

Our strength lies particularly in the Spanish classical period which ends with the seventeenth century. The work that has been done here could not have been done without the fundamental tools: bibliographies (Foulché-Delbosc, Pérez Pastor, Catalina Garcíá, Escudero y Pedroso, Jiménez Catalán, Viñaza, etc.), bio-bibliographies (Schott, Nicolas Antonio, Latassa, Ximeno, LaBarrera, Martí Grajales, etc.), bibliographical accounts of the great religious orders (Sommervogel for the Augustinians, etc.), nobiliarios (López de Haro, Salazar, Fernández de Béthencourt, etc.), dictionaries (Nebrija, Oudin, Salazar, Aldrete, etc.), series of texts such as Libros raros y curiosos, Libros de antaño, Parnaso Español, Theatro hispanol, etc., and philological and literary journals, including rarer items such as Semanario erudito, Revista crítica de historia y literatura Españolas, Portuguesas e Hispano-Americanas, etc.

Over and above this essential equipment, we have various special collections which offer advantages found nowhere else. The first of these is the library of the historian of the Spanish Inquisition, Henry Charles Lea. The materials in this collection are indispensable for the political, social, and ecclesiastical background of early Spanish literature: general chronicles of Spain, local chronicles of individual regions and cities, early legal codes, both general and regional, various series of "documentos incéditos", lives of saints (Acta Sanctorum, Salazarus' Commemorario Sanctorum Hispanorun), ecclesiastical histories of Spain (Marieta, La Fuente, España sagrada), indices of forbidden books (Valdés, Quiroga, etc.), early lives of the popes and cardinals (Ciaconius).

The library of Dr. Hugo Albert Rennert, the founder of Hispanic
studies at the University, was acquired after his death in 1927. This library was generally regarded as the most valuable private collection of old Spanish books in the world. Dr. Rennert was a specialist on the Spanish drama and his collection of Lope de Vega's plays surpasses all others, with the exception of the National Library at Madrid and the British Museum. Our set of the twenty-five original Parts, published between 1604 and 1647, is complete except for the sixteenth volume and portions of the third and eighteenth. Dr. Rennert's interests were wide and the number of first editions or early editions (1520 to 1670) of Spanish books in fields other than the drama is remarkably large.

A third important collection of early Spanish books is the J. P. Wickersham Crawford Memorial Collection contributed to the library by Mrs. Crawford after Professor Crawford's death in September, 1939. This collection is particularly rich in poetic works published in Spain in the sixteenth and seventeenth centuries and contains also important editions of early fiction and drama. In addition to the numerous valuable volumes possessed by Dr. Crawford, he had had photographed and deposited in the library, either in microfilm or as photostats, those works of sixteenth-century poetry and criticism which were needed to complete what he possessed and what was already in the University library. These films and photostats will provide material for much advanced research and many doctoral dissertations.

The library possesses also several seventeenth-century manuscripts of poetic texts of this period, which will serve as the basis of critical editions of the poets concerned.

In modern Spanish literature, the University has a collection of some 7,000 Spanish comedies, dramas, etc. in the original text by Spanish dramatists of the nineteenth and twentieth centuries published in various Spanish cities from 1820 to 1920 and bound together in 376 volumes. Some idea of the wealth of this collection may be gathered from the fact that for Breton de los Herreroa, we have sixty-four titles; Ventura de la Vega, seventy-seven; José Echegaray, sixty-two; Miguel Echegaray, seventy-two; Enrique Gaspar, thirty-two; Tomás Rodríguez Rubí, thirty-seven; and Narciso Serra, thirty-one. While we are very well supplied with the complete or nearly complete works of the leading modern writers, and many of second rank (Fernández Ardavín, Lópeze de Haro, López Pinillos, Pedro Mata, etc.), and possess also such interesting periodicals as La Lectura, Raza Española, Revista de occidente, research in this field would require the use of the resources of other libraries, and, inevitably, study in Spain.

A weakness of the library in Spanish results from the fact that our Hispanists have in some instances developed primarily their own specialty so that the library is not always sufficiently representative. Special series, such as the Bibliófilos Españoles, Bibliófilos Andaluces and others of similar character are incomplete and require building up.

Spanish-American literature has never been taught at the University of Pennsylvania and our supply of texts is inadequate. This situation will be remedied as quickly as possible.

Taking the picture as a whole, our position in Spanish, with the exception of Spanish-American literature, is unusually strong and by virtue of its strength we are prepared to assume leadership in Hispanic research in this area.

Italian

The advantages offered by the Henry Charles Lea Library for research in Spanish extend in a very real sense also to Italian. Mr. Lea's research in the history of the European Inquisition demanded the collection of a vast number of early historical works dealing with Italy. Our Italian collection owes its importance, however, to Francis
Campbell Macauley, who collected rare Italian books and in 1896 bequeathed his library to the University of Pennsylvania. The Dante Collection consists of about 2,500 volumes, among them four texts of the Divina Commedia printed before 1500. For Boccaccio, we have a fifteenth-century manuscript, five fifteenth-century printed texts and eighteen editions of the sixteenth century; for Petrarch, two editions prior to 1500 and twenty-four printed in the following century. A collection of similar value exists for Tasso and for Ariosto. Of particular note is the collection of Italian lyric poets of the fifteenth and sixteenth centuries. This includes early editions of nearly every poet from Serafino dall'Aquila to Marino and fourteen anthologies printed before 1600.

The library contains such outstanding periodicals as the Giornale Storico della Letteratura italiana, Archivio glottologico italiano, Archivum romanicum, Studi medievali, Bollettino della Societa dantesca italiana, Giornale dantesco, Studi danteschi, Bulletin italien, Etudes italiennes, La Critica. We are weak, however, in critical studies for the early period, and in critical studies and texts for modern Italian literature. In general, it may be said that while our collection of Old Italian books is second perhaps only to that of Cornell, our very exceptional resources could not be utilized to the best advantage without the use also of the collections at Bryn Mawr and Princeton.

Portuguese

Largely through the efforts of the late Professor Hugo A. Rennert, our collection of books on medieval Portuguese language and literature is fairly complete. Many additions, particularly in critical studies, have been made to Professor Rennert's acquisitions. Except for the relatively unimportant Cancioneiro de Evora, we possess copies of all the editions of all the early Portuguese cancioneiros. Our collection of prose works is also fairly complete. The most notable of these is the Portugaliae Monumenta historica, of which we have the only complete set in the United States. We also have all the important works on the history of the Portuguese and Galician languages and a fine collection of Portuguese and Galician dictionaries. An important etymological dictionary which we do not have is the Subsidios para un Diccionário Completo of A. A. Cortesão. We have a good collection of early Portuguese drama and a large number of editions of the Lusiadas, but we lack the works of most of the other important poets of the sixteenth century. Our set of the Revista Lusitana is lacking the first four volumes, which it would be highly desirable to obtain, if that is ever possible. We have a complete set of A Lingua Portuguesa and of the Boletim de Filologia but there are other periodicals, such as Biblos, the Revista da Universidade de Coimbra and the Boletim da Segunda Classe of the Academy of Sciences of Lisbon that we are badly in need of and should acquire. In paleography, we have the Palaeographia Iberica of Burnam and other less important works. And we have the monumental bibliographical dictionary of Innocencio da Silva. Recently we have acquired complete sets of many of the important works of fiction of the nineteenth century.

On the whole, we have one of the best collections of Portuguese books in the country.

HURLBURT COLLECTION OF FRENCH DRAMA

By George O. Seiver

In the field of the drama an item of special interest is the library of the late Professor Albert Francis Hurlburt. This collection was deeded to the University of Pennsylvania by Mrs. Helen Anderson Hurlburt and has been placed in its entirety in the Romance Seminar. Since Professor Hurlburt specialized in the drama, his library is composed main-
ly of plays and critical works dealing with the theater. Among the plays there are a few editions of eighteenth-century plays not readily available. Such are the nine volumes of the 1776 edition of Voltaire's dramas; the twelve volumes of the 1716 edition of Dancourt's theatre; the first edition of Diderot's Entretiens sur Le Fils naturel and his two most important plays Le Fils naturel and Le Père de famille, all of which are of major importance for the history of the drama; the Entretiens formulated the theory of the "drame bourgeois". Several eighteenth-century authors of lesser importance, such as Regnard, Gresset, Destouches, Piron, Saint-Foix, de Boissy, Nivelle de la Chausée, are also well represented in good contemporary editions. Authors of the early and late nineteenth century appear in good, although not outstanding, and in some cases not complete, editions. We may note a good partial edition of the plays of Pixérécourt dated 1841.

The critical works in the Hurlburt collection are relatively few but carefully chosen.

SPECIAL COLLECTION OF FRENCH PLAYS

By George O. Seiver

Also worthy of comment is the collection arbitrarily catalogued in our library under the general classification of Théâtre français. It consists of two hundred and ninety-one volumes, each volume containing from four to six plays. Some volumes contain several editions of the same play, a particularly valuable feature. The plays in this collection belong to the eighteenth and early nineteenth centuries. In particular there is a good number of plays presented during the period of the French Revolution. Besides plays by Voltaire, Lesage, Beaumarchais in either first or contemporary editions, there are numerous plays of various types, such as vaudevilles, dramatized proverbs, melodramas, musical comedies and operas. Several plays of this latter type have musical scores as an appendix. These various items are, for the most part, by minor and long-forgotten authors but many are extremely valuable for the historian of the drama, of customs, and of social points of view during the buoyant eighteenth century. In some instances plays carry manuscript corrections and revisions which will bear investigation. Among the notable items in the Théâtre français there are four editions of J. J. Rousseau; Le Devin du village, the earliest being dated 1765; five editions of Lesage's Crispin and six editions of Voltaire's comedy, L'Enfant prodigue, the earliest dated 1737; various contemporary editions of Beaumarchais' Le Mariage de Figaro and the first editions of his "comédie larmoyante" Les deux amis; first editions of plays by Pixérécourt and others; Hamlet and King Lear in Ducis' translation; first editions of plays by Anseaume, Saurin, Scribe, etc. While there are no complete editions of any one author the collection is rich in rare items which would be useful to the student of the evolution of the "drame" and of comedy.

FRANCIS CAMPBELL MACAULEY COLLECTION OF ITALIAN LITERATURE

By Otis H. Green, and Others

The Italian Collection owes its importance to Francis Campbell Macauley who, during a residence abroad of many years, collected rare Italian books and, on his death at Naples in 1896, bequeathed his library to the University of Pennsylvania. The original bequest of some 5,500 volumes came into the possession of the university in 1897. This number has been increased year by year since that date by additions purchased from the Francis C. Macauley Fund, which yields annually an amount slightly over $150. The collection is built around the four great masters of Italian literature, Dante, Petrarch, Ariosto and Torquato Tasso. Its particular value lies in the great number of fif-
teenth and sixteenth-century works, collections, and studies which it contains. The present report is limited in the main to items earlier than 1600. As the total number of volumes indicates, the collection is strong also in works of later date.

Of special interest are early works of criticism or elucidation of the great masters: Liburnio's *Le tre fontane... sopra la grammatica et eloquenza di Dante, Petrarcha et Boccaccio*, 1526; Doni's *Prose antiche di Dante, Petrarcha et Boccaccio*, 1547; Alunno's *La fabbrica del mondo, nella quale si contengono tutte le voci di Dante, del Petrarcha, del Boccaccio et d'altri buoni autori*, 1548; the same author's *Le rizquee della lingua volgare... sopra il Boccaccio*, 1555, and *Osservazioni... sopra il Petrarcha*, 1550; Amadía's *Annotationi... in che alcuni utili discorsi si contengono... Intorno alla lingua toscana et al Boccaccio*, 1565; and Fornari's *La spositione... sopra l'orlando furioso*, 1549.

The Dante collection, consisting originally of about 2,500 volumes, was catalogued and opened to the public in 1901. Editions of the *Divina Commedia* naturally deserve first mention. The earliest is the Nidobeatine text printed at Milan in 1477-78, which is closely followed by the rare Venice edition of 1478. The two other incunabula in the collection are the Venice edition of 1484 with Landino's commentary and the Venice edition of 1497 with occasional woodcuts and vignettes.

The Aldine edition printed at Venice in 1502 leads the sixteenth-century texts. This is of interest because of the correctness of the text and typographical beauty, and also because it is the earliest edition in octavo. Beside it stands the first of the Aldine counterfeits printed at Lyons in 1502 or 1503.

Among the sixteenth-century editions, which number twenty-eight, may be mentioned the exceedingly rare text printed at Florence in 1506; the handsome folio edition of Venice, 1507; Venice, 1512; Venice, 1515; Paganino's edition of 1515 and the folio edition of Venice, 1529, the first to contain a portrait of Dante worthy of that name.

Other rarities include a complete set of the volumes of the *Divina Commedia* issued by the city of Brescia in 1828; the edition of Filippo Macchiavelli (1819) with three volumes of original drawings by Gian Giacomo Macchiavelli, published at Rome in 1806-1807 and the first of *De vulgari eloquentia* published at Paris in 1577.

The Collection contains twenty-five translations in English of the *Divina Commedia*, and versions in Armenian, Bohemian, Dutch, French, German, Greek, Hungarian, Italian dialects, Latin and Spanish.

The two earliest editions of Petrarch are the Venice, 1490 edition of the *Trionfi, Sonetti et Canzoni*, with commentary by Lapini, Filelfo, and Squarciafico, and the Cremona, 1492 edition of the treatise *De remedii utriusque fortunae*. We have the Venice, 1501, edition of the *Opera*, the second collective edition of the Latin works; the Venice, 1515 edition of the same, with commentary by Licinio, Filelfo, Antonio da Tempo and Girolamo Alessandrino; and the Basle, 1554 edition, which includes also the Italian verse. We have a total of sixteen editions of the *Rime* published during the sixteenth century, among them the 1528, 1544, 1558, and 1563 commented editions by Velutello, three editions (1558, 1562, and 1564) with commentary by Bembo, a 1550 edition with commentary by Alunno, and Dolce's 1560 edition with commentary by Giulio Camillo. Finally, there is the *Petrarca spirituale* by Frate H. Maripetro (1538, 1545).

Of Boccaccio we have a sixteenth-century manuscript of the *Teseide*; a very rare edition of the Latin work *De genealogiis deorum gentilium*, Venice, 1472, bound with the treatise *De montibus, sylvis... Venice, 1473*, a 1511 edition of the former treatise and a 1588 translation of it by Giuseppe Betussi; Marchigiano's very rare translation of the *De
mulieribus claris, Venice, 1506, a later translation of the same work by Giuseppe Betussi (1596); and a 1544 edition of the De casibus virorum illustrium. There are editions of the Filocolo printed in 1488 and 1527, of the Fiammetta, 1491 and 1562, of the Corbaccio, 1516 and 1551, various editions of the Ameto beginning with the Florentine of 1521 and ending with that of 1592, which contains Sansovino's commentary. Our earliest edition of the Decameron, 1552, contains a life of Boccaccio by Dolce and notes by Sansovino. We have also Salviati's edition of 1587. There is a 1576 edition of the Vita di Dante.

Ariosto's Orlando furioso appears with commentary by Dolce in editions of 1544 and 1554, with commentary by Ruscelli in editions of 1556 and 1570. There is a 1552 edition of his Rime. His Satire is included in Sansovino's Sette libri di satire, 1563. There is a 1581 edition of the Herbolato.

The Tasso collection is richer, with eighteen sixteenth-century editions of the Gerusalemme liberata, beginning with the three published in the year 1581 at Ferrara, Casalmaggiore and Lyons, the last of which is especially rare. We have also a nearly complete collection of the controversial works written to criticize and defend Tasso's epic. The many editions of the Rime begin with those printed at Venice and Ferrara in 1582. The texts of the Aminta begin with the Aldine edition of 1581. There is a copy of the first edition of Il Re Torrismondo, Bergamo, 1587. The Dialoghi appear in editions ranging from 1581 to 1585; there are five sixteenth-century editions of various Discorsi; and the Gerusalemme conquistata is represented in an edition of 1594.

Very noteworthy is the collection of minor Italian lyric poets of the Renaissance period which includes early editions of almost all the lyric poets from Serafino dall'Aquila and Antonio Tebaldeo to Giambattista Marino and his contemporaries, and a valuable collection of anthologies, beginning with the Sonetti e canzoni di diversi antichi autori toscani, 1527 (we have also the 1532 edition), and containing such important items as the 1548 Rime diversi di molti eccellentissimi autori, the Rime di diversi nobili huomini et eccellenti poeti, of the same year, the 1552 Rime di diversi signori napolitani, Dolce's Rime di diversi et eccelenti autori, 1556, Ruscelli's I fiori delle rime de' poeti illustri, 1558, and many others.

Among the miscellaneous items are several works on the merits of the Italian vernacular: Bembo's Prose della volgar lingua, 1525, Citolini's Lettera della lingua volgare, 1551, Dolce's Osservazioni della lingua volgare, 1553, Ruscelli's Tre discorsi, 1553, and the same writer's De' commentarii della lingua italiana, 1581. Of special interest are Lodovico Domenichi's Facetie, 1568, Arlottta Mainardi's Scelta di facetie, 1595, Anton Francesco Doni's Seconda libraria, 1555, and Michele Pocciantio's Catalogus scriptorum florentinorum, 1599.

This collection, with its emphasis on Renaissance poetry, supplements materials in the same general field found in the Rennert and Crawford collections, and provides outstanding opportunities for research.

THE RENNERT COLLECTION OF SPANISH LITERATURE

By Otis H. Green, and Others

Through a fund established in February, 1927, by Mrs. Sabin W. Colton, Jr., the University of Pennsylvania came into possession of the Spanish collection of Dr. Hugo Albert Rennert, Professor of Romance Languages from 1893 until his death on December 31, 1927. Dr. Rennert was the first American scholar to come into direct contact with German scientific methods of research as applied to Spanish linguistics and literary history, and during his long period of service at the uni-
versity he not only won for himself the title of "Dean of American Hispanicists", but also was successful in surrounding himself with a group of pupils and co-workers whose pioneer work made the University of Pennsylvania one of the leading centers of Hispanic study in the United States.

Dr. Rennert's library of 1,155 volumes, collected during many years when collectors' treasures could still be had, was generally regarded as the most valuable private collection of old Spanish books in the world. His choice of books, while broadly representative of the best in Spanish classical literature, was made principally in the field of his major interest, the Spanish drama of the Golden Age, and it is in this field that the strength of the Rennert Collection lies. In a more restricted sense, the Collection centers about the figure of Lope de Vega, 1562-1635, the founder of the Spanish national drama. It was by his studies on the biography and bibliography of this dramatist that Dr. Rennert was chiefly known.

While preparing his Life of Lope de Vega, 1904, Dr. Rennert made a collection of the works of his favorite author, which consists almost wholly of first editions and is unparalleled in this country. Here are found the more important of his youthful works: La hermosura de Angélica, 1602, written by Lope in 1588 while soldiering in the Invincible Armada; a rare edition of La Arcadia, 1605, in which he describes the unhappy love affairs of his young patron, Don Antonio, Duke of Alba; and copies of the three editions of El peregrino en su patria, 1604, 1608, 1618, which include the most authentic lists of Lope's plays that we possess. No other library in the United States contains these three editions.

Mention should also be made of the very rare editions of Lope's Rimas, 1605 and 1611, the latter containing the famous treatise on El arte nuevo de hacer comedias en este tiempo, addressed to the Academy of Madrid, in which in a bantering tone Lope defends the so-called irregularities in his plays and his violation of the sacrosanct classical unities; and the first edition of Jerusalén conquistada, 1609, an epic poem in which he attempted, without success, to rival Tasso's Gerusalemme liberata.

Other notable volumes, most of them first editions, that represent the later years of Lope's literary activity, are Filomena, 1622, noteworthy for its defense against the Euphuistic poets of the day; Circe, 1624; La corona trágica, 1627, a religious epic that mirrors Spanish resentment at the execution of Mary, Queen of Scots; El laurel de Apolo, 1630, in which he extols the poet of his time; the Dorotea, 1632, a semi-autobiographical novel in which Lope describes unblushingly some of his youthful escapades; and the diverting volume entitled Rimas de Tomé de Burguillos, 1634, in which Lope's wit appears at its best.

Lope de Vega died in the year 1635, and contemporary accounts tell us that all Madrid mourned his passing. And his fame had spread to Italy, as is attested by the Esseguie poetiche...published in his honor at Venice the following year by Fabio Franchi.

As a poet, Lope holds a position of high rank, but as the founder of the national drama in Spain his position is supreme, and it is in its priceless collection of his plays that the Rennert Collection surpasses all others with the exception of the National Library at Madrid and the British Museum. The world has never seen dramatic inventiveness equal to his, even when due allowance is made for probable exaggeration in his own statements and those of his friends regarding the number of plays he wrote. The epithet "Nature's Prodigy," applied to him by Cervantes, has been accepted by posterity. Lope did not ascribe much importance to the composition of his dramatic works, and a hundred more or less in his estimates of his production seem to have meant little to him. In 1632 he wrote that he had composed no less than 1,500, while
his friend Pérez de Montalbán in 1636 set the mark at 1,800 plays. Dr. Rennert and other scholars have spent much time in trying to identify the genuine plays of Lope; no easy task, for in the heyday of his popularity, unscrupulous printers frequently placed his name on mediocre works in order to sell them. Careful study reveals that four hundred and thirty-one comedies of Lope are extant, and of this number Dr. Rennert's collection contains about three hundred in original editions. Some idea of the total may be gathered by a critic's statement that if a person should set to work to read the extant plays, at the rate of eight hours of reading each day, he would require a little over six months to complete his task.

The chief repository of the plays of Lope de Vega consists in the twenty-five volumes or parts published between 1604 and 1647, with an average of twelve plays to each volume. Complete sets are found only in two foreign libraries, and even separate volumes have become so rare that they practically never appear on the book market. Dr. Rennert's set is complete with the exception of the sixteenth volume and portions of the third and eighteenth. No collection on this side of the Atlantic can be compared with it. In addition to those already mentioned, it contains extra editions of a number of these volumes, as, for example, four copies of the first part, all of which are important for the preparation of critical texts.

The library is also notably rich in editions of the Valencian playwrights, and Calderón de la Barca and Moreto. Practically every one of the minor dramatists of the Golden Age is found here in original editions.

Early editions of Spanish lyric poets also form an exceedingly important section. Juan de Mena, the most distinguished poet of the fifteenth century, is represented in the rare black-letter edition of Las Trecientas, 1520, and also by an edition of the complete works printed by Martín Nucio at Antwerp in 1552. Auzias March, who sang so passionately of his love for Teresa Bou, appears in the Catalan original of Barcelona, 1545. Boscán and Garcilaso de la Vega, devoted friends during their lifetime, who by their metrical innovations changed the whole course of Spanish poetry, appear together in an edition published at Salamanca in 1547, while Garcilaso stands alone in an edition, almost unknown to bibliographers, printed at Coimbra in 1600.

Fernando de Herrera appears as an inspired patriotic poet in the rare edition of Seville, 1619, and as a rather pedantic commentator in his famous edition of Garcilaso, 1580, which has never been reprinted. López Haldonado's Cancionero, 1586, contains graceful verse that has only recently been reprinted, and includes one of the first published compositions of Cervantes. The Discursos, epístolas y epigramas de Artemidoro, 1605, of the Aragonese Rey de Artieda is chiefly interesting for its criticism of Lope de Vega and other popular dramatists who, in the poet's opinion, catered overmuch to the tastes of the groundlings. Pedro de Espinosa, in the first part of his Flores de poetas ilustres de España, 1605, gives us the most important anthology of the poetry of his time. This copy was formerly in the library of the noted bibliographer, Gallardo, and bears important marginal notes dating back to the early seventeenth century. Another rarity is the volume of Obras trágicas y líricas, 1609, of Cristóbal de Virues which contains the lyrical verse of this soldier-poet, as well as five tragedies which are among the rarest in Spanish literature, and no less rare is the first edition of the poetical works of the distinguished diplomat and humanist, Don Diego Hurtado de Mendoza, published at Madrid in 1610, thirty-five years after his death.

Not all the poets accepted the sonnet and other verse forms that Boscán and Garcilaso imported from Italy, and the chief champion of old-fashioned verse and traditional measures was Cristóbal de Catillejo, of whose works there is an edition of Antwerp, 1598.
Throughout the sixteenth and seventeenth centuries ballad literature, for which Spain is famous, flourished alongside of the Italianate forms, and of these we find notable examples in the Cancionero de Romances, 1555, Romancero General, Medina del Campo, 1602, and Romancero General, Madrid, 1604.

Charming translations of Anacreon and other classical poets are found in the Eróticas o amatorias, 1617, of Esteban Manuel de Villegas with the title-page containing a cut that represents the rising sun, with the caption Me surgente quid istae? by which the young poet bumptiously referred to his own exalted merits. It excited so much ridicule on the part of his contemporaries that the title-page was suppressed almost as soon as the edition appeared. Francisco de Quevedo Villegas is represented by two volumes of great rarity, Parnaso español y Musas castellanas, 1660, Las tres musas ultimas castellanas, 1670, as well as by important editions of his prose works.

The rather doubtful honor of making fashionable the artificial, over-ornate style that characterized Spanish poetry in the seventeenth century is generally accorded to Luis Carrillo y Sotomayor, whose works are found here in the edition of 1613. His innovations seem timid enough when compared with the bold experiments of Luis de Góngora, a far greater poet who was the storm center of a most bitter literary controversy in the early years of the seventeenth century. Góngora is here represented by rare editions of 1644, 1648, and 1658, and also by a valuable manuscript collection. The library also contains the first edition, 1629, of the verse of one of Góngora's most devoted admirers and imitators, the Count of Villamediana, who met a tragic death one evening in the year 1622 on his return from an entertainment at the Royal Palace. Rumor whispered that the Count had paid court too openly to the Queen. There is also an important manuscript collection of this poet's works.

Important Cervantes items are editions of Don Quixote of 1607 and 1608 and a French translation of 1639; an edition of the Novelas ejemplares of 1615, with an Italian translation of 1629; a copy of the exceedingly rare first edition of the Ocho comedias y ocho entremeses, 1615, sumptuously bound in red morocco; and the 1617 edition of the Trabajio de Persiles y Sigismunda. Of great sentimental interest is Haedo's Topographia e historia de argel, 1612, which incidentally describes the heroism of Cervantes during his years of captivity by the Barbary pirates. The author, a good friar, wrote his narrative long before Cervantes became famous.

Spain's pastoral novel began with the publication of Montemayor's Diana, a famous book that merited imitation by Shakespeare. The library contains editions of 1561, 1580, 1585, and 1624; French translations of 1592 and 1615; and the even rarer edition of Montemayor's lyric poetry published in 1554. Practically all the subsequent novels of this type are found here in first or early editions, for example, El siglo de oro en las selvas de Eritile, 1608, of Balbuena; La constante Amarilis, 1609, of Suárez de Figueroa; Cintia de Aranjuez, 1629, by Gabriel de Corral; and Experiencias de amor y fortuna, 1633, by Francisco de las Cuevas.

The creation of the rogue or picaresque novel was Spain's greatest contribution to European fiction in the sixteenth century, and nearly all the famous Spanish rogues are found in the library. The prototype, Lazarillo de Tormes is here in an edition published at Antwerp in 1555, one year after the original edition. His illustrious descendant Guzmán de Alfarache by Mateo Alemán follows in an edition of 1615, and in a beautiful English translation, 1622, by James Babbe (who signed himself Diego Puede-Ser, translating his name into Spanish), which contains, along with other interesting preliminary matter, verses by Ben Johnson in praise of the author and the translator. From the Salva Library comes a copy of El viaje entretenido, 1603, by Agustín
de Rojas, with its delightful description of the experiences of a
troupe of strolling players. Other rogue novels are the famous Picara
Justina, 1608, with a French translation of the year 1636, and Vicente
Espinel’s Vida de Marcos de Obregón, 1618.

J. P. WICKERSHAM CRAWFORD MEMORIAL COLLECTION OF
SPANISH LITERATURE

By Otis H. Green, and Others

Through the generosity of Mrs. Crawford, the library of Professor
J. P. Wickersham Crawford, professor of romance languages at the uni-
versity of Pennsylvania from 1914 until his death on September 22, 1939,
has been given to the university, together with a fund, derived both
from gifts from Mrs. Crawford and friends and from the sale of dupli-
cates in the Crawford Library not needed by the university, which will
be used for the purchase, upon the requisition of the university libra-
rian, of books in the field of Romance languages, books so purchased to
be marked by the bookplate selected for Dr. Crawford’s personal library.

The Crawford Collection was a scholar’s working library, covering
the general field of the Romance languages. In the more limited field
of Dr. Crawford’s specialty, Spanish literature of the Renaissance, it
was a research library, containing numerous first editions or early
editions of sixteenth and seventeenth-century Spanish books, together
with numerous photostatic and microfilm copies of old and rare works
found only in European libraries.

This collection as it is now incorporated into the university li-
brary, contains some 1,200 volumes. Its chief strength lies in the
field of the Spanish lyric of the Golden Age. It thus constitutes a
marvellous supplement to the collection of early Italian poetry in the
Macauley collection and makes of the University of Pennsylvania a cen-
ter of prime importance for the study of the Renaissance lyric in
these two literatures, so closely inter-related during that period.

Important items are Todas las obras de Juan de Mena, 1592, the
1549 and 1576 editions of the works of Boscán and Garcilaso de la Vega,
the Segundo cancionero of Montemayor, 1558 (film), the Floresta de
Ramirez Pagán, 1562 (film), the Coplas sobre Lepanto of Granado, 1571
(film), Cosme de Aldana’s Octavas y Canciones espirituales, 1578 (film),
the Obras de Lomas Cantorral, 1578 (photostat), the Obras of Romero de
Cepeda, 1582 (film), the Primera parte del Cortés Valeriano of Gabriel
Lasso de la Vega, 1588 (photostat), the Vergel de Flores divinas of
Juan López de Vueda, 1588, the Rimas of Vicente Espinel, 1591 (photo-
stat), and Gregorio Silvestre’s Obras, 1599 (photostat).

All of the foregoing are collections of lyrical works. Contempo-
rary literary theory appears in El arte poética castellana of Miguel
Sánchez de Lima, 1580 (photostat); the edition, with commentary by
Francisco Sánchez de las Brozas, of the works of Garcilaso de la Vega,
1574, and of Juan de Mena, 1582, bound together in an edition of 1765-
1766, with El Brocense’s Operas poetica latina et hispanica; and Díaz
Rengifo’s Arte poética española, in an edition of circa 1759. Rela-
tions with other literatures are represented by La Ulisesa de Homero,
1556, translated by Gonzalo Pérez, Secretary to Philip II, the Eglogas
de Virgilio, translated by Cristóbal de Mesa, 1618, the Heroyda Ovidiana,
Dido a Ennas, of Sebastián de Alvarado y Alvear, 1628; Petrarch’s
Triunfos, translated by Hernando de Hozes, 1554 (film), his Sonetos,
canciones, madrigales y sextinas, translated by Salomón Usque, 1567
(film), and also a photostat of Francisco Trenado de Ayllón’s manus-
script Comentario (y traducción) del Petrarca, dated 1595 and preserved
in the British Museum (see Gayangos, Catalogue, I, p. 17). There are
also a photostat of Ausias March’s Obras, translated by Montemayor,
1562, a photostat of Alciati’s Emblemas, translated by Daza, 1549, and
a copy of the 1573 edition of Urrea's translation of the Orlando furioso.

The poets of the latter years of the Golden Age are equally well represented. There is a film of Heredia's Guinalda de Venus casta, 1603, a photostat of the 1605 Romancero general, and of Rey de Artieda's Discursos, epístolas y epigramas de Artemidoro, published in the same year. There is a copy of Cristóbal de Mesa's Rimas, 1606, and a photostat of the 1611 edition of this work, together with a film of his Valle de lágrimas, 1607. There are copies of Lope de Vega's Rimas sacras in the 1611 edition, and the 1634 edition of his Rimas humanas y divinas del licenciado Tomé de Burguillos, a photostat of Salas Barbadillo's Rimas castellanas, 1618, and films of Antonio López de Vega's Lirica poesia, 1620, of Colodrero Villalobos' Rimas, 1629, and of the latter's Alphéo, 1639. Góngora appears in an edition of 1659, and Pellicer's Lecciones solemnes a las Obras de don Luis de Góngora, in an edition of 1630. There are 1634 editions of Villamediana and of the brothers Leonardo de Argensola, and a 1668 edition of Quevedo's Parnaso español.

The Spanish Renaissance epic is represented by four works: Ercilla's Araucana, 1597, and Lope de Vega's Jerusalén conquistada, 1609, Suarez de Figueroa's España defendida, 1612, and Lopez de Zarate's Invencion de la cruz, 1648.

Non-poetic works were not chosen by Dr. Crawford with a view to sequence or completeness. There are, however, items of genuine scholarly interest, of greater or less rarity, some of them extremely difficult to acquire today. Among the latter are a 1576 edition of Cristóbal de las Casas' Vocabulario de la lengua toscana y castellana, a 1593 edition of the Chronica del famoso cavallero Cid Ruy Díez Campadór, the Brussels, 1614, edition of Cervantes' Novelas Exemplares (there is also a 1629 Italian translation of this work), a 1621 edition (imperfect) of Lope de Vega's Decimaquinta parte, and a first edition of Suárez de Figueroa's Plaza universal. In the drama there are photostats of Guett's Comedia Tesorina, 1551, Juan de la Cueva's Obras, 1582; the anonymous collection Migajas del ingenio y entretenimiento apacible (undated, seventeenth century), the Obras of Antonio Hurtado de Mendoza, 1690, and a 1691 Calderón. Miscellaneous items are the Proverbios morales of Alonso de Barros, 1608, a work by the same title of Antonio Guajardo y Fajardo, 1614, Lope de Vega's Los pastores de Belén, 1616, Alemán's Guzmán de Alfarache in an edition of 1619, Gracían Dantiscio's Galateo español, 1621, Antonio Hurtado de Mendoza's Convocación de las Cortes de Castilla y juramento del Príncipe don Baltasar Carlos, 1632.

A few Italian items in Dr. Crawford's library add to the value of the university's Italian collection: an edition of Petrarch with commentary by Filelfo and Antonio da Tempo (1507 or 1522, the title-page is injured), the Commedie of Gelli, 1552, L'histoire spagnuola of Antonio Giulio Brignole Sale, 1649, Marino's La Francia consolata, 1619 and La galeria de cavalier Marino, circa 1620.
Collections of Colonial charters and state constitutions, and materials on the formation of the Federal Constitution are adequate, but the last require additions. There are few records of the proceedings of constitutional conventions, but of those the university library possesses a noteworthy collection.

Of English publications on the law of the American Colonies the library has almost none. Of session laws of the original Colonies before the Revolution there are very few save, in reprint, a complete set for Rhode Island. For three others, including Pennsylvania, there are considerable numbers in the late 1700's; and for seventeen other states there is considerable material antedating 1850. Beginning with that date the issues for all states are, with half a dozen exceptions, virtually complete. For most Colonies it will probably be necessary to rely upon making as complete a collection as possible of compiled statutes.

Of these—compilations, revisions, digests, and codes—there are adequate or very adequate collections for somewhat more than half the states, including six of the original Colonies; and for the other Colonies additional aid is available in the Charlemagne Tower Collection of Colonial laws owned by the Historical Society of Pennsylvania. For the other states the materials are notably deficient either before or after 1850, or both. Another weakness is the inadequate collection of reports upon the statutes of various states made by commissioners or revisers. Likewise inadequate is the collection of the compilations published in various states of all legislation upon particular topics, such as real estate and taxation.

Of reports, some of the Colonial period are lacking. For all the states reports are complete, several sets being available for some. In addition, the National Reporter System duplicates reports for all states since about 1885. Of special collections of cases, selected from all fields or confined to particular fields, including the standard "annotated series" past and current, the library possesses virtually all that have been published. A completer collection is desirable of American editions of English leading cases and classic English treatises, since they are invaluable in tracing the early spread of particular doctrines. Digests—nation-wide, federal, state, and regional—are adequate, except for the lack of sufficient duplicates.

The collection of legal biography numbers somewhere near 1,000 volumes. That of trials is considerably larger; it includes the Howell edition of state trials and various sets of Hargrove's edition.

**THE BIDDLE LAW LIBRARY**

By Members of the Law Faculty and the Librarian

**UNITED STATES**

**Historical and General**

By Francis S. Philbrick

**MODERN AMERICAN MATERIAL**

By Paul W. Bruton
recognized in legal literature, between works of primary authority and those of a secondary or reference character. Works of primary authority make up the original source material of current law, such as collections of judicial reports, statutes and administrative rulings. Works of secondary or reference character include digests, loose-leaf services, textbooks, and other treatises or essays on the law.

Primary or Source Material


The library contains a complete collection of the current reports issued by the state and federal courts, as well as the courts of the District of Columbia, Alaska, Hawaii, Puerto Rico and the Philippine Islands. At least one copy of the official reports of each one of these courts is received and in addition the National Reporter System, issued by the West Publishing Company, is maintained in toto, which gives almost a complete duplication of the current official reports. Thus, in the vast majority of cases, the collection includes at least two reports of almost all recent reported cases decided by any court of the United States or subdivision thereof.

In addition to the reports of the general courts of law, the library contains the reports of the most important commissions and special tribunals. The various federal commissions, such as the Interstate Commerce Commission, the Federal Trade Commission, the Board of Tax Appeals, and more recently the Communications Commission and the National Labor Relations Board are completely covered. No effort is made to maintain a complete collection of reports from the various state commissions. However, the most important of these bodies are the public utility commissions, and their significant decisions are completely reported in a series of volumes covering all the states and known as the Public Utilities Reports. A complete set of these volumes is maintained.

Other special case collections complete the judicial reports which are received. Cases on particular subjects, such as federal taxation and bankruptcy, appear in special sets and furnish readily accessible material for persons interested in these subjects. The various annotated series of leading cases such as American Law Reports and Law Reports Annotated are available in complete sets.

Briefs of counsel constitute important source material for the study of court decisions and the judicial process, but law libraries have great difficulty in obtaining them. Since 1928 briefs filed in the Supreme Court of Pennsylvania have been received by the library, and since 1938 the same practice has been followed with reference to the Superior Court. Briefs filed in the United States Supreme Court are available only in the library of the Philadelphia Bar Association, but the Biddle Law Library is participating in a project to microfilm them.

Rulings, Regulations and Reports of Executive and Administrative Agencies.

Reports of the cases decided by the various commissions and tribunals have been mentioned above. There is a mass of other material which is of particular value to students of administrative law. The library has a very adequate collection of rulings and regulations issued by the different executive departments of the federal government. Included are such important items as Treasury Decisions and Decisions of the Attorney General. The collection of material of this character from states other than Pennsylvania is scattered. However, such material as code commission reports, judicial council reports and special studies in law administration are available for a number of states.
The greatest deficiency of the library in this connection is the lack of reported decisions of attorneys general in states other than Pennsylvania.

Statutes and Legislative Reports

The library maintains a complete collection of current statutes and revisions from all the American jurisdictions. Also, an effort is made to obtain the more important legislative hearings and reports issued by committees of Congress and the Pennsylvania Legislature. This material is highly selected and scattered.

Works of Secondary or Reference Character

Digests and Search Books. A good collection of the standard digests, including the American Digest System, is maintained. Thus, digests covering all reported American cases are available. In addition, citators showing the current citation of cases are available for the complete National Reporter System and many official reports. The collection also includes Corpus Juris, American Jurisprudence and the other standard law encyclopedias of both national and state scope.

Loose-Leaf Services

An important recent addition to the lawyer's tools has been the loose-leaf service. The library has an excellent collection of such services covering state and federal taxation, labor law, trade regulation, trusts, bankruptcy, banking, securities regulation and United States Supreme Court docket and decisions.

Treatises and Textbooks

The collection of treatises and texts, running to some 14,000 volumes, includes the most important items now of general interest to lawyers and law students. The collection of publications of the American Law Institute is, with few exceptions, complete. It includes Tentative and Proposed Final Drafts as well as the Official Restatements in their various editions. The State Annotations are complete to date. The library has a complete set of the Proceedings of the American Law Institute and an almost complete collection of pamphlets on the history and various phases of its work.

ENGLAND

Historical and General

By Francis S. Philbrick

For English law down to 1750 or 1800 the Biddle Law Library may be justly characterized as an excellent basis for a truly great collection. It is especially strong for the sixteenth and seventeenth centuries. In general it is strictly a legal collection, although down through (particularly) the medieval period it contains considerable material of a general historical nature which supplements and is supplemented by that in the Main University Library. It is stronger in sources than in secondary authorities, and much stronger in private than in public law.

For the Germanic background there are available the pertinent sections of the Monumenta Germaniae Historica (as well as the earlier collections of Lindenbrogius and Walter), and many standard works on the law of various Germanic tribes. In the Anglo-Saxon and Anglo-Norman periods additional chartularies are desirable, and various historical studies (such as essays by Liebermann) are indispensable. On Domesday Book not even the united holdings of the Law and Main University Libraries are adequate.
Of statutes the library possesses for England the *Statutes of the Realm*, the *Statutes at Large* of Ruffhead and his successors, all the great contemporary collections (Chitty, Law Journal, Butterworth, etc.), and the older collections of Rastell, Pulton, Keble, and Evans. It has the *Acts and Ordinances of the Interregnum*, the Acts of the Privy Council, all the classic statutory commentaries, and an abundance of rarities such as early imprints of Magna Charta. The collection of statutory abridgments is inferior to that of case abridgments. For Ireland and Scotland both old and modern compilations are very well represented.

Reports are the strongest department of the library. Plea rolls of twelfth to fourteenth centuries are notably complete; likewise records of seignorial courts. For records of county courts, however, the combined holdings of the Biddle Law and Main University libraries are decidedly deficient. The collection of printed yearbooks is remarkable. It contains some 160 imprints of the sixteenth century and many of the seventeenth, the latter including several sets, complete and incomplete, of the great edition of 1678-80 and earlier compilations. In addition there are present all yearbooks issued in the Rolls Series and those published by the Selden Society and the Ames Foundation. The collection of old abridgments is also very notable. Of all post-yearbook reports—including digests, encyclopedias, and indexes—virtually everything is present both in original editions and reissues, as well as in the English reprint. Aside from reports, however, materials on the history of even the great central courts require great additions, and the same is true in even greater degree of other courts.

Secondary works—not only treatises but such aids as glossaries and histories—are available on all subjects. They approach completeness, however, on but few—such as the legal profession; they are notably inadequate on others—such as domestic relations, maritime law, and the law merchant. The library is strikingly strong in treatises of the sixteenth and seventeenth centuries, of which it has many hundreds of imprints, including works of most of the leading writers of those centuries and numerous editions of all the greater legal classics. Various of these individual collections, because already notable, should be enlarged.

**BRITISH EMPIRE AND ISLES**

Layton B. Register, Librarian

The fine Empire collection has suffered curtailed appropriations in favor of domestic law during recent years. However, in this process the relative importance of colonies was recognized. Outside of Canada the resources are almost exclusively statutes and reports, a prolific and expensive type of continuation. Counting Australia and Canada, federal and provincial, each as single units, the collection numbers fifty-four colonies. Australia, Canada, India, New Zealand and South Africa are the best provided.

The whole collection is over-weighted with reports and under-developed in statutory law. Digests have not always been kept up to date. Texts are lacking outside of Canada and would represent an expense far beyond available funds.

The Canadian group, exclusive of texts, contains over 2,500 volumes and is almost up to date on all federal and provincial statutes and reports, with adequate digests. The texts are far too few, especially with respect to late editions of standard works and to new works. The East Indian collection contains the official local codes and General Acts, but not in later editions. Newfoundland's Acts are complete from 1877.

Ireland is only fairly covered, while Scotland has a wealth of material.
Irish Statutes at Large are complete from 1310 to 1800. The Public Statutes of the Oireachtas are complete from 1923 and of Northern and Southern Ireland from 1921. The reports cover both law and chancery and land cases.

Acts of the Scottish Parliament from 1124 to 1707 with index are present in the official folio reprint; there are also the Scots Statutes Revised from 1424 to 1907. The reports are exceptional, including the Appeal Cases, Session Cases, Scottish Law Reporter, Scots Law Times, Scots Revised Reports, Faculty Cases, Justiciary Cases, the Scottish Jurist and many special reporters. The Journal of Jurisprudence is complete, as also the currently received Scottish Law Review.

FOREIGN LAW (Exclusive of British Empire)

The foreign collection made an encouraging start in the early 1900's. The World War eventually brought to the fore new problems of American government and law, so pressing as to demand a changing and increasing service from the library. Previously adopted programs had to be altered and some foreign purchases had to be sacrificed in favor of the more imperative home need. Nevertheless, on three occasions in the last ten years important foreign additions have been received, two of which were paid for from the Ellis D. Williams Class of 1868 Endowment Fund for the Biddle Law Library.

In 1930-31 Margaret C. Klingelsmith, then Librarian, made substantial purchases in The Hague, Leipzig and Paris from carefully prepared lists which aimed to build up the foundation of German, Austrian and Italian works and augment the already considerable French collection. During the same year was purchased the entire library of the late Dr. D. Simons, Professor of Criminal Law of the University of Utrecht. This is described under the topic "comparative law". In 1932 we were able to procure about 1,800 volumes of the library of the late Professor Loeffler of Vienna. These are mostly criminological and supplement the Simons purchase in a valuable degree.

In all, about fifty foreign countries are represented in the library, exclusive of the many units of the British Empire.

Early in the 1900's the Latin American collection was begun by the personal efforts of Dr. Leo S. Rowe, the present Director of the Pan American Union. In 1913 this was supplemented by purchases made by the present librarian after a period of study in Spain. Since then but little has been added, and a considerable sum would be required to bring legislature, decisions of the courts, digests, recent codes and leading treatises to date.

Save for some Hindu and Moslem law, the far and near Orient and the Slavic and Scandinavian countries of Europe have no material of consequence. France, Germany and the Netherlands have the largest representation, that of France amounting to some 1,600 volumes, Germany about 600 and the Netherlands about 700.

France. Official texts of legislation are provided from 1789 to 1911 by the Bulletin des Lois. It is a regrettable omission that these have not been carried on. The years lacking, however, may be found in unofficial form in the Recueil Dalloz (complete from 1825 and received in advance sheets), also in Duvergier complete from 1919 connecting with Sirey's Legislation de la guerre; and of course in the Journal officiel in the Main University Library. All reporting of court decisions in France is unofficial, and the Dalloz, in both parts, the Recueil and the Répertoire, covers the jurisprudence of all courts since 1825. Annotated texts of the Codes are adequate. Modern commentaries on the
The historical portion of the collection is rich in the possession of about fifty coutumiers, many of them fine leather folios of the seventeenth century, including a Beaumanoir. The coutumes are supported by a numerous representation of the commentators of the seventeenth and eighteenth centuries and modern investigators. The history of the drafting of the Napoleonic Code is found in Locré and Maleville. The more important historical treatises, general and particular, are present along with the leading French journal of legal history complete from 1855 to date.

The French collection as a whole is well selected and offers good resources for research, superior, it is believed, to any library in this region.

Germany. The official Reichsgesetzblatt from 1914 to date contains the legislation, but should be extended back at least to the beginning of the century. The laws of the National Socialist regime since 1933 are fully supplied in Pfunder-Neubert, Das neue deutsche Reichsrecht and Hoche, Die Gesetzgebung Adolf Hitlers. The Zeit­schrift der Akademie für deutsches Recht provides a current leading law journal of a general character. Digests and encyclopedias are hardly adequate.

The Civil Code of 1900 receives attention both as to texts and translations, important commentaries and, with respect to the history of its drafting, in the "Motive," the "Protokolle," and the "Entwurf" of the Commission. Among the treatises on the Civil Code, I mention those of Mugden, Plancke, Cosack, Staub and the Grosse Kommentar of Dertman and others. The period of the Pandektenrecht is represented by Windscheid, Dernberg, Eichhorn, Heusler, Marquardsen and others.

The history of German law begins with a fine group of texts of the early Germanic laws, including the editions of the Monumenta Germaniae Historica, Canciani, Haenel, Lindenbrogius and Walter. The later Sachsenspiegel is present in the fine facsimile of the Dresden MS. by Amira. Historical authors include Brunner, Bethmann-Hollweg, Maurer, Stobbe, Grimm, Gierke, Plancke, Jellinek, Savigny, Binding. The Zeitschrift der Savigny Stiftung in its three parts is almost complete. As in the case of France, this is a good collection.

Italy. This collection is inadequate and unbalanced. Legislation outside the Codes is not received in any form. On the other hand the decisions of the courts are adequate, with those of the Supreme Court of Rome 1877 to 1905 and in unofficial form for all courts, including administrative decisions, in Il Foro (including the Repertorio generale). Good commentaries on the Codes are lacking. Treatises are mainly historical and include briefer general works of the best writers from Partile to the present day. The early law of the period of the Germanic invasions is very adequate with good texts, already referred to under "German law".

The Italian legal periodical literature is rich, including Giustizia penale (complete from 1895), Archivio giuidico, Rivista di diritto aeronautico, Rivista italiana di diritto penale (all complete) and Rivista di diritto i procedura penale (in part); also journals on international law.

The Netherlands. This collection is a part of Professor D. Simons' Library, mentioned earlier. Omitting that part devoted particularly to
criminal law and procedure (see "comparative law"), the pure Dutch ma-
terial numbers some 700 volumes. The "Luttenburg" from 1813 to date
covers the legislation. The reports of judicial decisions are complete
since 1839. In treatises, shorter texts and selected dissertations,
the collection is very strong indeed. As a whole, this Dutch collec-
tion would have few equals in this country.

COMPARATIVE LAW

By Edwin R. Keedy and Layton B. Register

Comparative law studies the differences and likenesses in the le-
gal institutions of several systems of law. It is clear, therefore,
that all the primary sources of the particular countries studied (see
the other topics of this report) constitute necessary source material
for research in comparative law. Similarly the secondary authorities
of those countries constitute necessary interpretative aids. The fol-
lowing report is, therefore, limited for the most part to works which
are the fruit of research in the comparative field or specially adapted
to its study. Added mention will be made of the collection devoted to
comparative criminal law and procedure.

Of topical compilations of the laws of several countries there is
but a scattering outside criminal law and procedure. Commercial law
has several such from the early maritime codes to the Commercial Laws
of the World. Patent, trade mark and workmen's compensation are
touched upon. The general and special texts cannot be regarded as
more than a beginning, the best example being the more important works
of Lambert.

The main strength of the section lies in its periodicals and so-
ciety publications. This is the form in which much work in compara-
tive law finds publication. Amongst them are complete sets of the Jour-
nal of Comparative Legislation (London), the Annuaire and the Bulletin
of the Société de Legislation Comparée (Paris); all of the series put
out by the Istituto di Studi Legislative (Rome), probably the most am-
bitious of all efforts to report legal activities and thought on an in-
ternational scale. Particular subjects covered by periodicals of in-
ternational scope are maritime law, air law and labor law (Internation-
al Labor Office, Geneva) and private international law (conflicts of
law).

There are roughly 20,000 foreign law dissertations, mostly German,
dating from 1886. Until these are opened up by subject cataloging,
their usefulness is limited.

COMPARATIVE CRIMINAL LAW AND PROCEDURE

Mention has already been made of the purchase of the Simons and
Loeffler libraries, from which the collection on comparative criminal
law and procedure has been mainly formed. Exclusive of periodicals
there are over 1,250 separate items including codes, drafts, projects
of reform, collected laws, statistical studies, treatises and mono-
graphs including several hundred bound dissertations. At least fifty
countries are represented, with the criminal and procedural codes of
more than thirty, though these have not been kept up to date except in
the case of France.

The periodical collection is noteworthy and probably would be dup-
licated only in a very few libraries of the country. It contains nine
major German journals, four French, three Italian, three Dutch and one
Swiss. Almost all are complete.

France. The French portion contains nearly 200 texts on French
criminal law and procedure. Most of this material is modern and well
distributed among the various phases of the subject. In making the
collection some emphasis has been placed on the functions of the of­
ficials engaged in the preliminary investigation of crime. During the
past five years quite a number of books discussing recent legislation
and theses on special topics have been added. The library does not
contain the latest edition of some of the standard texts.

England and Scotland. The library contains the standard English
treatises on criminal law and procedure, including the early works on
the pleas of the Crown. There are about a hundred volumes dealing with
special topics of both substantive law and procedure. Some of these are
discussions of statutes. There are six sets of criminal trials. There
are also reports of various royal commissions, which investigated prob­
lems of the criminal law.

The standard Scottish treatises are found and also several volumes
on special topics. There is a complete set of reports of Justiciary
Cases and three sets of criminal trials.

ROMAN LAW

By John Dickinson

The library includes a good elementary working collection of the
better editions of the texts, translations, and most of the more recent
commentaries, treatises, and monographs published in English. There
are also sets of the Zeitschrift der Savigny-Stiftung, Romanistische
Abteilung (to 1930), the Nouvelle revue historique de droit français
et étranger and its predecessors complete from 1853, the Revue d'his­
toire du droit, the Archivio giuridico and the Studia et documenta
historiae et juris of the Pontificum Institutum Utriusque Juris (Rome).

There is a fairly representative collection of the standard lit­
arture in German, including the treatises of Dernberg, Windscheid,
Vangerow, and Bethmann-Hollweg, and the works of Savigny, Jhering,
Karlowa, Leist, Lenel, Salkowski, and Voigt, although not always in the
latest editions.

There is only a slight representation of the more recent mono­
graphic literature in French and German.

The material on the Roman law of the earlier Middle Ages is also
meager. While there is much of the monographic and other work of Fit­
ting, Ficker, and Conrat (Cohn), we have very few editions of the ear­
erlier medieval glosses and summaries. There is a copy of the Summa
of Azo in an edition of 1530.

There is an unusually rich collection of the commentaries of the
later medieval jurists, including Odofredus, Baldus, Franciscus
Aretinus de Acolitis, Angelus de Perusio, Joannes de Imola, Ludovicus
Pontanus, and others. The bulk of this collection came originally from
the library of the Princes of Thun, at Tetschen and was acquired a few
years ago. The library also contains the eleven-volume edition of the
complete works of Bartolus de Saxoferrato (Venice, 1603), and two sets
of the works of Cujas.

There is no edition of Donellus.

CANON AND ECCLESIASTICAL LAW

By John Dickinson

In the field of historical canon law, the library has various edi­
tions of the Corpus juris canonici, including the most recent and best
by Friedberg. We have the Zeitschrift der Savigny-Stiftung,
Kanonistiche Abteilung (to 1930), but not the Zeitschrift für Kirchenrecht. Literature on the canon law of the earlier Middle Ages, texts, glosses, modern monographs, and historical works is wholly lacking, but there is a comparatively full representation of the later medieval canonists, Joannes Andreae, Durantis, Bouhic, de Anania, Joannes de Imola, Propositus, Albericus de Rosate, and Zabarella, from the same collection noted above under Roman law.

There are various editions of the standard earlier treatises on English ecclesiastical law, Lynwood, Ayliffe, Gibson, and Burns.

There are no works on modern canon law and no modern treatises, or histories. The Dictionnaire de droit canonique of Naz is subscribed to.

JURISPRUDENCE AND LEGAL PHILOSOPHY

By John Dickinson

The material in the field of jurisprudence and legal philosophy is scattering.

Aside from recent American books, there is a good working collection of nineteenth-century English texts—Austin, Lorimer, Phillimore, Hastie, Rattigan, Bryce, Holland, Pollock, Lightwood, Clark, Salmond, Vinogradoff—with a few earlier treatises. There is no complete edition of either Hobbes or Bentham.

Apart from the standard translations, the only German writers on legal philosophy fully represented are Jhering and Stammler. There is a somewhat more adequate collection of recent French juristic writing, including works by Gény, Saleilles, Bonnecase, Capitant, Charmont, Le Fur, Renard, Ripert and Roguin.

There are bound sets, kept up to date, of the Archiv für Rechts- und Wirtschaftsphilosophie and Archives de philosophie du droit et de sociologie juridique.

INTERNATIONAL LAW

By Alexander H. Frey

The approximately 2,500 books on international law in the Biddle Law Library have been separately assembled in two rooms equipped through the generosity of Mr. Henry Reed Hatfield. This collection relates predominantly to public international law, but at the present time works on private international law (conflict of laws) are also included; these, however, will shortly be transferred elsewhere in order to provide space, already desperately needed, for the rapidly expanding public international law field.

While, on the whole, this collection is superior to that which one would expect to find in a general law library of 100,000 volumes, it is nevertheless decidedly uneven and exhibits a drastic need for additional appropriations.

One may find an excellent collection of British and of American treaties and official documents and correspondence concerning the international affairs and foreign relations of these two nations, but one looks in vain for comparable material with respect to other countries. There are, however, complete collections of the treaties and international engagements registered with the Secretariat of the League of Nations, and of the proceedings before the Permanent Court of International Justice at The Hague.
There is a good collection of the reports of organizations such as the Carnegie Endowment for International Peace, the International Law Association, the American Society of International Law, the Académie de droit International, Grotius, Annuaire International, Institut Juridique International, but the general periodical material is most inadequate, consisting almost exclusively of the American Journal of International Law, the British Year Book of International Law, Revue de droit international et de législation comparée (Paris), Revista di diritto internazionale (Rome).

The collection of general treatises on international law is surprisingly full, but at the same time some amazing omissions can be noted. A brief sampling revealed the absence of such well-known books as Brierly's Law of Nations, Redlich's Law of Nations, Holland's Lectures on International Law, Stowell's International Law, Hatschek's Outline of International Law, Nielsen's International Law Applied to Reclamations, and the latest edition of even such a standard treatise as that of Wilson.

These deficiencies are primarily the product of the last decade and suggest that the funds available of recent years have not been adequate for the maintenance of this truly fine collection at the level of excellence to which it formerly attained.

PERIODICALS

Layton B. Register, Librarian

Mention is made of the library's important periodical holdings in particular fields covered by several topics of this survey. It remains to view the field as a whole, bearing in mind that the periodical literature of the law is generally specialized. I shall divide the collection into (1) American and (2) Foreign.

American

The American collection contains about 280 items, of which currently received issues number 114.

The law reviews and journals edited by the law schools of the country have enormously increased in number and importance since the beginning of the century (from twenty-seven to eighty-two). Their contents cover a wide range, present, past, historical and jurisprudential. They are important both for scholarship and legal practice. Forty-one such law school reviews are currently received. All the more important are taken and are complete.

Among the particular fields covered by the American periodical collection are air law, international law, both public and private, medical jurisprudence, labor, legal education, arbitration, banking, corporations, bankruptcy, bibliography, insurance, civil rights, procedure, criminal law and criminology, local government, bar associations, taxation, patents and trade marks, Philippine and Porto Rican law, social security, trade regulations.

The library contains a complete file of the American Law Journal, published in Philadelphia in 1808, the first American legal periodical. Within the next half century forty-three legal periodicals were born, of which we have the files of twenty-two, complete in most instances. These include the only three having continuous existences since their foundation; namely, the Legal Intelligencer (Philadelphia, 1843), American Law Register (Philadelphia, 1852) which later became the University of Pennsylvania Law Review, and the Pittsburgh Legal Journal (1853).
Periodical literature is very adequately serviced both through the cumulative indices of particular series and also through the several standard general legal tools of index.

Proceedings of bar associations form a good though incomplete collection. The proceedings of the American Law Institute, the Association of American Law Schools, the Association of American Law Libraries, the Commission on Uniform Laws and some others are complete, but the collection cannot be considered to contain more than the important items.

Foreign

The foreign collection comprises about 230 items. The English are naturally the most frequently and generally used. The earliest English dates back to 1790, and fifteen fall within the first half of the 1800's. All of the more important, such as the Justice of the Peace, Law Times, Solicitor's Journal, Law Journal, are complete. Scotland and Ireland are both represented by their oldest current publications. The British colonies have a scattered but well-selected group, most important of which are the Canadian.

Foreign periodicals other than of England and the Empire form a noteworthy group both as to numbers and range. The major part come from Continental Europe, much the most important representation being that of Germany, France, Italy and the Netherlands. The Slavic and Scandinavian nations have not been touched, while Spain and Latin America are too meager to be of substantial use. The Latin American gap is serious and should be remedied.

Among the more important complete items deserving of mention are the Archiv für Kriminologie (Leipzig), Archiv für Rechts- und Sozialphilosophie (Berlin), Journal du droit international privé (Paris), League of Nations Journal and its supplement (Geneva), Revue d'historie du droit et Revue historique du droit français et étranger, Themis (The Hague), Archivio giuridico (Modena). The Zeitschrift der Savigny-Stiftung für Rechtsgeschichte unfortunately lacks the last eight years in all three of its parts.

The proceedings of learned societies are few but well selected.

Some Observations on the Resources of the University Library and Biddle Law Library

The General University Library contains large bodies of strictly legal materials. In part this is due to a very proper recognition of the relation between the growth of public law and the development of the English state and government, and to an equally proper recognition of private law as a basic institution of English society. It may be questioned what material regarding, for example, sheriffs and justices of the peace is strictly legal. It cannot be denied, however, that strictly legal material no more belongs in the General Library because historians seek to use it than the yearbooks belong there because philologists are concerned with their language. The Main University Library contains great quantities of literature on the petit jury, lawyers and the Inns of Court, canon law, ecclesiastical and civil courts, and many other purely legal topics. It contains, also, hundreds of volumes of state and federal reports and statutes (some of which, no doubt, are needed for the undergraduate schools); valuable material on Anglo-Saxon law; various yearbooks and abridgments thereof; old legal periodicals and treatises; bar association reports; legal biography; much on Roman law and modern civil law; much on medieval Germanic law and procedure and modern German law; much on Spanish and Italian law; much on both medieval and modern French law; and several of the great and expensive German legal periodicals, and statutory and monographic collections. No doubt some materials might well be transferred from the Biddle Law Library to the Main University Library.
Library, but it would seem consistent with an effort to integrate research centers to consider also the removal of much strictly legal material from the General University Library to the Biddle Law Library. Certainly there could well be greater co-operation between the two when buying for the development of particular fields.

BUSINESS LAW

By Smith Simpson

Generally speaking, the resources of the several libraries of the University of Pennsylvania are adequate to meet the ordinary requirements of the Department of Business Law. The Biddle Law Library contains a complete system of federal and state reports, federal and state statutes and most of the principal digests of reports and annotations of statutes as well as a large collection of secondary works on the more important branches of the law. The Main Library of the university also possesses a quantity of legal materials and social studies which are necessary supplements to the study of the law itself. Sometimes these materials of the Main Library supplement and at other times duplicate those of the Biddle Law Library. Since the Biddle Law Library is not, strictly speaking, an undergraduate library, a certain amount of duplication of legal and sociological works found in the Biddle Law Library is necessary in both the Main Library and in the Lippincott Library. Thus, the Lippincott Library collection repeats certain of the federal and state reports, Pennsylvania statutes, digests of reports and statutes and standard treatises which are found in the Biddle Library. This is for the purpose of convenience to the faculty and student body of the Wharton School and the duplication is cautious and limited. However, there is certain legal material in the Main Library which represents unnecessary repetition. Such things as New York reports, or Connecticut statutes, for example, are of such rare use to the undergraduate student that their duplication in the Main Library seems unnecessary and wasteful.

The lack of certain specialized, up-to-the-minute, loose-leaf legal services at the university is to be deplored because of the current developments which are taking place in these fields. Thus, there are not available in any of our university libraries such services as Prentice-Hall and Commerce Clearing House in admiralty law, aviation law, corporation law, (including corporation tax service), liquor control legislation, patents and trade marks law, public utilities and carriers service, sales legislation and workmen's compensation legislation.

Along certain lines, material, although extensive and adequate for ordinary teaching needs, has been found to be inadequate for extensive research. Along other lines, the material although to be found in one or another library is scattered and the specialized legal services available in these lines are not to be found. To single out one particular line for illustrative purposes, extensive research is handicapped in the field of patent and copyright law; and it is hardly necessary to point out the importance of the law of copyright in this day of radio broadcasting. It might well prove advisable for one of our libraries to make a collection of the briefs of lawyers in important copyright cases in order that the researcher in this field might have immediately available this valuable source of material. It is inevitable that in as large an urban center as Philadelphia there should be a number of practitioners specialized in the field of copyright law so that in this locality there should be no great difficulty in assembling a representative collection of briefs. Our present materials in this field cannot be said to be adequate for extensive research. League of Nations documents, including League of Nations Treaty Series, make available international conventions concerning the protection of industrial and artistic property; and certain discussions of the rights
of broadcasters which have occurred in the International Labor Organizations are to be found in the documents of this organization in the Main Library. But documents relating to the Paris Peace Conference of 1919, where a wide variety of questions arose of interest to the business lawyer, such as the protection and regulation of industrial property, artistic property and international competition, are entirely inadequate. Conspicuously missing is David Hunter Miller's Diary of the Peace Conference, which was privately printed and limited to a certain number of sets and therefore can probably never be acquired by the university. A conscious attempt should be made to supply this lack of Peace Conference materials from other sources. In addition, there is also missing in the field of copyright law useful comparative materials on national laws. Where such materials exist they are not up to date.

It is to be observed that while studies in the field of labor and industrial relations are plentiful in the Lippincott Library and afford a necessary supply for the study of the business lawyer in the field of property and business relations, there is nonetheless missing a collection of labor contracts. Since the Business Law Department teaches the law of contracts and labor contracts are of great importance in business relationships, a collection of labor contracts in this locality is very much needed. Such a collection, to be useful, should be competently classified, indexed and annotated.

There is far from a plenitude of materials on sociological problems of the law in other fields than labor. It is to be noted, however, that the Biddle Law Library is gradually adding to its collection of books which are devoted to the sociological aspects of the law, and the Business Law Department is itself suggesting additions along this line to the Lippincott Library, but funds are inadequate and the present provision of such works is extremely meager.

Reference should also be made to the inadequacy of material in the field of legal biography. It is coming to be increasingly recognized that the personality of judges often influences decisions and that an important precedent may be traceable to a single judge and his social philosophy. This has long been appreciated by practitioners but research along this line is in its infancy. We are lacking in materials relating to the supreme court justices of Pennsylvania, for instance, and any research in the biography of such men is probably out of the question until suitable materials can be conveniently assembled.
A representative group of oriental studies in an American university offers courses dealing with man and his works in a range of territory extending from the Atlantic coast of Africa in the west to Japan or even farther east in the Pacific, and the subjects of research of the instructors are selected from that wide region. More than a billion people live in this area, over a half of the world's total population. In this region developed all three of the world's ancient civilizations: (1) the Egypto-Babylonian, from which derive the Islamic and, through the Aegean area and Palestine, the modern European-Christian; (2) the Indian; and (3) the Chinese, or Far Eastern. Two of these ancient civilizations still continue with unimpaired vitality in India and the Far East; the third, through Islamic civilization, has no rival in the Near East and northern Africa, and even has blocks of adherents in Europe. The time period covered is from the beginning of civilization, if not rather from the primitive stone age cultures preceding it, down to the present.

The subject matter of study in such a department begins with language and literature and always has them as the largest part of its offerings, and research is always based upon philological methods. With that basis it may, within the limitations of its staff, deal not only with language and literature, but also with archaeology, music, mathematics, or other topics. In some cases an instructor may lecture or write on sociological or economic or political aspects of the region he represents.

In this university oriental studies use the full teaching and research of seven instructors. The courses represent the culture of ancient Egypt, the ancient and modern Semitic world, including the Sumerians, Hittites, and Hurrians, the Indo-European portion of India, the culture of China, ancient Persia, and the Aegean area. Research similarly deals with all these. The major fields not represented are the areas where Turkish and its affiliates are spoken, Japan, the non-Aryan (Dravidian and Munda speaking) language sections of India, Tibetan, and the Siamese, Cambodian, Burmese, and Javanese areas, which all belong to "Greater India." It is evident that, even in the fields represented here, the staff can make only a selective coverage, each man offering work, especially linguistic, which is fundamental, and adding to that according to his own productive interests. Although the total number of instructors in oriental studies is less here than in two other great American universities, the coverage is wider and more even than in the one which has the largest oriental staff of all and not much different from that of the other.

The group oriental studies is a confederation of departments rather than a single department. Its various divisions have even more dissimilarity than that between Romanics and Germanics or between English and Greek. The departments have confederated, partly because of their individually small staffs, but more because they recognise a community of interest in oriental subjects, which becomes increasingly impressive as archaeology continues to provide more abundant evidence of relationship between their cultures in the five millennia preceding the Christian era.

In addition to its library facilities the University of Pennsylvania has special facilities for research in oriental subjects, which make it one of the most obvious seats of such studies in America. The University Museum is one such asset. It has accumulated, by archaeological excavation and purchase, collections of prime importance from Egypt, Mesopotamia, Persia, and China, with less abundant
materials from India, China, and some other oriental regions. It conducts excavations which constantly enlarge these collections, and its accumulations contain a perennial supply of scientific source material. Besides the University Museum, the Philadelphia Museum of Art has oriental collections, especially of Chinese, Indic, and Persian material. Much of the material in these museums has not only a value for the history of art and for archaeology, but also for the study of languages, history of law, and economic conditions of the time.

At this university is the largest collection of Indic manuscripts in the United States, a valuable aid to research.

The group oriental studies of this university is concerned not only with the history of civilization in the separate fields of its members, but also with the relations between the different fields. In the fall of 1938 it inaugurated a co-operative seminar on "Interconnections of Early Oriental Civilizations," which it is now continuing for the second year. All members of the group attend all sessions, and they pose and clarify, even if they do not solve, questions of interconnection raised by the great amount of archaeological material from the first few millennia of civilization that has been accumulating during the past few decades. No such concerted attack on this material has ever been attempted elsewhere, and it is possible at this university only because of the wide range of oriental interests here represented.

The controlling teaching and research motif of the group oriental studies at the University of Pennsylvania is the history of oriental civilization. The basis of all its work is language, without which no work on ancient civilization can hope to be satisfactory. The three new appointments made in the group for the years 1938 and 1939 have all been in line with that policy, and in so far as the size of its staff permits the group means to study the age, character, and importance of oriental civilizations and their contacts with one another. It regards the library and museum facilities of this city from the point of view of the help they offer to such study, and it hopes to continue to build up the university's facilities for that purpose.

Considering the conjunction of library facilities, museum collections, manuscript accumulation, and diversity of interest of orientalists on the university staff, it might appear that no city in the United States is better equipped than Philadelphia to conduct research in the oriental humanistic field.

THE NEAR EAST

By E. A. Speiser

In a survey of library and research facilities bearing on the Near East and available in and around Philadelphia it is best to begin with (1) a division of the field into individual departments. The resulting subdivisions can then be examined with regard to (2) sources and (3) secondary literature.

Individual Departments

The main individual departments of Near Eastern studies are all represented among the collections of the University of Pennsylvania. These departments may be listed as follows: (1) cuneiform, which includes Sumerian, Assyro-Babylonian, Hittite, and marginal fields (Hurrian, Urartean, Elamite); (2) Egyptian; (3) Biblical and Northwest Semitic; (4) Syriac; (5) Arabic; and (6) Judaic. In addition to these are two superimposed departments which draw upon or intersect several of the above independent divisions, viz., (7) Near Eastern archaeology; and (8) history of ancient law.
The coverage of a field as large as the Near Eastern can hardly be uniformly thorough in a single institution. At the University of Pennsylvania some of the subdivisions have been kept up better than others, but there are considerable gaps in all of them. Nevertheless, there is no center between New York and Chicago which affords equally comprehensive facilities for Near Eastern research. We have here an excellent nucleus which judicious tending could bring up to adequate size at a comparatively small cost. Furthermore, the University Museum contains splendid source materials for the study of Near Eastern archaeology. When all these resources are taken into consideration, our research facilities in the Near Eastern field prove to be better balanced than those of any other institution in this country.

In the Philadelphia area there are several other valuable collections of interest to the student of the Near East. These collections do not embrace the entire field, but specialize in selected departments. They are, therefore, richer in some respects than the corresponding collections at the university. Here may be mentioned the libraries of the Dropsie College (Biblica, Judaica, Arabica), Bryn Mawr College (Archaeology), and the American Philosophical Society (especially for Archaeology), not to specify the smaller relevant collections of such institutions as the Philadelphia Divinity School and Haverford College. The university also, however, has an adequate cuneiform library. In view of the very considerable cost of archaeological and textual publications, a reasonable division of labor among all the institutions concerned is plainly indicated. Principal periodicals and basic texts must constitute minimum requirements in all these libraries. But rarer publications (which are usually the most expensive) might well be apportioned to the budgets of individual libraries. By thus avoiding duplication of highly specialized works the collections of the Philadelphia area could fill major gaps in certain selected fields and make available at least one copy of any significant publication.

Sources

Of the groups listed above, four call for particularly extensive collections of sources. These are cuneiform, Egyptian, Arabic, and archaeology. The first two contain the literary and other epigraphic outputs of civilizations which flourished in each case for more than 3,000 years. Many hundreds of thousands of documents have been unearthed in Mesopotamia alone. Only a fraction of this total has been published so far, and thousands of new inscriptions are added by the excavations of each normal season. The textual contributions of Egypt are less extensive, but the reproductions of the countless paintings of ancient Egypt, a primary cultural source, make up for the discrepancy. It follows that complete cuneiform and Egyptological libraries are at once large and expensive. Arabs have always been known as prolific writers and this activity has been on the increase of late. Archaeological publications have kept pace with the steadily expanding activity in the field.

The University of Pennsylvania was for years the main Assyriological center of this country. Our library is the only one in the field between New York and Chicago. We have the principal series of texts published by the British Museum, the German Oriental Society, the Louvre, Yale, Chicago, and, of course, the University Museum. We possess also all the Hittite texts, the Chaldian (Urartean) Corpus, and the principal Elamite inscriptions, as well as the Hurro-Akkadian texts published by Harvard and the Baghdad School. Gaps remain to be filled in the Ashur series and in the Assyriological series of Oxford.

Our Egyptian collection is also the best in this area, though not wholly adequate. There have been comparatively few accessions in the past twenty years. The recent appointment of a distinguished
The Arabic collections of the university include the principal works published up to 1900. Since then our accessions have not been well balanced. But here again the university has indicated its interest in the subject by establishing a special chair of Arabic and appointing to it a very prominent specialist. He has been allowed a generous initial library appropriation and the departmental collection should be brought up to date in the course of a few years.

Our sources on archaeology were wholly adequate up to 1930. Through the co-operation of the library and the University Museum there was accumulated a representative collection of books on Egyptian, Palestinian, Mesopotamian, and Anatolian antiquities. Simultaneously there grew up a splendid collection of original objects from all these fields. In the past few years additional objects have been added but published sources have not been kept up correspondingly. Since the university enjoys all the advantages of an early start (the earliest in the country) and has fallen behind only in the past few years, it should be comparatively easy to catch up with the rapid output of archaeological publications and maintain the high standards of this archaeological center.

In three of the remaining departments, viz., Biblical, Syriac and Judaic, secondary literature is today more important than the sources themselves owing to the virtual exhaustion of original material in these fields. Our early collections in these departments are excellent and the main problem is to maintain the periodicals and current discussions, not a small task when the vastness of these disciplines is borne in mind. The only exception is Northwest Semitic epigraphy which continues to supply us with fresh sources, notably the extensive material from Ras Shamra. The lively interest of our group of oriental studies in this particular field, as evidenced by pioneering contributions to the subject, is a guarantee that the accumulation of primary sources will not be neglected.

History of ancient law, the last department, depends for its sources on the other subdivisions, especially cuneiform, and its library consists, therefore, of works which have to be listed under the head of "Secondary Literature". It is worth pointing out that the University of Pennsylvania is the first institution in this country to recognize the importance of ancient law as a sociological and cultural commentary on the progress of man. This recognition has resulted in a grant by the American Council of Learned Societies which will enable a trained jurist to supplement his legal studies by a first-hand investigation of the rich cuneiform legal material. The Council looks forward to the training of a group of jurists versed in the complex history of this discipline and this university promises to become the center of these studies. The nucleus of an adequate library of ancient law is now in the process of assembling.

Secondary Literature

The Main University Library and the University Museum have between them the most important technical journals devoted to oriental
ORIENTAL STUDIES: NEAR EAST

Some of these pertain to the entire field, as e.g., the Journal of the Royal Asiatic Society, Orientalistische Literaturzeitung, Zeitschrift der deutschen morgenländischen Gesellschaft, Archiv für Orientforschung, and Archiv Orientalist. The same is true of the Journal of the American Oriental Society which is edited from here. Others are restricted to the Near Eastern field, and a considerable number are confined to special subdivisions, e.g., Zeitschrift für Assyriologie, Revue d'Assyriologie, Babyloniaca, Revue Biblique, Zeitschrift für ägyptische Sprache, and the Journal of Biblical Literature. Archaeological periodicals are well represented. Among the greatest desiderata should be listed Revue des études Arabes, Revue Hittite et Asianique, and Caucasica.

The current literature on Egyptian and Arabic studies is poorly represented in our Library, but our new professors of Arabic and Egyptology are fully alive to this need. In the field of Biblical studies we have succeeded in keeping up with the most important publications. What is true of primary archaeological publications is also true of archaeological and historical discussions: the last few years have left considerable gaps. In planning the expansion of our collection on the history of ancient law we are looking forward to the co-operation of the Biddle Law School Library. Finally, we have good working collections on the history of religion and on Hamitic languages, a group which claims the interest of the Semitist and the Egyptologist alike.

Conclusion

The Main University Library and the collections of the University Museum offer together what is perhaps the best balanced research apparatus for Near Eastern studies in this country. The filling of certain notable gaps and the continued maintenance of collections in the various directions which Near Eastern studies have taken at the university would make our facilities reasonably complete. Relevant collections in several other institutions in the Philadelphia area help to strengthen the position of this center. As an indirect indication that our facilities are widely appreciated may be cited the fact that our several Oriental departments often include graduate students from distant states and even from abroad.

INDIC STUDIES

At the University of Pennsylvania, as at many other universities, the holder of the Sanskrit professorship orders most of the books purchased by the library for the entire range of Indian humanistic interest. Not only language and literature fall within his province, but also archaeology, art, religion, philosophy, music, history and even in some cases ethnology, sociology, and present-day government and politics. The consequence is that the small amount of money available for purchases under the head of "Sanskrit" cannot begin to give the library adequate coverage in all these fields, even though from time to time instructors in other departments co-operate to fill the library's needs. Our collections therefore are fullest in Indic languages, especially the classical languages, literature, religion, philosophy, and archaeology, with less satisfactory representation for history and ethnology, and still less for sociology, history of law, economics, and political science.

Within the fields of language, literature, art, archaeology, religion, and philosophy, the University of Pennsylvania has one of the five largest Indic collections in the United States. The leading collections are at Harvard, Columbia, Yale, Pennsylvania, Chicago, Princeton, Johns Hopkins, and California universities, and at the
Cleveland Public Library. In the matter of Indic manuscripts it owns about 3,000, the largest collection in the United States. Harvard comes next with about 2,500; then Yale with 430 (Yale itself 130; library of the American Oriental Society, on deposit in the Yale Library, about 300). When its collection of Indic sculpture, housed in the University Museum, is considered in association with the collection of Indian art in the Philadelphia Museum of Art, the joint result puts Philadelphia second only to Boston in the exhibition of Indic art material in the Americas.

Primary materials for all humanistic studies connected with India consist almost entirely of printed texts and translations. In the year 1935 the American Council of Learned Societies had printed a survey of such primary materials in American libraries, a "Union List of Printed Indic Texts and Translations in American Libraries" by M. B. Emeneau, American Oriental Series, and it is possible to see from it that we own the standard editions and translations of all the major works in Sanskrit, Pali, and Prakrit, although we do not own all the editions of these works that have been published. With very few exceptions, however, we possess what is necessary for research, and it is only rarely that we have to borrow from other libraries. Works of second importance are also fairly well represented here. The most important gaps in our collection of primary materials lie in the field of the modern languages and in Tibetan. Here we have never purchased systematically—nor, as far as I know, has any institution in America—research in the languages and literature of the modern Indo-Aryans, the Dravidians and the Mundas, and the languages and literatures of Greater India (Burma, Siam, Cambodia, Sumatra, Java) could not be undertaken here on any large scale or on any but a very few topics. It would be a help to Indic studies throughout the United States if somewhere in the country an adequate collection of such material were made.

The difficulty in accumulating works of secondary importance in the classical languages lies in the fact that many of these are published obscurely in India or in some of the countries of Greater India. It is, therefore, impossible to equip any library fully merely by purchasing books published by the better-known houses and societies, by keeping up subscriptions to the major journals handling Indic material, and by acquiring the most important series of texts and translations. The problem of getting satisfactory bibliographical knowledge for India alone troubles Sanskrit scholars everywhere, and the Library of Congress has just sent its director of Indic studies to India. He will have as one of his duties the task of establishing contact with many series now hardly known, yet frequently handling important material, and of arranging for future notification of publications. We shall get the advantage of his findings and be able to improve our collections. In addition to our present sources of supply of texts and translations, which are in general satisfactory for easily obtainable material, we shall then supplement with the valuable, though less important sources.

The tools here for Indic research in humanistic subjects are good again for the classical languages. We subscribe to all the important journals and some of the less important—though it would be well to add a few not now carried on our shelves—and we have complete files of them. We own all the standard lexical and grammatical works and works of bibliographical aid, such as topical bibliographies. In the matter of manuscript catalogues of collections in India we lack several important publications; these should be acquired. We have only meager coverage for the modern languages.

Secondary products of research are again most abundant for linguistic, literary, religious, philosophical, and archaeological subjects. Ancient history has moderately good coverage, but medieval and modern history are very inadequately covered. In the case of those
last two topics we lack some source material as well as secondary ma-
terial, especially publications of material by Islamic authors in
India, often writing in Persian. The archaeological collection has
come through exchange of University Museum publications; but it is
weak on Greater India. In the history of Indian art the books in the
university libraries and in the library of the Philadelphia Museum of
Art jointly give a good basic collection, but some expensive works
should be added. Indic ethnology will probably be better represented
now that a graduate of the University of Pennsylvania's Department of
Anthropology has seriously gone into the Indic field, and is even now
in India on a research appointment.

The University of Pennsylvania is especially fortunate in owning
its large collection of Indic manuscripts. These have been acquired
during the past ten years through the interest of the late Mr. John
Gribbel, Dr. Charles W. Burr, the Faculty Research Committee, and es-
pecially Provost Penniman. Our almost 3,000 and Harvard's approxi-
mately 2,500 make up all but a few of the 7,273 listed by Dr. Horace
I. Poleman in his "Census of Indic Manuscripts in the United States
and Canada" (American Oriental Series, XII (1938) ), a work compiled
under the auspices of the American Council of Learned Societies.
Some of the rarities of our collection are mentioned in the Library
Chronicle for June, 1934, and December, 1935. Two doctoral disserta-
tions at this university have already been based upon some of this
material, to which of course added material in other manuscript col-
lections in Europe and India. Several other articles have involved
the use of our manuscripts, and still further work is in progress.
The collection will provide source material for much future work.

The art collections of the University Museum and the Philadelphia
Museum of Art have already been the source of research by scholars re-
sulting in articles and in a book which is just now in the press.
(W. Norman Brown, A Pillared Hall from a Temple at Madura, India in
the Philadelphia Museum of Art.)

There is no doubt that Philadelphia is at present an excellently
equipped center for research in the Indic field. The existing lacks
are not fundamental, but rather are of accessory material. They can
be supplied, and of course should be supplied, especially as demand
arises. Probably the only city in the country better provided with
material for research in the Indic field, including all the humanistic
subjects mentioned in this report, is Boston. To compensate, Phila-
delphia has an advantage over Boston in having superior resources in
the Near Eastern field, which as we are daily seeing has had close and
important contacts with India. This region must be considered now in
connection with research in India's past during the three millennia
preceding the Christian era, as well as with that concerning India
from the time of the arrival of the Moslems.

THE PENNIMAN-GRIBBEL COLLECTION OF SANSKRIT MANUSCRIPTS

By W. Norman Brown

The University of Pennsylvania possesses a collection of almost
3,000 Indic manuscripts, the largest in the Western hemisphere. The
total number of items in H. I. Poleman's Census of Indic Manuscripts
in the United States and Canada, as cited above is 7,273, with some
additional uncatalogued items bringing the number to "between 7,500
and 8,000". The second largest collection in this country is at
Harvard, where there are "about 2,500". The material is almost all
from India, but a few items are from Burma, Siam, Ceylon, Tibet.

A very few of the manuscripts had been acquired in chance
fashion by the library and the University Museum before 1930, but in
that year Provost Penniman gave a sum of money to purchase Indic
manuscripts, and shortly afterwards obtained a donation from the late Mr. John Gribbel. Other money came from Dr. Charles W. Burr, the Faculty Research Fund, and the Colton Fund. Some manuscripts have been donated. The purchases were made in India, between 1930 and 1935, under the direction of W. Norman Brown.

The entire collection is included in H. I. Poleman's "Census of Indic Manuscripts in the United States and Canada," which gives information concerning title, author (when known), material, number and size of folios, number of lines of writing on a side, script, date (when given), copyist (when named), and the library number. There is no separate printed list of the collection. The university possesses a card catalogue of the collection containing some of the material in Dr. Poleman's Census. No analytical description of the collection has ever been made.

The language of most of the manuscripts is Sanskrit, and the works are almost entirely connected with Hinduism (or Brahmanism). The two other great Indic religions, namely Jainism and Buddhism, are represented by only a few works. There are a few manuscripts in Pali, Burmese, Sinhalese, Tibetan, Jaina Mähräshtri Präkritic, and some of the modern vernaculars. The scripts is generally Devanagārī, but a few others appear, such as Tamil, Telugu, Burmese, Sinhalese, Tibetan. The manuscripts are generally written on paper: these are from western, northern, eastern, and central India. The few others are on palm leaf, and come from eastern and southern India, or outlying regions of Greater India. The age of the manuscripts is from the middle of the fifteenth century, although most of the materials are of the seventeenth and eighteenth centuries. This period is that of the average Indian manuscript; older documents are comparatively rare.

We have examples of many of the standard texts, such as the Rig Veda, some of the Brahmanas, parts of the epics and legendary history called Puranas, some legal texts, philosophical works, grammatical treatises, belles lettres, hymns of praise to various deities, sectarian religious books. We have also much material that represents texts so far unpublished or only inadequately published.

One of the most important classes of material in the collection is that of medieval and current practice of domestic religious rites or sacraments. The most ancient texts of this department of Indian religions have been fairly well, although not completely, explored. Later rites, which differ from the older as medieval and modern Christian baptism, marriage and funerals differ from those of early Christianity, have at best been reported only sketchily and hardly a text has been edited, translated, or even systematically analyzed. We have here a number of these works showing how properly to be born, live, and die an orthodox Hindu. One of the best in our possession tells in thirty-six closely written folios what to do just before, during, and after death, if you and your close relatives want you in the next existence to get the full advantage of pious Hinduism. This manuscript formed the starting point of a doctoral dissertation in Sanskrit presented to this university in 1933 by Dr. H. I. Poleman, which has given us a critical edition of the text, now supplemented by a translation and commentary, and has led into the study of related texts of death rites. In our collection are manuscripts of texts which could start similar important investigations into other medieval and current practices, for example, the daily rites of an orthodox Hindu.

Another slightly worked department of Indic civilization represented here is that of medieval law. In our collection the most outstanding item in this category is the code of the great Sivaji (1627-1680), a Maratha chieftain of western India who bitterly fought the Mohammedans and perhaps more than any other single leader contributed to the downfall of the Mughal empire. He endeavored to
re-establish Hinduism, devoted himself to protection of the cow and honor of the Brahmans, and had his legal system modeled with timely variations on the orthodox Hindu codes. A voluminous and rare Sanskrit manuscript in our possession contains his system as formulated by one of his Brahman ministers.

We have some valuable manuscripts dealing with Indian medicine, some of them coming from Nepal, and one being devoted particularly to the use of mercury in therapy.

A cult in Hinduism known as Śakti, wherein the male creative principle and female energization of it constitute inseparable associates, is represented by between 200 and 300 items in the collection, many of them unpublished, and some of these apparently important.

Grammar is very strongly illustrated in the collection.

Philosophy, especially the Vedānta, is illustrated in many texts, of which there are some unpublished texts. The Nyāya philosophy is also represented in some unpublished works.

One of the most famous Indian story collections, compiled about a thousand years ago, was known as the Brhatkathā "Great Tale", and a version of this, by Ksemendra, of which perhaps only six other manuscripts have so far been reported, is represented by one of our Sanskrit manuscripts.

Among the rare works is the Ganitanāmamālā by Haridatta, an astrological work. Another is the Prayascittaviveka by Sūlapāṇi, a work on the rites of expiation. Still another is the Smrtikaustubha, a text of death rites by Anantadeva, who wrote in the first half of the thirteenth century and was one of the earliest authorities on later Hindu ritual. A curiosity is an anonymous and probably incomplete text in dialectic Hindi on birds as omens, showing rude paintings of sixteen birds, some with onomatopoetic names not appearing in the Hindi dictionaries, and indicating whether these birds are favorable or unfavorable in connection with topics, such as starting on a journey or entering into a business association. It was possibly a village soothsayer's pocket guide.

One of the oldest dated manuscripts is of the Nyayamakaranda by Anandabodhacarya, an unpublished work on logic, of which three other manuscripts are listed in Aufrecht's Catalogus Catalogorum of Indic manuscripts. The colophon of our manuscript gives a date equivalent to 1505 A. D., a very old date for paper manuscripts in India except in western India, and indeed old for manuscripts anywhere in India except western India and Nepal.

The collection is without endowment, and no acquisitions are being made at present, although this is an excellent time to purchase.

CHINESE

By Derk Bodde

The material facilities existing in the Philadelphia area for the study of Chinese history and civilization may be conveniently divided into (1) books on China, and (2) Chinese collection of art. In both these categories the collections at the University of Pennsylvania are outstanding and form the logical center for study of such sort in or around Philadelphia.
Beginning in the autumn of 1938, the University of Pennsylvania was so fortunate as to receive a three-year grant from the Rockefeller Foundation, consisting of $1,500.00 per year, and given for the purpose of (1) increasing the University's already fairly good collection of books in western languages dealing with various aspects of Chinese civilization and (2) forming a collection of books in the Chinese language, a field in which it was heretofore almost totally deficient. The very considerable advance that has already been made in both these fields at the present time, little more than a year since the grant began to operate, may be seen from the paragraphs that follow.

Western books on China

The situation as regards this group may best be judged by turning to the pages of the authoritative bibliography compiled by Charles S. Gardner, A Union List of Selected Western Books on China in American Libraries (American Council of Learned Societies, 1938). According to this bibliography, which lists a total of 350 book titles and twenty-one periodicals of fundamental importance in the Chinese field, the University of Pennsylvania in 1938 possessed 165 of the 350 books and eleven of the twenty-one periodicals. This gave it a position of seventeenth among the seventy-six libraries in the United States and Canada whose holdings are listed in this bibliography. Since that time, however, the holdings of the university have been increased, so that they now include 284 of the 350 book titles, and eighteen of the twenty-one periodicals. This has enabled the university to improve its standing, so that now, as compared with the holdings of the other institutions as listed for 1938 in the Gardner bibliography, it occupies the position of ninth place.

Not only this, however, but about 100 titles not listed in Gardner's bibliography have also been acquired. These cover a wide field of interest, including such subjects as archaeology, art, history, philosophy, literature, music, economics, folk-lore, language and a host of other topics. They range in time from studies made on one of the earliest representatives of the human race, the Peking Man, who lived about half a million years ago, down to the political doctrines of the late Sun Yat-sen.

The chief gaps in the university's collection are (1) certain rare and out-of-print books that are very difficult to obtain, (2) some of the more expensive art publications and (3) works dealing with modern Chinese history (nineteenth and twentieth centuries). These gaps, however, are filled to a considerable degree by the holdings of other institutions in the Philadelphia area, such as the Philadelphia Free Library, the American Philosophical Society, Bryn Mawr College, etc. Meanwhile, the University of Pennsylvania is constantly making new acquisitions, and it is hoped that well before the expiration of the Rockefeller three-year grant, virtually all important works in the Chinese field will have been procured.

Books in Chinese

Books in Chinese in Philadelphia libraries are restricted almost entirely to those now being purchased by the University of Pennsylvania, where several thousand volumes have already been acquired. Of these, undoubtedly the most outstanding is a copy of what is the world's largest encyclopaedia, the Ku Chin T'u-shu Chi-ch'eng or "Complete Collection of Illustrations and Writings of Ancient and Modern Times." This work, compiled under imperial decree by a large group of Chinese scholars, was first published in 1726 in 10,000 chuan or books, comprising more than 800,000 pages and containing about 100,000,000 Chinese characters. The English sinologist,
Lionel Giles, in his book entitled An Alphabetical Index to the Chinese Encyclopaedia Ch'in Ting Ku Chin T'u Shu Chi Ch'eng (London: 1911), describes the printing of this encyclopaedia as "perhaps the greatest typographical feat that the world has seen," and estimates that it is between three and four times the size of the eleventh edition of the Encyclopaedia Britannica.

Less spectacular than this encyclopaedia, but of no less importance, are several modern compendiums of Chinese literature which have been purchased by the university. These compendiums consist of collections of fundamentally important Chinese works, and are somewhat similar in their idea to such a series as the Loeb Classical Library, but much broader in scope, in as much as they are not restricted to any one field, but cover all four of the major divisions of Chinese literature, namely classics, histories, philosophers and belles lettres. One such collection recently acquired is the Ssu-pu Pei yao, or "Important Works in the Four Divisions" (the four divisions of literature mentioned above), which includes 351 separate works. Another is the Ssu-pu Ts'ung-k'ian, or "Collected Printings in the Four Divisions," first, second and third series, which comprises 596 titles. The Kuo-hsueh Chi-pen Ts'ung-shu, or "Basic Sinological Library", containing 52 titles, is another collection of the same kind.

In addition to the above collections of reprints of old standard works, the writings of modern Chinese scholars are not being neglected. The university is making a particular attempt to secure complete files of the major scholarly Chinese periodicals, and recently an order was also sent off to China for about three hundred books of outstanding significance written by present-day Chinese scholars. Finally, the university has already acquired a considerable number of linguistic, biographical and geographical dictionaries, as well as bibliographies, indices to ancient classical works, and other reference books of fundamental importance.

The major problem arising in connection with this Chinese collection is that of cataloguing. This problem cannot be completely solved until the services of a cataloguer possessing a knowledge of Chinese have been engaged, and as yet, unfortunately, the necessary funds for such a cataloguer have not been forthcoming. However, an order has recently been sent off to the Harvard-Yenching Institute, Cambridge, for one set of 40,000 library cards, printed in Chinese with English transcription, and covering the holdings of the Chinese library at Harvard. A first installment of more than 5,000 of these cards has already been received and it is hoped that the acquisition of the remaining cards will mark the first step toward the cataloguing of the Chinese material at the University of Pennsylvania.

Although it is hardly probable that the university's Chinese collection will ever approach in size the really large Chinese collections in this country, such as those at the Library of Congress, Harvard, Columbia, Princeton and the University of California, yet the prospects are promising that by the end of the next two years a practical working collection will have been formed, sufficient to serve the scholar in Chinese for most ordinary purposes.

Chinese Art Collections

The collection of Chinese art in the University of Pennsylvania Museum, though not large, is qualitatively one of the most important in this country. In the field of Chinese sculpture (especially Buddhist sculpture) it is particularly outstanding, and together with the similar collections in the Boston Museum of Fine Arts and in the Freer Gallery of Art in Washington, probably ranks as the best in the country. It also has a few, but artistically very good, examples of Chinese bronzes, grave figurines, and pottery of the Sung dynasty.
It is almost wholly lacking, on the other hand, in later Chinese porcelain, while its collection of Chinese paintings is of minor importance.

The Philadelphia Museum possesses a collection of Chinese art which though fairly large, is of far less intrinsic importance than that in the University Museum. In its building in Fairmount Park, however, the Philadelphia Museum possesses a moderate sized collection of Chinese porcelain, which will probably eventually be moved into the main museum building, and which supplements to some extent the corresponding gap in the University Museum. Moreover, the Philadelphia Museum can boast of a remarkable example of Chinese architecture: an entire hall, of considerable size, which formerly formed part of the palace of a Manchu duke in Peiping, and which was transported to this country some years ago. This hall will ultimately occupy a large single room in the Philadelphia Museum, and when the work of erecting it is completed, probably within the next few months, Philadelphia will possess a specimen of Chinese architecture unique in this country.

PHILOSOPHY

By C. W. Churchman

The field of philosophy has so many divisions that it has seemed best to form this report in outline, with as adequate remarks as possible on each branch. Many of the interests of philosophy overlap with other fields, with the consequence that the total philosophical library is scattered all over the university. It would not be going too far to state that practically every branch of the university library contains books on philosophy and many of them contain important collections; we have made special note when the latter is the case.

History of Philosophy

Ancient Philosophy

Original or Source material: Good material in oriental philosophy. The Greek and Latin sections are for the most part fairly complete. There is very excellent library on Aristotle, for example, and the Plato material is very fine. The Loeb Classical Library is a great aid for the student.

Secondary material: Most of the standard works, though some works on special topics are lacking.

Medieval Philosophy

Original material: The Migne Patrologia (in Lea Library) is complete in Latin but not in Greek. Thirteenth and fourteenth century material is only fair, except that the library houses (in the vaults) the finest collection on Ockham in the country. The library of the Episcopal Divinity School, a few blocks away, contains a very excellent collection of Patristic material.

Secondary material: Most of the standard histories are in the library, but works on special topics are very incomplete.

Journals: The library does not subscribe to all the important journals on medieval philosophy.
Modern Philosophy \(\text{metaphysics, epistemology}\)

Original material: There are complete texts on all the great philosophers, and in some cases many editions of them (e.g., Kant, Sidgwick, etc.), but some of the minor works are either missing or incomplete. Contemporary philosophy is very incomplete in comparison with the Widener Library but we have many of the important works.

Secondary material: While containing many good works on the modern field, the library also lacks many special studies, some important.

Journals: The files of those in the library are in general complete, but some important journals are missing (e.g., Logos).

Ethics

The university's library on ethics, e.g., those volumes of interest to the student of philosophy, is fairly good. The collection on the English intuitionists is almost complete.

Aesthetics

Some of the volumes on experimental aesthetics are in the psychology section. In the case of philosophical aesthetics, we lack some important works, but are not badly deficient. The School of Fine Arts Library contains some volumes on the aesthetics of art, music, etc.

Logic (modern Logic)

The university's collection is only fair, but together with Bryn Mawr the library is adequate. The Mathematics Library contains some works on modern symbolic logic.

Philosophy of Science

Many of the important works in this field are contemporary, and the library is deficient in contemporary material in philosophy. The deficiency is especially noticeable in special works on the subject, e.g., in probability theory. But in the case of the philosophy of a special science, many other departments have filled in the gap. For example, the Moore School Library has some good works on the philosophy of physics, the Zoology Library has some on the philosophy of biology, etc.

Jurisprudence

Most of the valuable material is in the Biddle Law Library.

Conclusions

The university library is excellent on standard works in philosophy, but, with the exception of special cases, is not adequate for very detailed research. Such inadequacy is overcome in part by other libraries in the metropolitan section.
POLITICAL SCIENCE

By Bradford W. West

The principal collections for the study of political science at the University of Pennsylvania are to be found in the General Library, the Biddle Law Library and the Lippincott Library. An excellent specialized library for the study of state and local government is being built up by the Institute of State and Local Government. None of the other departmental libraries are of comparable usefulness in this field although the resources of the Penniman Library would be invaluable for research in governmental educational systems.

There is some duplication of materials in the libraries mentioned but little which is not justified. Most of the duplications are of reference books, textbooks or special services constantly used by undergraduate or graduate students. In the case of such books it is proper to have additional copies placed in the departmental libraries most conveniently located for the students and faculty using them.

Since the field of political science has numerous subdivisions it seems best to comment first upon those library resources which are used in all or several of these subdivisions. This will be followed by analyses of the facilities for the study of the various subjects. Invaluable assistance has been given me by the men teaching these courses who have appraised the university's library facilities with respect to their own subjects.

General Political Science Sources

United States Government Documents

These, together with state and local official publications, are the most essential source materials in many branches of political science. In this respect the university is extremely well equipped. In addition to the General Library's excellent collection of statutes, committee hearings, departmental reports, etc., the research student has available the extensive facilities of the Biddle Law Library. Court reports and many other especially useful government publications may also be consulted in the Lippincott Library. Another very extensive collection of United States government documents is located in convenient proximity to the university in the Commercial Museum Library.

State and Local Government Documents

Although the various libraries of the university have excellent collections of some kinds of state documents, they are unfortunately inadequate with respect to some other kinds. There are complete collections of the constitutions, statutes and supreme court decisions of all the states. Likewise most but not all of the recent survey reports in the fields of state and local government, which have been made available for distribution, are here. Other state and local documents are very numerous but in many cases there is not comparable material for all the states nor are the series for a given state always complete. Naturally there are more nearly complete documents for Pennsylvania than for any other state. Although the libraries contain numerous state "manuals" and reports of departments and fiscal agents, many are missing. There are some copies of state and local budgets but for a few states and cities only. Crane's Digest of City Charters as well as complete charters and ordinances for a very limited number of cities are on the campus but the material of this character is adequate for neither intensive nor extensive research.
Periodicals and Newspapers

The General Library subscribes to all the important American political science periodicals such as the *American Political Science Review*, the *Political Science Quarterly*, the *Annals of the American Academy*, the *National Municipal Review*, *Public Management* and the *Southwestern Social Science Quarterly*. There is a less complete but in most respects fairly adequate selection of British, French and German political periodicals. Less specialized periodicals containing material pertinent to political science are well represented in the library. Daily papers include the *New York Times*, *Christian Science Monitor*, *Philadelphia Inquirer*, *London Times*, *Journal des débats*, and the *Corriere della Sera*. A notable omission is the absence of any German newspaper. The Biddle Law Library's valuable collection of law reviews should be noted. All the important bibliographical aids are available in the General Library. Less extensive but in some respects more intensive aids are to be found in the Lippincott and other departmental libraries.

American National Government

In American national government there are comprehensive collections covering early American constitutional history, English constitutional history, the American Convention debates, the debates in the state conventions and pamphlet material of the formative period of American government.

Following the historical material there is a comprehensive collection of reference works, commentaries, government documents in full, together with both early and recent standard works on the constitutional system and on special branches such as the executive, congressional and the judicial. Because of the inadequate funds available for acquisitions in recent years, however, there are numerous valuable recent studies lacking from the shelves.

American State and Local Government

In this field the new and excellent library of the Institute of State and Local Government deserves special mention. Since its facilities are necessarily limited to a select group of students the other facilities of the university for study in this field must be appraised. The availability of government documents and periodicals has been noted above. In addition we have most of the older texts and special reference works but the libraries are inadequately supplied with authoritative works of recent date.

Public Administration and Administrative Law

Several important recent acquisitions of books in the field of public administration have improved the situation materially. A number of others are needed, however. Since the Political Science Department has not recently offered a course in administrative law, I defer to the judgment of the law faculty as to the adequacy of our libraries for research in this subject.

American Labor Legislation

In the field of American labor legislation, the principal Government series, including such issues as the *Monthly Labor Review*, the *Monthly Bulletin*, the *National Labor Relations Board Decisions*, and the *Reports* are all well covered. In addition, there is an excellent collection of labor union journals and proceedings, and a large group of works on specialized subjects connected with union organization, union protection, label, closed shop, etc. Closely related is an extended series of books and magazines on personnel management. This combination makes our collection in the field an eminently satisfactory one for both research and teaching.
British government publications are extensively represented, most of the documents needed for research concerning present-day British government being available. A recent acquisition of value contains the constitutional documents of all parts of the British Empire. There is a fairly extensive collection of German publications including the essential Reichsgesetzblatt, and the Ministerialblatt des Reichs-und Preussischen Ministeriums des Innern, as well as important publications of the Statistisches Reichsamt. The principal French publication is the Journal officiel. Switzerland is represented chiefly by the Amtliche Sammlung der Bundesgesetze und Verordnungen der Schweizerischen Eidgenossenschaft. In view of the greater facility with which American students use the romance languages it is perhaps regrettable that the German, rather than the French or Italian version of this important collection is the only one available. There are, in addition, many publications of other governments, but for no other country is the collection so complete as for these four, upon which the research of American students of political science was largely concentrated until very recently. In view of the present importance of the Fascist government it is noteworthy that our libraries are wholly devoid of official Italian publications. We need as a minimum La Gazzetta ufficiale, the Annuario statistico, and Sindacato e corporazioni. Princeton has the nearest available file of La Gazzetta ufficiale beginning with the issues of 1921 or 1922. For earlier issues one must go to New York or Washington.

The increasingly important Russian and Japanese documents are also almost completely lacking.

Secondary materials

The situation with respect to foreign periodicals has been noted above. I should like to reiterate that the General Library should subscribe to one or more German newspapers. For current use in political science the Voelkischer Beobachter would probably be best, although the Frankfurter Zeitung would doubtless be preferable for general purposes.

Our libraries contain an excellent selection of the older standard books dealing with the governments of the principal foreign countries. In recent years curtailed funds have made it possible to buy only sparingly of American books in this field and to a somewhat less extent books published in Great Britain. It has been possible to secure a fair selection of volumes dealing with the rapidly changing governments of Germany, Italy and the U. S. S. R. On the other hand we do not have a number of valuable British studies of special aspects of the British government nor most of the voluminous French, German and Italian works on modern government.

Political Parties and Public Opinion

We have election laws for all the states in Lippincott Library and statutes in general for all the states in the Biddle Law Library. We do not have a complete set of state "manuals" nor any other source of complete information on election results. Our libraries are adequately equipped with books on the historical aspects of parties but books on current developments have not been acquired as freely as might be desired. More newspapers from other sections of the country would also be required to make the university a research center in political parties.

A great majority of the books on a recently compiled bibliography on public opinion and propaganda were found to be in the libraries of
the university. Two weaknesses appeared; first the great mass of recent literature in this field is inadequately represented; second, a large number of doctoral dissertations dealing with public opinion have not been received by our library. This is particularly true of theses completed at Ohio State, Columbia, Syracuse, Chicago, Stanford, Johns Hopkins, Kansas and Yale universities.

Political Theory

The principal works required by students in political theory are in the General Library, usually in the best editions. Among the newer books, particularly in American political theory, there are a number for which funds have not been available.

Public Finance

The libraries of the University of Pennsylvania offer a generally satisfactory collection of materials in public finance. General treatises in English and foreign languages are available with a goodly collection of books on particular topics to supplement them. Periodical and pamphlet literature is abundant. Both the general reader in public finance and the student who specializes in specific phases of the field will find here many valuable materials to aid him. The important publications of the federal government are received as well as those of many of the state and local governments. In addition, subscriptions are carried for the publications of many private research agencies. Contemporary literature in this field is so copious, however, that it has not been possible to purchase all the monographs and research reports of value which have appeared recently. There is also a need to supplement the present collections of state and local reports.

The material in the libraries relates very largely to the financing of American governments, but English public finance is also quite well covered. Less abundant materials are available concerning the financing of other countries. The Colwell and Carey collections contain many rare pamphlets on public finance of the seventeenth and eighteenth centuries.

International Law

In the field of international law, neither the General Library nor the Biddle Law Library has the material necessary for extensive research nor extended graduate study. For the work of undergraduates the material is fairly adequate. The two libraries do not duplicate one another's books; for instance, many reports of commissions and court decisions, and some legal texts and commentaries, may be found only in the Law Library; while the publications of the League of Nations are in the General Library. It is unfortunate that there is no common catalogue for the two libraries.

A few of the more modern works in various special fields of international law are definitely needed. For instance, our undergraduate classes could profitably use now a copy of D. V. Sandifer's Evidence Before International Tribunals. It would also be highly desirable to have a set of the published opinions of the Mixed Claims Commission, United States and Germany, if they could be obtained, although many of these have been published in the American Journal of International Law, which is available in the library.

With these few additions and the keeping up of similar publications as they come out in the future, the university can fairly well supply the ordinary needs of the undergraduate student. For more advanced research and intensive graduate study, much more material would be necessary. The university among its several libraries has more material needful for the student of international law than any
other library in the City of Philadelphia, with the possible exception of the library of the American Philosophical Society, which is not so well adapted for undergraduate study. The university library also has more material published in the beginning and middle of the nineteenth century than any other library in Philadelphia or its vicinity, including several pamphlets on neutrality and the freedom of commerce during the War of 1812 and the American Civil War. In some other respects its international law collection is somewhat inferior to that of the Bryn Mawr College Library.

International Relations

The General Library has had a global subscription to all League of Nations documents for many years, and has filled in the gaps of the early period whenever documents are still in print. Unfortunately, the cramped facilities of the library, plus the fact that it has been understaffed (with particular need for full-time experts on documentation) renders the material less serviceable than it ought to be. Further, there is a great lack of material on important international public unions (such as the International Postal Union, its Congress reports and its periodical, L'Unione postale.

Attention has been given elsewhere to source materials available for the governments of Europe and the United States. It may be observed here that materials on the Far East are woefully deficient.

Secondary materials in the general international field have not been adequately maintained in the past decade. A survey made last year revealed hundreds of important titles of this period which are not in the library.

I shall not include here any appraisal of the facilities for the study of Latin American relations as I understand a separate report is being prepared on that subject.

Conclusions

It is obvious from the foregoing statement that the resources of the university's libraries for research in political science vary greatly as between the different branches of the subject. They are best with respect to American government, particularly national, and weakest in the field of international relations. Throughout, however, there has been a weakening of its resources in the last ten years or so, due to the lack of sufficient funds for acquisitions. Fortunately the ill effects of this situation have been permitted to affect least the acquisition of source materials and essential periodicals.

HISTORY OF RELIGION

By Professor Emeritus J. A. Montgomery

The history of religion is technically a modern title in bibliography, arising in the present writer's lifetime, and yet religion has been an integral, often major part in human civilization, most strikingly so in its ancient epochs, but equally so down to recent ages, as for the Western world in the establishment of the Christian church-state, the Holy Roman Empire, with its younger rival in Islam, equally religious and political, the whole medieval period, the Protestant Reformation and its aftermath and reactions for centuries, while our own American history was in its beginnings deeply rooted in religious impulses, which have continued to play their part, political and sociological, down to the present day. But the essay at an encyclopaedic study of the history of Religion, with its parallel in the history of philosophy, is still young. The result has been that in the several fields of history with an increased
knowledge of the importance of the subject of religion the special­istic scholars, linguists, historians, sociologists, have pursued the theme in their several fields, while on the other hand the "vision of the whole" is still in its beginnings. All American "professorships in the history of religion" are of very recent foundation, and many of them still remain of superficial value because of the immensity of the field. Our own university has no such professorship, and its formal Group of History of Religion is composed of an aggregation of specialists in most distant and distinct specialties, with quite varying interests in the subject of religion. The late Professor Jastrow was however one of the pioneers in interest in the larger subject, and Professor Emeritus Barton has worked at large in that field.

For the ancient world, Greece and Rome, the Near East - Egypt, Palestine, Syria, Arabia, the Euphrates Valley, the Middle East - e.g., India, the Far East - China, Japan, the several special groups have in part good collections in the library; there may be named especially the collections in Indic and Chinese studies, of recent acquisition. For the Hebrew-Jewish religion (the Old Testament, etc.) and for Islam, apart from the linguistic and historical aspects, these collections are not all full, and for the rise of the Christian Church (the New Testament, etc.) and the first ages of Christendom they are most defective. For later Christian Europe there is one unique collection, the Lea Library, bearing upon the Inquisition and all the history entailed. This mass of material for one confined field brilliantly shows up the vacancies for the medieval and Protestant ages of Europe. The still young but essential subject of primitive religion is in the hands of the Group of Anthropology, which has displayed its interest in securing valuable collections in some of the many fields of the history of primitive man, which covers the globe.

The College of Philadelphia, becoming later the University of Pennsylvania, almost uniquely among the Colonial foundations, started free of all church affiliations, and has remained so ever since. Hence its libraries never possessed early ecclesiastical and theological collections, and these lines have not since been consistently developed. However, the several excellent theological seminaries in and about Philadelphia are fitted to supply many of these gaps. Mention may be made of the Divinity School of the Protestant Episcopal Church, with a special library foundation for Patristic (Greek, Latin, Oriental) and Catholic literature; the Lutheran Seminary; the Augustinian College (Roman Catholic), Overbrook, and Crozer Seminary (Baptist), Chester. The study of the history of religion has become a prominent feature in the seminaries, but its level greatly requires elevation. To these institutions is to be added the Dropsie College for Hebrew and Cognate Learning with admirable Judaic and Arabo-Judaic collections.

The Union Catalogue of Philadelphia will serve admirably to avoid unnecessary duplications among the Philadelphia libraries, and direct attention to important lacunae which should be filled up in the pertinent quarters. Greater intercommunication and mutual adjustment of library acquisitions is a greatly needed desideratum in this vast field.

The Seybert Collection: Spiritualism

By Paul F. Gemmill and Edgar A. Singer

"The late Mr. Henry Seybert--shortly before his death presented to the University of Pennsylvania a sum of money sufficient to found a chair of Philosophy, and to the gift added a condition that the University appoint a Commission to investigate all systems of Morals, Religion, or Philosophy which assume to represent the Truth, and particularly of Modern spiritualism". (cf., Preliminary Report of
The collection comprises 284 titles, 475 volumes. The dates of acquisition are all prior to that of the Report. The dates of authorship range from 1658 to 1887. The collection is believed to be the richest in the country of works on the subject of spiritualism, mesmerism, animal magnetism, telepathy, etc., of authorship falling between these dates.

The market value of the collection was appraised in 1900 at $3,000. It would be difficult to form an opinion on the scientific value of the works included. Their value as historic documents may be suggested by a rough estimate of their comparative rarity. We judge some fifty titles to be rare; if the remainder contain works of any particular rarity, this could only be known to a special student of the literature of spiritualism.
Since 1927 the Department of Mathematics has had in Bennett Hall the Mathematics Research Library where are gathered the indispensable tools of the working mathematician. This library has been a great stimulus to our graduate students. Faculty and students find it a great convenience to have all the books devoted exclusively to higher mathematics gathered in one place.

The University of Pennsylvania is the natural center of gravity for mathematics in this area; we have for the past seven years exchanged professors and advanced students in graduate courses with Bryn Mawr, Swarthmore and Haverford as well as holding a common Mathematical Colloquium. The possession of a good mathematical library such as we have, has been a great aid in cementing these ties; our mathematical colleagues at the above and other neighboring institutions are continually consulting our collection for material not available in their own libraries. We shall list below the status of our library with respect to the various natural headings under which fall the materials used by the research mathematician.

Scientific encyclopaedias

We have in our library complete copies of the German Enzyklopädie der mathematischen Wissenschaften (now about 25 bound volumes) and the French Encyclopedie des sciences mathematiques (19 volumes). New numbers of the former are appearing continually, and acquired by our library.

Abstracts of mathematical literature

We have complete sets of the following journals devoted to the reviewing of current research in various mathematical journals: Zentralblatt für Mathematik und ihre Grenzgebiete (now to vol. 20), Jahrbuch über die Fortschritte der Mathematik (now to vol. 63), and the Revue semestrielle des publications mathematiques (publication here has been discontinued since advent of the Zentralblatt für Mathematik).

Mathematical journals

Our library subscribes to the leading journals devoted to the publication of mathematical research which appear in the United States, Great Britain, France, Germany, Italy, Holland, the Scandinavian countries and Japan. In all we have approximately 3,000 volumes under this category. In all cases our collections go back to the first numbers of the journal and are complete except for a few volumes which have been lost.

With the exception of Wiadomosc matematyczne, we have all the leading Polish mathematical journals. Our collection does however not contain any Greek, Hungarian or Roumanian mathematical journals. We are also weak in Russian journals due to the fact that in building up a library it was natural to first secure those journals in languages accessible to the largest number of scholars. However, there has been very much fundamental research produced by the Russian mathematicians during the last twenty years and more and more of their journals now contain a large percentage of articles in French and German as well as a number of memoirs in English. At present the only Russian journal we have to which we subscribe and of which we have the back volumes is Recueil mathematique de la Société de Moscou. To make available the full development of Russian mathematics there should be added as soon as possible the following sets of journals: Communications of the Kharkhoff

We are also lacking in the Indian Mathematical-Physical Journal and the Journal of the Indian Mathematical Society.

The Main Library and the Wharton School Library have journals devoted to theoretical statistics which many mathematicians use but which it does not seem necessary to duplicate here. None of these have the Giornale degli Istituto d'attuari d'Italia. There is also no complete set of Metron in Philadelphia and vicinity.

Collections of monographs on modern developments in mathematics

There have been published in recent years a number of excellent series of mathematical monographs. Most prominent amongst these are the following, of which we have complete sets: The Borel Monographs on the Theory of Functions, Mémorial des sciences mathématiques, Grundlehren der Mathematischen Wissenschaften (51 vols.), Ergebnisse der Mathematik and Ihrer Grenzgebiete, Mathematik und ihre Anwendungen in Monographien und Lehrbüchern, Sammling Goschen, and Colloquium Publications of the American Mathematical Society.

Proceedings of international congresses of mathematicians

We have complete sets of the proceedings of the various congresses beginning with those of the first such congress in 1893 and continuing at four year intervals (interrupted by the war) to those of the congress at Oslo in 1936.

Collected works

We have practically complete sets of the collected works of all mathematicians of whose research publication has been undertaken.

Advanced books and Treatises

Certain books have not been possible for us to procure during recent years because we have felt it desirable first to keep complete our periodical sets. The collection is fairly good in this respect and it is felt that gaps can be filled readily with increased appropriations. For the present, the neighboring institutions which do not maintain as large a journal list as ours, do help with some of our deficiencies.

Theses

Through our exchange bureau in the Main Library we do obtain doctor's dissertations from this country and abroad. These are catalogued under authors. It would be desirable to have them also catalogued by title. We have approximately 4,000 theses in our library. Less than one third of these are bound but the remaining ones are catalogued and available for use. However, our set of theses is not complete. Our largest gaps are in French dissertations. It would be desirable to purchase a complete set of dissertations submitted to the University of Paris. Afterwards our German thesis collections should be carefully studied and omissions supplied.

There are in the Main Library the various collections of proceedings of national academies of sciences of various countries, foreign philosophical societies, etc., which contain articles in mathematics as well as those from other fields of science.
There is one entirely new direction in which we should expand our library. It is in the field of mathematical models of surfaces and curves. The writers remember the very fine collection of mathematical models displayed in the halls of the Mathematical Institute at Göttingen. To have a good collection of these would be an aid to many students in elementary as well as advanced graduate courses and also as a stimulus to arouse the curiosity and interest of younger students in some of the beauties of geometry.

On the whole we have a good collection, and the above suggestions are made with the thought of making it as complete a set of working tools of the research mathematician as possible.

CHEMISTRY AND CHEMICAL ENGINEERING

By Ralph Connor and John G. Miller

Our resources in chemical and chemical engineering literature at the University of Pennsylvania include the Smith Memorial collection, which is housed in Harrison Laboratory, and modern chemical literature. Most of the latter is located in the Hatfield Room in the Main Library, but some useful material is located in the Medical Library, Library of the Department of Physics and the Towne Scientific School Library. This division of the literature is probably justified by the fact that the present distribution causes the least inconvenience for the majority of the people who use our library facilities. These departmental libraries are included in the survey of our resources in modern literature.

A few words should be said about the needs and facilities of this area for chemical library work. Philadelphia is practically the center of the chemical industry and the nearby territory includes large numbers of research and industrial laboratories. This means that there is an unusual need for complete library facilities in this locality. Considering the area as a whole, the combined resources of the University of Pennsylvania, the Franklin Institute, the Free Library, the Philadelphia College of Pharmacy, and the Library of the College of Physicians compare favorably to those of any other similar area.

Edgar Fahs Smith Memorial Library

The nucleus of this library was left to the university by our late provost, Edgar Fahs Smith, and included old books on chemistry and alchemy as well as pictures and cuts of historical interest. The collection contains representative works from 1480 through the remainder of the fifteenth century and is fairly complete from the sixteenth century. Both in the number of rare books and in the total number of works, this is probably the largest collection dealing with the history of chemistry, with the possible exception of two German collections. This library now contains about 10,000 items, of which about 6,000 are books and pamphlets. Additional acquisitions of old books are made when they become available and all of the current literature dealing with the history of chemistry is added to the library. A generous endowment by Mrs. Smith insures the continued expansion of the library and makes possible the services of a full-time curator. This is the only library in this country which is devoted to the history of chemistry, is open to the public and is continually being increased. Its importance is attested by the amount of information it supplies to chemical historians in this country and abroad. The Curator of the Collection, Miss Eva Armstrong, has written a more detailed account.
A complete modern chemical library should contain (1) periodicals devoted to research, (2) abstract journals and comprehensive indexes to research originalia, (3) treatises, encyclopedias, and comprehensive compilations of data, (3) reviews and monographs dealing with special topics, (5) elementary texts and (6) patent literature. This survey, therefore, will briefly consider the resources of our library in each of these types of literature.

Our supply of periodicals, although by no means complete, can be safely said to include all those that would be used regularly. For example, of the thirty-three common chemical periodicals listed on page 37 of Soule's *Library Guide for the Chemist* (New York: 1938), thirty-two are on the campus and, with four exceptions, in practically complete sets extending back to the first issues. The one periodical not available is a weekly news-letter published in Germany and rarely useful in research. As a typical example of our resources in special literature, of seventeen periodicals from various countries which frequently contain references to industrial heat transmission, thirteen are in our library and four are missing. Of the latter, only one would be likely to be very useful. We do not have many of the less common and seldom-used publications. However, it is doubtful if an attempt should be made to secure these periodicals, since most of them are available at the Franklin Institute. Chemical work published in pharmaceutical journals may be found in the Library of the Philadelphia College of Pharmacy which is only a few blocks from our campus. Because of our convenient location with respect to these libraries the only periodicals added to our list in recent years have been those which are not available elsewhere to this locality.

One of the most serious weaknesses in our journal resources is the apparently permanent loss of some volumes, probably due to theft. Replacement of these will be quite difficult if long delayed.

The library has all of the abstract journals and comprehensive periodical indexes that are worthwhile. Unfortunately, there are only a few volumes of the *Chemisches Zentralblatt* before the 1896 issue, after which the series is complete to date. This deficiency is not important, however, since the *Bulletin de la societé chimique de France* covers the early literature back to 1857. Furthermore, much of the early literature which might be useful to modern research is best obtained by use of treatises such as Beilstein and Gmelin, formula indexes such as Richter and Hoffman, and subject and author indexes such as the *Repertorium der technischen Journal-Literatur* and the Royal Society's *Catalogue of Scientific Papers*. All of these are in the library.

Our library has all the important treatises, encyclopedias and comprehensive compilations of data (e.g., Beilstein, Gmelin, Mellor; Fehling, Thorpe, Ullman; Annual Tables, *International Critical Tables*, Landolt-Boernstein). Not only the latest editions of these are on hand, but also many of the older editions. Old editions of such works are not to be considered fully replaced by following editions since, due to the rapid expansion and changing specialization in the many branches of chemistry, new editions must actually omit, rather than modernize, much of the valuable material of the older editions. For this reason, references to older editions are often met in modern work.

Complete files of the important reviews and annual surveys (*Annual Reports*, *Annual Review of Biochemistry*, etc.) are on the campus. In certain fields we have a good collection of monographs and books on special topics. For example, from a list of twenty books selected at random from a list devoted to chemical engineering, sixteen were in our library, two were there but not in the latest
editions, and two were missing. This exemplifies our resources in fields in which we have had an active interest at the university. In some fields in which no member of the staff has worked, we have few books and it seems that no attempt has been made to obtain a good general selection. However, the Franklin Institute has a complete collection of works of this type and we probably have no real need for extending our present collection at this time.

The statement concerning monographs may also be applied to texts. We have a considerable number of these and probably do not need many more because of the fairly complete collection at the Franklin Institute. It might be added that some of the texts in the Hatfield Room are quite old and valuable. These would probably be more useful and more appropriately located if they were transferred to the Smith Collection.

A rather complete patent survey may be made in the library by the use of Friedlander (of which we have a complete collection) and the abstract journals. We are fortunate in being close to Franklin Institute which is one of the few libraries maintaining a complete file of United States patent specifications and which also possesses a valuable collection of those of Great Britain and France.

Conclusions

The University of Pennsylvania has the Edgar Fahs Smith Memorial Library containing the outstanding collection in this country which deals with the history of chemistry. In modern chemical literature we have the publications which are used regularly and we are able to secure the more obscure publications from other nearby libraries. Our present collection would be an excellent nucleus for a complete chemical library. Considering the entire Philadelphia area, it is doubtful if any community has better facilities at present for chemical library work.

THE EDGAR FAHS SMITH MEMORIAL COLLECTION
IN THE HISTORY OF CHEMISTRY

By Eva V. Armstrong, Curator

The Edgar Fahs Smith Memorial Collection consists of three sections: The first and most important section is devoted to the history of chemistry; a second section is devoted to the early history of the University of Pennsylvania; a third section consists of early American stipple engravings.

Dr. Edgar F. Smith, formerly Provost of the University of Pennsylvania and Director of the Department of Chemistry, assembled a collection of rare books, manuscripts, and prints, the majority of which were purchased in Europe. After his death in 1928, the library was presented to the University of Pennsylvania by his widow, Margie A. Smith. It was opened to the public in March, 1931, under the care of a full-time curator. The material in the collection has been catalogued in accordance with modern library methods. Mr. Frederick E. Brasch, Chief of the Smithsonian Division of the Library of Congress, generously contributing his services as library consultant.

In the Smith Memorial Collection there are approximately 10,000 items, including 6,000 books and pamphlets, 3,000 prints, and about 1,000 manuscripts. Interest in the collection is evidenced by the fact that since 1931, gifts of books, prints, and manuscripts to the number of 3,143 have been received from donors in the United States and Europe.
The history of chemistry section is the largest and most important part of the collection. Here may be found the classics in chemistry, such as the works of van Helmont, Jean Rey, Stahl, Lavoisier, Priestley, Sir Humphry Davy, Liebig and others. There are histories of chemistry, from the first attempt in this field by Robert Vallensis in 1561, down to modern versions. With these are bibliographies, such as those of Lenglet Dufresnoy (1742), Caillet, Brunet, H. Carrington Bolton, and Ferguson's Bibliotheca chemica. The earliest book in the chemistry section is dated 1480 and was written by Saint Thomas Aquinas. In each succeeding century down to the present, outstanding contributions in chemistry are represented, and it is the present aim to fill gaps in these ranks. Biographies of chemists are included. Rare books on alchemy form an important part of this section and include the works of Egyptian and European alchemists — Geber, John Dee, Edward Kelley, Flamel, Paracelsus, and others. There are numerous examples of the works of Robert Boyle. Because of the close connection between chemistry, medicine, and physics, items relating to the latter sciences are included. There are first editions and presentation copies by Faraday, Berzelius, Volta, Edward Jenner, and others. Two books from Sir Isaac Newton's library are annotated by him. Modern publications on the history of chemistry are added as they appear, as well as periodicals devoted to science history.

Among the manuscripts in the chemistry section are letters by Madame Curie, Pasteur, Mendeleeff, Priestley, and many others. The Smith Collection furnished two important alchemical manuscripts to Dr. W. J. Wilson, of the Library of Congress, for a publication entitled A Catalogue of Alchemical Manuscripts in Latin and the Vernacular in the United States. One of these was originally in the library of John Winthrop, first Governor of Connecticut, and is annotated by him. The prints in the chemistry section consist of rare engravings, lithographs, and photographs of chemists, chemical and alchemical laboratories, and of apparatus. Photographic reproductions of paintings in European galleries, of chemical and alchemical interest, are included.

The section on the history of the University of Pennsylvania is small but contains Americana of general interest, including early American imprints and textbooks. Among the manuscripts in this section are ten letters of signers of the Declaration of Independence.

The collection of stipple engravings numbers something under one thousand and represents the work of the earliest American engravers. They are mainly portrait prints and the subjects are general in character.

It will be seen that the strength of the Smith Memorial Collection lies in the history of chemistry material. This section is made up largely of collectors' items and is unique in that it contains material difficult to obtain in the United States. It resembles certain foreign collections, such as the "Deutsches Museum" in Munich. It is the only special collection of its kind in this country which is available to the public and from which reference data, photostat and photographic reproductions or rare source material may be obtained. It is consulted by authors writing in science history and by professors in various universities in planning courses on the history of chemistry. A collection of negatives and lantern slides is being built up to expedite this service. Material has been supplied to scholars and to scientific institutions from Canada to Texas and from Boston to California, as well as in Europe. An instance of service rendered to the Royal Swedish Academy of Sciences may be cited. The Academy requested the Smith Memorial Collection to assist it in locating manuscripts of the Swedish chemist Berzelius in the United States. Three proved to be in the Smith Collection and seven others were located by the curator in private collections and other libraries.
Photostat copies were supplied to the Swedish Academy, which in appreciation, presented eight volumes on Berzelius and other Swedish scientists to the Smith Memorial Collection. Service rendered by the Smith Collection to Mr. E. Kilburn Scott, of London, led to the receipt of valuable relics of Joseph Priestley from the Priestley family in England. These included a Wedgwood medallion of the scientist made in 1769.

The resources of the collection are utilized by Professor C. L. Deischer, of the University of Pennsylvania, in illustrating courses on the history of chemistry in the graduate and undergraduate schools. Papers based on material here have been read before various scientific societies by Dr. Deischer, Dr. H. S. Lukens and by the curator, or published in scientific periodicals.

The Smith Collection is well known to members of the American Chemical Society. Dr. Marston T. Bogert, of Columbia University, pronounced it "the finest collection of its kind in America, and one of the best in the world." Mr. F. E. Brasch, of the Library of Congress, wrote: "This library is developing into a remarkable research institution for the history of chemistry." Professor T. S. Petterson, of the University of Glasgow, commented: "I am very glad to know that you pay so much attention to the philosophical and historical side of chemistry at the University of Pennsylvania."

There is no published catalogue of the collection. Its card catalogue is duplicated in the Union Library Catalogue of the Philadelphia Metropolitan Area. Brief descriptions of the library have been published in various periodicals and a separate pamphlet describing it was issued by the university in 1937, and two thousand copies distributed to libraries and universities.

The Edgar Fahs Smith Memorial Collection has been endowed by Mrs. Edgar F. Smith. An endowment of $50,000 provides for maintenance and upkeep. An additional endowment of $10,000, to be used solely for the purchase of books, prints and manuscripts, is now being contributed by Mrs. Smith. Of this amount $7,000 have been received from her by the Trustees of the University of Pennsylvania. The original $50,000 endowment has been paid in full. Commenting on this endowment, Dr. Tenney L. Davis of the Organic Research Department of the Massachusetts Institute of Technology, wrote: "I am grateful to you, as every other student of the history of chemistry must be grateful for the endowment of the Edgar Fahs Smith Collection. The permanent pre-eminence of the Collection is now assured...It ought to be the best collection in the history of chemistry in the world."

**PHYSICS**

By Frederick Seitz

The total number of books needed for pursuance of study and research in the fields of physics is sufficiently small so that they may easily be kept in a well-planned departmental library. At the present time most of the books and periodicals relating to physics are housed in the Randal Morgan Laboratory. With a few exceptions, this library contains practically all of the material necessary to carry on work in almost any field of physics that is of present-day interest. The exceptional cases are, for the most part, contained either in the Main Library or in other departmental libraries. In the few remaining cases with which the writer is acquainted, it has always been possible to find the work in one of the nearby libraries such as that of the Franklin Institute, or the Bryn Mawr Library. If the reference in question is a single book, it is usually added to the departmental library as soon as the deficiency is discovered.
In addition to books required for research and instructional purposes, the library contains a large number of the historically interesting books, such as Newton's *Principia*. These books are kept under separate lock and key, but are available to any person who has need of them.

**Periodicals**

As in most other branches of science, the periodicals are the most important unit of a library collection. The physics library possesses all of the prominent periodicals that are devoted exclusively to physics. Most of the borderline journals, such as the periodicals devoted to physical chemistry or physical metallurgy, are available either in the Hatfield Collection in the Main Library, or in other departmental libraries such as that of the Moore School. In addition, the periodicals, such as *Nature* and *Naturwissenschaften*, that are used by all branches of science, and to which physicists commonly contribute, are available either in the Randal Morgan Laboratory or in one of the other departmental libraries.

As far as the writer is aware, all of the prominent periodicals that are of interest to physicists are available on the campus. Moreover, duplicates of them are available at a number of libraries in the vicinity, such as those associated with the Franklin Institute, the American Philosophical Society, and the Physics Department of Bryn Mawr College.

**Handbooks and Technical Books**

Next to periodicals, the most important books are the special handbooks and technical books devoted to survey of particular fields of physics. There are of two types: Many-volume sets, such as the *Handbuch der Physik* and the Physical Society of London's *Reports on Progress in Physics*, and special volumes on particular topics, such as the technical books put out by many scientific publishers. The Randal Morgan Laboratory Library contains practically all physics books of this kind that have been published. There are notable exceptions, however. For example, several books relating to the determination of crystal structure by means of x-rays are present neither in the departmental collections nor in the Main Library. In this particular case it was found that the Physics Department of Bryn Mawr College possessed the books, and it was decided that duplication would be unnecessary.

It is probably worth calling attention to the fact that the physics department library now contains the nucleus of what is hoped will grow into one of the best collections of books relating to the physics of metals. This collection was started only within the last year, but it is felt that most of the important books can be added within the next five years provided conditions in Europe do not continue to deprive us of access to European publishers.

**Elementary Student Books**

A large number of books are published each year for the use of elementary students and the lay public. These range from freshman textbooks in general physics to popular treatments of the philosophy of modern physics. The physics department library contains representative sets of all of these types of literature, including all of the "best sellers".

**Historical Books**

As mentioned in the introduction, the physics library has a collection of historically interesting books. With the exception of a practically complete collection of Newton's work and of
Franklin's scientific letters, these do not comprise a unified set. They are essentially a random collection of interesting and important old books.

**Summary**

The library resources of the University of Pennsylvania include nearly all of the essentials for pursuing work in the field of physics, most of this material being housed in Randal Morgan Laboratory. Almost without exception, all addition necessary books and periodicals are available in Philadelphia and vicinity.

**ASTRONOMY**

By S. G. Barton

The library of the University of Pennsylvania is very well equipped for astronomical research in so far as this depends upon books alone. Much astronomical research involves the use of instruments. The most important items in an astronomical library are the journals, which are devoted to a considerable extent to theoretical discussions, and the publications of the observatories, which are devoted largely to the publication of the results of observations.

The **Classified List of 4800 Serials** compiled by Dorothy Hale Litchfield in 1936 shows that the university libraries receive fifty journals classed as astronomical. We have complete or nearly complete sets of the most important of these, for instance, 265 volumes of the Astronomische Nachrichten, 100 volumes of the Monthly Notices of the Royal Astronomical Society, 90 volumes of the Astrophysical Journal, 75 volumes of the Vierteljahresschrift der Astronomischen Gesellschaft and 48 volumes of the Astronomical Journal.

The same work shows that we receive 124 series of publications issued from observatories. The largest of these issues are 125 volumes of the Annals of the Harvard College Observatory and the publications of the great national observatories at Washington, Greenwich, Paris, Potsdam, Pulkova and Cordoba.

Miss Litchfield's work shows that there is virtually no additional material of these kinds in the neighboring libraries at Bryn Mawr, Haverford and Swarthmore colleges. The private library of Dr. Gustavus W. Cook of Wynnewood contains copies of celebrated early works on astronomy of historical interest. The private library of Dr. C. P. Olivier of this university has a valuable collection of reprints and papers on the subject of meteors extending back over twenty-five years.

We have a complete set of the American Ephemeris and Nautical Almanac and a large number of similar publications of other governments. Of especial value are the issues of the Berliner astronomisches Jahrbuch which extend back to 1776 and far antedate the issuance of the American Ephemeris.

The library is strong in star catalogues. Among the large issues are the Katalog der astronomischen Gesellschaft, the Henry Draper Catalogue and the Astrographic Catalogue. The library is perhaps weakest in works on astrophysics as no one here has specialized in this field. The departmental libraries in physics and in mathematics supplement that in astronomy. There is a deficiency in books recently published but this defect can be remedied when funds are available.
It is scarcely feasible to try to present in a brief report more than an outline of the major possessions and the equally important lacks at the University of Pennsylvania in this very wide field. Properly presented there should be detailed items in the various aspects of physical geology including, theoretical, technical, practical, structural and economic geology and mineralogy. Mineralogy too needs a more careful attention than may be offered here; the same remarks apply indeed to each aspect of the general subject.

For the sake of short and convenient reference, the various sorts of publications in this very wide field of study will be grouped under the following general headings: (1) publications of the federal and state governments, (2) journals, continuations, and society publications, and (3) general publications, including technical handbooks.

Federal and State Government Publications

Federal Government

The Main University Library contains sets of practically all of the great national surveys dating back to the occasional and more or less sporadic and disconnected expeditions to the Far West. Since some of these reports contain descriptions of original materials in the way of fossils, physiographic features and some structural features they are a valuable source of historic information.

Later surveys such as the Hayden, King, Powell, and still later the present organization of the United States Geological Survey are all represented in sets which while deficient in certain volumes are yet available. Some of the volumes of these various surveys were at the time of publication intended only to be of temporary interest.

The Engineering Library in the Engineering Building has portions of a valuable series issued by the United States Geological Survey under the title of Water Supply Papers. This series has now extended into some hundreds of separate reports. The set in the Engineering Library is incomplete. Likewise the General Library has another set which lacks some of the earlier volumes, while containing all the recent ones. It seems desirable that there should be some one place within the university where an entire set of the Water Supply Papers would be conveniently available for consultation.

State Governments

The General Library contains numerous reports of various states; some of these are of permanent value, others of little importance except for historical interest. New York, New Jersey, Pennsylvania, Maryland, Ohio, Indiana, Illinois, Michigan, and so on to the west and south are present. To enumerate the missing volumes is not attempted here. The bulk of these state reports which deal with original palaeontological materials, or with structural and physiographical details are generally speaking available. The Canadian survey is well represented at the General Library.

Isolated geological, mineralogical and palaeontological reports from various foreign governments are in the General Library; they are too incomplete for detailed listing.

The library of the Academy of Sciences contains not only the reports lacking at the University of Pennsylvania and at the other teaching institutions in this area to fill out their respective series but it has one of the most complete series of such surveys, both foreign and American to be found in the United States. Series as well
as individual reports, monographs, etc., lacking elsewhere in this area will undoubtedly be found at the Academy of Natural Sciences.

**Geological maps and topographic charts**

Here, unfortunately the university is weak in its possessions. The General Library and the departmental library in earth sciences do not have for suitable study either complete sets of such maps, nor an adequate room or like quarters in which to study them. Apparently the most modern and best-equipped map library in this area is at Bryn Mawr College which has space specifically devoted to maps. The Philadelphia Free Library on the Parkway has a good collection of political maps.

**Journals, Continuations and Society Publications**

In the Philadelphia metropolitan area the journals pertaining to the various divisions of earth sciences are best represented at the Academy of Natural Sciences. This great library contains over 120,000 volumes in science. Among these are complete sets of practically every important scientific journal published with the exception of certain types of trade journals. All of the scientific societies dealing with physical science, with paleontology, mineralogy, etc., are in the Academy library complete.

Our own collections while incomplete as will be noted contain an excellent working basis of periodical literature. Some of these journals have been obtained from funds furnished by the Department of Chemistry as well as the Department of Earth Sciences, but they are available for students and workers. There are a number of journals or other serials published by sundry foreign institutions which are not fully represented in our library. These will not be listed here except in the case of some of the German journals which are incomplete for the reasons that owing to the disturbed status after the close of the World War and to the high premium exacted by their publishers, this library along with many others in this country were compelled to break their subscriptions. Our own sets are those herein listed complete up to various years as noted in the 1930's. We have the following: Zentralblatt für Mineralogie (to 1933); Fortschritte der Mineralogie (1904-1933); Naue Jahrbuch der Mineralogie, Geologie und Paläontologie (to 1932); Lehrbuch der Geo-physik, Tschemaka Mitteilungen (to 1937); Zeitschrift für praktische Geologie (complete); Proceedings of the Royal Physiographic Society at Lund, Bulletin de la Société des Naturalistes de Moscou, Section Géologique, Revue de géologie et des sciences connexes, Liège; Revista minera, geologia y mineralogía, Buenos Aires; Société française de minéralogique (complete); Geological Magazine, London (complete); Quarterly Journal of the Geological Society of London (complete); Mineralogical Magazine and Journal of the Mineralogical Society of London (complete); Sands, Clays and Minerals; American Geologist (complete up to its absorption into the following); Journal of Geology (complete); Economic Geology (complete); Journal of Paleontology; Journal of Sedimentary Petrology (complete); Bulletin of the Geological Society of America (complete); Bulletin of the American Seismological Society (complete); Instrumental Bulletin of the Seismological Observatory, Georgetown University; Spolia zeylandica (shelved in the General Library and the University Museum); Boletín de petróleo (to 1933); Bulletin of the American Society of Petroleum Geologists (complete); Journal of Geomorphology (complete); the special geological publications of the National Research Council, Transactions of the American Geophysical Union which contain geological papers; the American Mineralogist (complete). There are other more or less local societies, publications and bulletins from various colleges, etc., which are too isolated to receive special mention.
Among the teaching institutions within this area, the University of Pennsylvania, Bryn Mawr College, and in addition for paleontology, the Wagner Free Institute of Science, are the best sources for earth science literature. However, neither Bryn Mawr nor the University of Pennsylvania has the completeness to be found at the Academy of Natural Sciences.

The Edgar Fahs Smith Memorial Library in the Harrison Laboratory contains valuable material relative to the early stages of mineralogical science. Attention is called here to the collections of early treatises in earth science in the library of the Academy of Natural Sciences. The library of the Department of Botany contains some resources in the subject of paleo-botany which are not to be found in the General Library.

We have a first rate working set of the chief handbooks covering optical mineralogical geological and petrographic structure. These should not be considered as textbooks but are working materials, in German, French, and English, for the specialist.
The nature of the library resources in any field is difficult to evaluate since a library which is adequate for undergraduate or even graduate students may be quite inadequate for the research specialist. To serve the former group properly, certain basic works should be found in such quantities that collateral readings are expedited. To serve the latter there are no limits, except space and funds, to the material required. The result is, of course, that no library can become a thoroughly adequate research center for all the interests represented in the faculties it serves.

So far as the sociological field is concerned, the library resources of the university are of uneven character. We possess an excellent collection of the general sociological journals of the United States, as well as the leading journals of Great Britain, France, Germany and Italy. Of some of these, duplicate series exist in different locations in the university. On the other hand, we lack the journals of countries other than those mentioned. This is no serious drawback since their research value is low. Our sociological material is published in the statistical, economic and political science journals, as well as in certain psychological ones, and in all these fields our collection is adequate for our purposes.

While there are gaps in the university's collection of materials of interest to the student of social theory, it is not exaggeration to say that we possess at least seventy-five percent of those that are essential. In the field of Latin and Greek classics the situation has long been adequately taken care of. Recent acquisitions make it possible to study classic Chinese social theory with profit. The principal works of important recent European and American social theorists are very well represented. Altogether, the situation points to the university's being considered the outstanding place in this vicinity for the study of social theory materials. From the point of view of an all-embracing inclusiveness, to be sure, we have notable deficiencies in the sociology of Latin American countries, the Balkan states, and the present-day Far East, but this is a deficiency which we share with most, if not all, American universities.

For the study of the social institutions, the library is also fairly well supplied, although budget limitations have prevented the purchase of valuable source material produced in the last twenty years, especially in the field of the family. The standard works are found, however. We are able to draw on the material placed in the library by other departments for the study of political, economic and educational institutions. There are many gaps in our collection of works on religion and religious institutions.

The material for the study of social problems is also rather good on the whole. Much of it is found in the library of the Pennsylvania School of Social Work, affiliated with the university, and in scattered departments such as the Lippincott Library (statistical material), the Psychology Department (mental hygiene) and the Medical School (public health).

The resources available for study and research in the field of race relations include approximately 1,000 volumes upon practically every aspect of Negro life, culture and problems. Not many volumes are available on racial physical anthropology, but this deficiency is partly met by the publication of the Journal of Physical Anthropology by the Wistar Institute. Volumes on Negro education exceed in number books on other phases of the Negro problem. Both the Journal of Negro Education and the Journal of Negro History are available, as
is the continuous file of the Negro Year Book since 1918. Publications on the African backgrounds of the American Negro are not well represented. The American history collection provides excellent material for the study of the problems of slavery and reconstruction.

In the field of immigration some 350 volumes, covering European, Asiatic, British, South American, Chinese, Japanese, Australian and American immigration and emigration are available. From a search of the files the chief deficiency in this field appears to be publications dealing with the Jewish people.

While the facilities for advanced research, because of the presence of so much secondary material, might be regarded as weak, the present resources might easily be transformed into a basic research collection by the addition of statistical material, surveys, etc.

In the field of criminology and penology our resources are somewhat unbalanced. The Biddle Law Library possesses two recently acquired foreign collections, chiefly of criminal law, which contain much criminological material, mostly German, both in the form of monographic studies and in important periodicals such as Aschaffenburg's Monatschrift. Other important foreign criminological journals are also available in the Biddle Law Library. On the whole, however, the period since 1910 is not well covered. The General Library owns such important foreign periodicals as Lombroso's Archives (lacking vols. 9-16), Lacassagne's Archives (complete except for vols. 1-10) and Gross' Archives (complete until 1934), and very incomplete series of the Proceedings of the National Congress of Criminal Anthropology and the International Prison Congress. Complete files exist, of course, of the Journal of Criminal Law and Criminology, and nearly complete files of the Proceedings of the American Prison Association, the National Probation Association, etc. The erst-while library of the Pennsylvania Prison Society, organized shortly after the Revolution, was incorporated many years ago in the General Library's collections.

The international literature, periodical or monographic, is therefore fairly well represented so far as the last century is concerned. We are weak in monographic studies, especially the foreign ones of the last two decades, and our collection of criminal statistics, both American and foreign, is very deficient. One of the richest collections of psychological and psychiatric journals in the country, that of the College of Physicians and Surgeons, is also available to qualified advanced students, concerned chiefly with the biological aspects of crime causation, mental hygiene, etc.

Various members of the Department of Sociology possess highly specialized private collections, which in many respects supplement the collection of the university libraries. These private libraries are in constant use by our advanced students.

STATISTICAL METHODS IN THE SOCIAL SCIENCES

By J. Parker Bursk

In considering the sources of statistical materials the problem may be approached in two ways: first, the adequacy of those sources providing factual data which may become a part of subsequent analyses and second, the adequacy of those sources which present and discuss the statistical techniques which are applied in the social sciences.

The first phase is not considered in this report, since presumably the adequacy of factual data in the various fields of the social sciences has been covered in the reports submitted for those fields. This report is confined to a consideration of the available material dealing with statistical techniques.
Source material for the study of statistical techniques appears in three forms: textbooks, periodicals of the statistical societies, and miscellaneous monographs. The university libraries best equipped in this field are the Main Library and the Lippincott Library of the Wharton School. There are available numerous standard textbooks covering the basic statistical techniques and there is no important gap in the available material.

Newly devised statistical techniques ordinarily make their appearance in the various statistical journals. The university libraries have files of the Journal of the American Statistical Association, the Annuals of Mathematical Statistics, Econometrica, Biometrika, the Journal of the Royal Statistical Society, and the Proceedings of the Manchester Statistical Society, which are the principal journals printed in the English language. There are available also French, Italian, and Norwegian journals, some of which are printed at least partly in English. These periodicals cover comprehensively the development of new statistical methods.

As far as could be determined from a survey of the catalogued material there is no important omission in the group of statistical monographs which have contributed to the development of modern techniques.

The Lippincott Library and Main Library also appear to be rich in books which deal with the application of statistics to economic and social problems. Such books as H. L. Moore's Forecasting the Price of Cotton and Generating Economic Cycles, H. L. Schultz's The Theory and Measurement of Demand and others are available to the student who is interested in the application of the various techniques to specific problems.

It is impractical to itemize in detail all the source material in the statistical techniques but the survey of the university library resources would indicate that there is no important omission of basic material.
THE CHARLEMAGNE TOWER COLLECTION
OF RUSSIAN BOOKS

By Arthur B. Berthold,
Union Library Catalogue

The Charlemagne Tower Collection of Russian books, housed in a special gallery above the main charging desk, came to the library in 1902. It consists of about 2,300 volumes, and is the gift of Charlemagne Tower, at that time ambassador to the court of St. Petersburg. There is a 138-page catalogue of the collection, entitled Katalog russkikh knig, prinesennykh v dav Universitetu v Pennsylvani Sharlemagn'Tauer (S.-Peterburg: 1902). This catalogue consists of a subject part in Russian and an author index in English. For practical purposes, however, it is of slight use, because it does not go beyond a simple listing of authors and short titles, imprint and paging being omitted entirely.

The collection, in respect to subject matter, is quite catholic — in fact rather too much so. It embraces the whole field of literature proper and a fair selection of works in the humanistic disciplines. The selection, however, is evidently superficial — being limited apparently to works published between 1860 and 1901. There is no evidence of critical choice among editions — even such important authors as Tolstoi, Dostoievski, and Turgenev being represented not by the best, but by the more easily obtainable editions.

Fiction, poetry and drama comprise over one-half of the titles. All the major and worth-while authors are included — in collected works, whenever possible. But it is a little disconcerting to see the proportion given to such authors as Barantsevich, Leikin, Marlinski, and Pazukhin — names which hardly rate a paragraph in literary histories.

While pure literature may be said to be selected on the basis of availability and is therefore disproportionate in favor of the current "best seller", the same method of selection in the field of literary criticism is considerably more fortunate. Some of the Russian critical thought — at least in its earlier stages — appeared in that time. Of note is Vengerov's Russkaia poeziiia (Russian poetry), and Ivanov's Istoria russkoii kritiki (History of Russian criticism). There is also Merzhekovskii's essay on Tolstoi and Dostoevski, L. L. Obolenskii's study of the philosophical basis of Tolstoi's belief, and A. Pypin's monumental history of Russian literature in four volumes.
The section of history and biography is perhaps the most valuable of the whole collection. Apart from the more general studies of various phases and periods of Russian culture, it includes also some highly significant collections of original source material. Thus, for instance, there is the four volume edition of Pis'ma i bumagi imperatora Petra Velikago (Letters and documents of Tsar Peter the Great, 1887–1900), and the ten volume Arkhiv Kniazia Kurakina, (published 1890–1902). The Kurakin referred to is Boris Ivanovich Kurakin (1676–1727), one of Peter's more promising pupils and the "father of Russian diplomacy". The Arkhiv Kniazia Vorontsova, a compilation of 40 volumes published in 1876–97, is perhaps of even greater historical value. Mikhail Larionovich Vorontsov was imperial chancellor under Elizaveta Petrovna and a protector of Russian literature. His papers, written in Russian and in French, cover the period of 1741 to 1767 - a period which saw the coup d'etat of Elizaveta, the revolution of July 9, 1762 which did away with the unfortunate Peter III, and finally the rise of Catherine II and her protegé Panin. Finally, there is the Sbornik imperatorskago russkogo istoricheskogo obschestva (Collections of the Imperial Russian historical society) - 113 volumes of original sources and studies of Russian history and diplomacy in all its significant phases.

Notwithstanding the fair size of the collection, it is not adequate for the proper investigation of any Slavic subject. It has something on a large variety of subjects, but no subject may be said to be specialized in. An even more serious defect is the fact that it is a static collection - nothing has been added to it since it was organized in 1902.

It has none the less, all the qualities of a basic collection in Slavic material. Definite efforts should be made to bring the independent Slavic material in the library in functional unity with the collection. There is adequate independent material from Russian learned societies and universities, and even the Baltic states are represented by their most important scientific contributions. On the other hand, pure literature appears to have been neglected almost entirely. In short, the whole field of Russian literature after 1902 is hardly represented at all. It would seem then that if the field of Slavic studies should be considered important enough to deserve a living collection of books, all the Slavic and Baltic material ought to be combined in a separate collection or department of which the Charlemagne Tower Collection would form an impressive basis.

CURTIS COLLECTION OF FRANKLIN IMPRINTS

By C. Seymour Thompson, Librarian

The Curtis Collection of Franklin Imprints, now containing more than 300 items, had its origin in a collection, one of the largest ever assembled up to that time, begun in 1896 by Henry V. Massey. In 1908 it was purchased by John Gribbel, who added very greatly to it by purchase of many rare items. In 1915, "feeling that the most appropriate owner for the collection was the company publishing the Saturday Evening Post, the journal direct in descent from Franklin's Pennsylvania Gazette, Mr. Gribbel transferred it to the Curtis Publishing Company." (W. J. Campbell's catalogue of The Collection of Franklin Imprints in the Museum of the Curtis Publishing Company Philadelphia: 1918.) In 1920 the Curtis Publishing Company presented it to the University of Pennsylvania.

The collection not only ranks among the largest four collections of Franklin imprints—of which two others are in Philadelphia, at the American Philosophical Society and the Historical Society of Pennsylvania—but is notable for its specimens of some of the scarcest
of Franklin's publications. Perhaps most noteworthy of all is the fact that it includes the only complete set in existence, in any one library, of the fourteen Indian Treaties printed by Franklin, the only one previously lacking from the set having been recently acquired by purchase. The set of "Poor Richard" almanacs is nearly complete, and there is a good file of the Pennsylvania Gazette. Mention may also be made of two "unique" manuscript items, Franklin's book of Family Expenses kept by him during his residence at Passy, and an Elegy on My Sister Franklin, probably written when he was not much more than twelve, and quite certainly before he was sixteen.

His early progress as a printer is well illustrated by copies of the first publication on which his name appears (No. 80 of the New-England Courant, Boston, 1723); the first book on which he is known to have worked in London (Wollaston's Religion of Nature Delineated, 1725), and of his own composition, inspired by that publication, (the Dissertation on Liberty and Necessity, 1725); the first book on which he worked in Philadelphia (Sewell's History of the Christian People Called Quakers, published by Keimer, 1728); the first product of his own Philadelphia press (Watts' Psalms of David, "Printed by B. F. and H. M.", 1729); and the first book bearing the imprint "B. Franklin" (Beissel's Mystische und sehr geheymische Sprüche, 1730).

In like manner the student of Franklin's printing activity finds the various groups into which his publications fall well represented by enough examples to be fairly illustrative of each type. For example, religious works are represented by six of the most important Whitefield items; by Arscot's Some Considerations Relating to the Present State of the Christian Religion; and by many of the works relating to the Friends and to the Moravians. Legal forms and documents are fairly well represented, and there is a good collection of the Pennsylvania laws and proclamations, including the "Charters" of 1741. There are many pieces of the Colonial currency.

Other individual works worth mention include both impressions of the Cato Major (one of them an exceptionally fine copy); the History of Joseph, 1739; George Fox's Instructions for Right Spelling, 1737; several copies, including one of the finest known, of the Proposals Relating to the Education of Youth in Pennsylvania; and other items connected with the early history of the university.

THE FAIRMAN ROGERS LIBRARY ON HORSEMANSHIP

By Dr. John D. Beck

The Fairman Rogers Library on Horsemanship is a unit of the library at the School of Veterinary Medicine, University of Pennsylvania.

A notable feature of the library is the number of older books in it; these begin in the seventeenth century. They are mostly in French, German, and English.

In its books and journals, which approach 700 in number, is contained information on most all conceivable phases of horsemanship and, to a lesser degree, on subjects which do not, in a restricted sense, come under this heading. The following list may give some idea of the material bearing on the horse and horsemanship: stable practices, dressing, feeding, exercising, training for all conceivable purposes, the horse and man's physical fitness, origin of the horse, breeding, blood lines in various countries, pedigrees, performances, anecdotes about famous horses, racing in all its forms, hunting, shoeing, bandaging, and unsoundnesses. The character of the works ranges from The Science of Fox Hunting to a volume (translated from the
French) on "the manner of feeding, dressing and training horses for the great saddle, and fitting them for the service of the field in time of war, or for the exercise and improvement of gentlemen in the academy at home; a science peculiarly necessary throughout all Europe, and which has hitherto been so much neglected or discouraged in England, that young gentlemen have been obliged to have recourse to foreign nations for this part of their education."

There are several books which deal with various types of outdoor sports, bound volumes of sporting magazines, the Cavalry Journal of the United States Cavalry Association.

THE REFERENCE COLLECTION

By H. Glenn Brown, Reference Librarian

To understand the value of this survey of the reference collection, it is necessary to know something of its aims and methods of procedure. The chief factor governing both was time, the survey being accomplished in about ten days during which the normal routine of the Reference Department was not interrupted. Hence it was determined that the survey would have to be more or less informal, that it would result in a general, broad estimate of the resources, and that it would be incomplete.

To accomplish even these aims, the following method was employed. From Robert B. Downs' Guide for the Description and Evaluation of Research Materials (Chicago: 1939) the general classes it seemed possible to cover were selected and our holdings in them determined largely by a checked copy of Miss Isadore G. Mudge's Guide to Reference Books, Sixth Edition (Chicago: 1936). This comparison was supplemented by the checking of other bibliographies and specially prepared lists. Subject bibliographies have been omitted, since it was assumed that these would be covered by the surveys made by the faculty members.

Consequently the value of this survey lies in its estimate of the extent and general character of the collection. The examination made was more of a coup d'oeil than a study with a microscope.

ENCYCLOPEDIAS

A few of the early, historically important encyclopedias are included in the library's holdings, among them being these: Vincent de Beauvais' Speculum quadruplex (1473) Latini's Li Livres dou tresor (1863 edition); Bayle's Dictionnaire historique et critique, editions of 1730 and 1738 and English translations of 1734 and 1826; Chambers' Cyclopaedia of 1738, 1741, and 1751; and Diderot's Encyclopédie, 1751-65 with supplement, plates, and tables.

For ordinary reference purposes the library offers the principal American and English encyclopedias, including the ninth, eleventh, and fourteenth editions of the Britannica and its supplements. The foreign encyclopedias include La Grande Encyclopédie, Grand Dictionnaire universel (and the other Larousse encyclopedias), Brockhaus and Meyer's (several editions), Ersch and Gruber's Allgemeine Encyclopädie, Enciclopedia italiana, Enciclopedia universal ilustrada europeo-americana (Espasa), Prins' Algemeene encyclopaedie.
Besides the essential standard, comprehensive American and English dictionaries, the library owns or is purchasing The Dictionary of American English on Historical Principles, Dictionary of the Older Scottish Tongue, and the dialect dictionaries of Thornton, Wright, Jamieson and Warrack.

The collection of foreign language dictionaries, while not as complete a one as might be found in a university dependent entirely upon its own resources, is still probably the most comprehensive in the city, and especially strong in Portuguese, Scandinavian, and Oriental languages. All the essential dictionaries for the study of French, German, Latin (including Du Cange), and Greek are available. The library does not own the Diccionario de la lengua española of the Academia Española, or the Vocabolario degli accademici della Crusca. Other languages represented include Arabic, Armenian, Breton, Coptic, Cornish, Czech, Danish, Dutch, Finnish, Friesian, Gaelic, Hebrew, Hungarian, Irish, Lappish, Lettish, Lithuanian, Nepali, Pali, Persian, Russian, Sanskrit, Syriac, Tibetan, Welsh, and Yiddish. This is by no means a complete list; American Indian languages, provincial dialects, and other regional works are omitted entirely.

 Bibliography

Library catalogs

Printed catalogs available include those of the Astor Library, Boston Athenaeum, Peabody Institute, Carnegie Library of Pittsburgh, British Museum, London Library, Edinburgh University, Faculty of Advocates, Trinity College at Dublin, John Rylands, Bibliotheque Nationale, and the Gesamtkatalog der preussischen Bibliotheken and Berliner Titeldrucke. Of smaller collections, there are catalogs too numerous for mention. We have also many of the printed catalogs of important private collections, such as the Church Catalogue (both Americana and English Literature), the Ashley Library, the De Reune Library of Georgia History, the Wrenn Library, the McAlpin Catalogue of British History and Theology, etc. These are supplemental to the university's depository card catalogue.

General bibliographies

All of the important general bibliographies are available, including the works of Brunet, Grasse, Ebert, Peddie, Quaritch, Watt, Hain, Copinger, Reichling, Burger, Panzer, Proctor, Pellechet, Polain; and the British Museum Catalogue of Books Printed in the 15th Century, the Gesamtkatalog der Wiegendrucke, the Census of Fifteenth Century Books Owned in America, and the new Internationale Bibliographie der Bibliographie.

National bibliography

American and English bibliography are very well represented. The holdings include all such important works as Bradford's Bibliographer's Manual, Evans' American Bibliography, and Sabin's Dictionary, for American bibliography; and Leland, Bale (Illustrium Maioris on film), Wood, Collier, Hazlitt, Lowndes, Watt, Short-title Catalogue, Arber's Transcript, (1554-1640 and 1640-1708) and Term Catalogues for English Bibliography. Such things as the United States Catalog, and the English Catalogue are taken for granted.

The extent and character of the foreign national bibliography can be indicated best by the following list of the more important items:

Belgian

Bibliotheca belgica
Bibliographie de Belgique
THE REFERENCE COLLECTION

Danish

Nielsen. Dansk Bibliografi
Dansk Bogfortegnelse

Dutch

Brinkman's cataloge
Nijhoff. Nederlandsche bibliographie van 1500 tot 1540.
Nederlandsche bibliographie. 1856-date

Finnish

Suomalainen kirjallisuus 1544-1932.

French

Quérard, Vicaire, Lorenz, Bibliographie française, Bibliographie
de la France, "Biblio", Librairie française. For first and rare
editions: Carteret, Le Petit, Rothschild, and Tchemerzine.

German

Panzer's Annalen der älteren deutschen Literatur, Heinsius,
Kayser, Deutsches Bücherverzeichniss, Halbjahresverzeichniss, Deutscher
Literatur-katalog.

Italian

Haym's Biblioteca Italiana, Pagliaini's Catalogo generale,
Bollettino delle pubblicazioni italiane, Giornale della libreria,
La scheda cumulativa, Catalogo dei cataloghi.

Mexican

García Icazbalceta's Bibliografia mexicana del siglo XVI.
Andrade's Ensayo bibliográfico mexicano del siglo XVII. Medina's La
imprenta en Mexico (1538-1821).

Norwegian

Pettersen's Bibliotheca norvegica.

Spanish

Foulché-Delbosc's Manuel, Antonio's Bibliotheca hispana vetus
and Bibliotheca hispana nova, Haebler, Vindel, and the Hispanic
Society List of books. General bibliographies of Palau y Dulcet,
Ribelles Comín, and Salva y Pérez. Catalogo general, Bibliografía
española, and Bibliografía general española.

Spanish American

Medina's Biblioteca hispano-americana.

Swedish

Linnström's Svensk boklexikon, Svensk bok-katalog, Årskatalog
för svenska Bokhandeln (1927-date).

PERIODICAL REFERENCE MATERIALS

Largely through the efforts of Miss D. H. Litchfield, former
reference librarian, the library has built up what is a splendid
collection of periodical and newspaper reference materials. All of
the common periodical indexes and union lists are available, either in
the main library or in departmental or college libraries, together
with the two German indexes, Nijhoff's index, Norsk tidsskrift index,
Danak tidsskrift index, and a recent subject index to Welsh period-
icals.

However, it is the excellent collection of union lists, catalogs, and national periodical bibliographies which makes this group out-
standing. There are over sixty catalogs or lists of library holdings, either permanent or current, and over thirty national lists. Among
the former may be found such union lists as: Union Catalogue of the
Periodical Publications in the University Libraries of the British
Isles (1937), Verzeichnise auslandischer Zeitschriften in schweizeri-
schen Bibliotheken (1925), Inventaire des périodiques des Bibliothéques
de Strasbourg (1937).

The extent of the national bibliographies is hinted by the
inclusion of such items as Periodici italiani, Die bulgarischen
Zeitschriften, Catalogue des périodiques slaves, Periodica U.S.S.R.,
Publicaciones periodicas Chilenas, and Guide to Leading Chinese
Periodicals.

All of the important bibliographical journals are represented in
in the general periodical collection, for the most part by complete
files. Minor journals, including library and book-reviewing publica-
tions are numerous.

Newspaper reference materials are adequate, perhaps somewhat
better than average in accessibility, but this group needs enlarging
and improving. Newspaper holdings in general are "spotty". There is
little of the London Times before 1900; and before 1915, the New York
Times is represented only by the years 1861-66. There are compara-
tively good holdings of Philadelphia newspapers, and some early
American papers of importance. In general, the development of an
important newspaper collection has been left to other libraries in the
city with richer basic collections.

DISSERTATIONS COLLECTION

Another reference collection which has been given special atten-
tion is that of dissertation bibliography. The library's collection
of the dissertations themselves is large, comprising over 650 boxes
(16" x 7½" x 12") of unbound theses, both foreign and American. These
are not fully cataloged, but a special catalog of the collection is
maintained by the Catalog Department. To complement this and to serve
various other needs of students and scholars an effort has been made
to cover the field of dissertation bibliography both extensively and
intensively. Broadly, the field is well covered, as the library pos-
sesses most of the important general and national bibliographies, such
as Mundt's Bio-Bibliographisches Verzeichnisse, the Library of Congress
lists, the Thesis Supplement of the Institute of Historical Research,
Catalogue des thèses et écrits of the French Ministry of Public
Instruction, Jahresverzeichnisse, Josephson's Avhandlingar... 1855-1900
and Nelson's Akademiska Afhandlingar vid Sveriges Universitet... and
an incomplete set of Jahresverzeichnis der schweizerischen
Hochschulschriften.

Covering the field intensively has been much more difficult, but
there nevertheless is an unusual number of bibliographies from or
concerning individual institutions and about certain subjects. This
part of the collection is "spotty", largely because of erratic and
irregular publication — the brave beginnings and untimely endings —
but also because keeping track of such publications is too time-
consuming a job for a small staff. However, the result of bringing
together in the Reference Room all the dissertation bibliography
which the library possessed or could acquire is most gratifying,
both to students and librarians.
To the scholar working with manuscript materials the library offers assistance which can be obtained in few other libraries. With a few exceptions, all printed catalogs of manuscripts in English libraries are available. France is represented by the famous Catalogue générale des manuscrits des bibliothèques publiques, Leroquais' three works: Les bréviaires manuscrits des bibliothèques publiques de France, Les sacramentaires et les missels manuscrits, and Les pontificaux manuscrits, and by numerous others. The section for Germany is rather weak, but the library is receiving the Verzeichnis der Handschriften im Deutschen Reich, and owns indexes or catalogs of collections in the Staatsbibliothek at Berlin, the Staatsbibliothek at Munich, and the universities at Erlangen, Giessen, Heidelberg, and Leipzic.

The collection as a whole can be judged fairly well by the holdings for Italy. For the whole country there is the Inventari dei manoscritti della biblioteche d'Italia; for the Vatican the following: Assemanus, Ehrensberger, Salvo-Cozzo, Stevenson, Stornajolio, and Codices urbinates latini; Vattasso, and for many other collections in Italy.

For Belgium the library has the Catalogue des manuscrits de la Bibliothèque royale de Belgique, the current Catalogue général des manuscrits des bibliothèques de Belgique and a few others.

Of course there is the recent work of Di Ricci and Wilson, Census of Medieval and Renaissance Manuscripts in America, together with other catalogs of American collections.

And finally, catalogs for collections in Budapest, Vienna, St. Gall, Copenhagen, Lisbon, and the great library of the Escorial in Madrid.

Here this brief survey must end. It must be stated again that the survey was made hastily and that no attempt was made to cover subject bibliographies. This latter fact was a necessary condition, and although most of the bibliography is covered in other sections of this survey, it should be noted that there may be important omissions, such as the London Bibliography of the Social Sciences, the major English bibliography in that field. However, it is felt that enough is given here to denote the great strength of certain divisions of the collection and some of its weaknesses, and to furnish a reasonable estimate of its extent and character.

MANUSCRIPTS

By C. Seymour Thompson, Librarian

The Library has more than 21,000 separate manuscript items; nearly 1,300 of these are fully cataloged, and many of them have been bound. The main part of the collection consists of manuscripts which are unbound and kept in manuscript folders in a cabinet used for this purpose. These are not regularly cataloged but are listed in a separate file kept in the office. Most of these have been very fully indexed, bringing out the recipients as well as the writers of all correspondence, and, to a large extent, the subject matter.

Among the most important collections of manuscripts of notable size are the following:

5,000 pieces in the Lea Library, particularly in the fields of medieval church history and the inquisition, but including also many letters relating to municipal and state reform, civil service, copyright legislation, and political matters.
Nearly 3,000 Indic manuscripts, believed to be the largest such collection in the United States. They are chiefly Hindu, but include some Jain and Buddhistic.

4,400 in the Edgar Fahs Smith Library, relating mainly to the history of chemistry, but including many of interest in connection with the history of this university.

More than 3,000 Robert Montgomery Bird items, relating to his literary work, including many of interest in connection with American political history of his period, and public affairs of the day.

872 Franklin letters, 850 of which are calendared in the Calendar of Papers of Benjamin Franklin in the Library of the University of Pennsylvania, published in 1908.

THE UNION DEPOSITORY CATALOGUE AT THE UNIVERSITY OF PENNSYLVANIA LIBRARY

By C. B. Clapp, Head of the Cataloguing Department

This catalogue of about 2,000,000 cards is a true union catalogue, because it comprises cards received from ten libraries, and shows in addition thousands of holdings of a considerable number of other libraries on cards printed for them by the Library of Congress.

The proportion of cards received from libraries other than the Library of Congress may be surprising to those who are not acquainted already with the figures. After deducting Library of Congress' revised cards, which replace old cards, the percentage of cards received from libraries other than the Library of Congress was in the year 1937-38, 40 percent, and in the year 1938-39, 35 percent of the total cards received. The actual holdings of the other libraries was a still higher percentage, owing to the Library Congress cards which represented their holdings.

So far as is known the file of Library of Congress cards in the catalogue is complete. These cards are deposited with the university library, being one of two such files in Philadelphia, the other being at the Free Library. With the exception of the "AC" or co-operative cards they are sent free. The co-operative cards are those produced from cataloguing by numbers of libraries through the American Library Association Co-operative cataloguing committee and edited and printed by the Library of Congress; they represent chiefly works in important series. A charge is made to cover the cost of such cards. The revised cards do not cover absolutely all changes made by the Library of Congress, but are supposed to cover the important ones, the unimportant ones including the tracings for subjects which may have been changed. Most books in the Library of Congress are covered by the catalogue, but a few minor types or apparently inactive groups are supposed to be excluded. The cards are received about once a week throughout the year. Owing to administrative requirements at the Library of Congress the cards of any calendar year do not begin to come in until after two or three months of the year, but are otherwise received promptly. All cards printed by the Library of Congress are subject to order in quantity for our library's cataloguing needs.

With the exception of the Vatican cards all from the various libraries go into the main union catalogue file. The Vatican cards are at present kept separate in the same room, partly because of certain differences in headings, partly because they represent a type of literature of considerable special interest to the university library, viz., material related to ecclesiastical history and theology, especially medieval or early, and partly because
Dr. E. C. Richardson, the late librarian of Princeton and Library of Congress consultant advised the separation. There are approximately 21,000 Vatican cards, the first being received in 1935, and our set is complete.

Harvard cards were first received in 1924, when we purchased from Princeton their set of about 50,000 cards, after which we continued the subscription. Harvard printed cards only up to about ten years ago, as their plan was merely to go through the alphabet, picking important titles not held by L. C. Newberry Library printed cards for years before we began to subscribe in 1936. Our sets of Princeton and Wesleyan cards are supposed to be complete. Regarding those of the other libraries we lack the information to show their completeness.

The following table shows the name of each contributing library, its usual symbol, the year when our subscription began, the approximate number of cards we are supposed to have, and the receipts for the last two fiscal years.

The cards other than those of the Library of Congress are paid for.

<table>
<thead>
<tr>
<th>Library</th>
<th>Symbol</th>
<th>Begins</th>
<th>No. of Cards</th>
<th>Cards Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library of Congress (regular)</td>
<td></td>
<td></td>
<td>1937/38</td>
<td>1938/39</td>
</tr>
<tr>
<td>Library of Congress (revised)</td>
<td></td>
<td></td>
<td>38,701</td>
<td>51,968</td>
</tr>
<tr>
<td>&quot; (&quot;AC&quot; or co-operative)</td>
<td></td>
<td></td>
<td>6,949</td>
<td>5,424</td>
</tr>
<tr>
<td>John Crerar</td>
<td>JC</td>
<td>1924</td>
<td>3,908</td>
<td>3,874</td>
</tr>
<tr>
<td>Princeton</td>
<td>NJrP</td>
<td>1933</td>
<td>111,000</td>
<td>3,095</td>
</tr>
<tr>
<td>Michigan University</td>
<td>MiU</td>
<td>1928</td>
<td>6,949</td>
<td>5,424</td>
</tr>
<tr>
<td>Chicago University</td>
<td>UCL</td>
<td>1924</td>
<td>6,949</td>
<td>5,424</td>
</tr>
<tr>
<td>Illinois University</td>
<td>UIL, IU</td>
<td>1925</td>
<td>6,949</td>
<td>5,424</td>
</tr>
<tr>
<td>Wesleyan University</td>
<td>Wu</td>
<td>1934</td>
<td>6,949</td>
<td>5,424</td>
</tr>
<tr>
<td>Newberry</td>
<td>NL</td>
<td>1936</td>
<td>6,949</td>
<td>5,424</td>
</tr>
<tr>
<td>Harvard</td>
<td>HCL</td>
<td>1924</td>
<td>6,949</td>
<td>5,424</td>
</tr>
<tr>
<td>Vatican</td>
<td>Va</td>
<td>1935</td>
<td>6,949</td>
<td>5,424</td>
</tr>
</tbody>
</table>

The Library of Congress card total may be supposed to be somewhere in the neighborhood of 1,550,000 at a rough estimate made from taking various measurements of the total Union Catalogue and deducting the cards of other libraries. No attempt has been made to check this figure with any claim of the Library of Congress to have printed or sent so many cards.

The John Crerar set started in 1924 with an approximate 50,000 cards, from which it may be supposed that we received then all cards of which they had copies in stock.

Our interest in music cataloguing, with the trend of the Newberry cards toward the form of cataloguing we have lately adopted for music, has led to the segregation of the major portion of their cards for music, in the Cataloguing Department, for reference use in cataloguing; but this separation is only temporary, and represents only a portion of all their cards.

We subscribe also for the Library of Congress cards for anonymous works; these are merely a duplication and rearrangement of regular Library of Congress cards for anonymous works. The cards are in a separate file near the union catalogue. There are perhaps 25,000.
We receive, also, the cards of the Folger (Shakespeare) Library, which are deposited in the Furness Memorial. They are few in number and highly bibliographical, each extending over several cards.

Attention is called to the fact that for a couple of years or so the University of Pennsylvania Library has mimeographed cards for many works for which Library of Congress cards could not be obtained at the time of cataloguing. Copies of these cards, like all other cards, go into the Philadelphia Union Catalogue, and a very, very few are sent to the Library of Congress Union Catalogue in Washington. While they are equal in merit to other libraries' cards, there would be no profit to us in selling them.
Academy of Natural Sciences, 1, 4-5, 10, 16, 47, 83, 86, 181-183
Academy of Stomatology, 9
Accounting, 22-26
Aeronautics, 59
Agriculture, 1-3, 8, 39
American literature, 119-122
American Philosophical Society, 1, 10, 16, 76-77, 83, 86, 161, 168, 178
Anatomy, 5, 7, 10
Animal magnetism, 171
Anthropology, 13, 16-19, 171, 184
Arabic, 152-6
Archaeology, 17, 63-66, 68, 91-92, 97, 102, 120, 152-158
Architecture, 63, 68, 83, 98
Arms and armor, 99
Art, 63-65, 68, 98-99, 102-103, 106-109, 156-158, 160-163, 176
Assyriology, 155
Astronomy, 180
Athenaeum of Philadelphia, 111
Avestan, 88-89
Banks and banking, 29-34
Barnes Foundation, Merion, 64
Bible, 108, 152-156
Bibliography, 191-192
Bibliography of American literature, W.P.A. project, 121
Biography, 61, 75, 84, 86, 116, 120, 139, 159, 177, 187
Biological sciences: Botany, 1-3, 183; Zoology, 4-5
Bookkeeping, 22-26
Boston Museum of Fine Arts, 162
Botanical Society of Pennsylvania, 2-3
Botany, 1-3, 183
Bryn Mawr College, 12-13, 63, 80-81, 92, 154, 161, 178, 180-181, 183
Business: Accounting, 22-26; Business cycles, 31; Business law, 150-151;
Corporations, 27-29, 44-47; Finance, 21, 27-29, 38; Insurance, 36-39;
Marketing, 39-41; Personnel management, 12-14, 166; Public utilities,
44-47; Real estate, 34-36
Chemistry, 7-8, 116-118, 174-178
Child study, 50, 53
Chinese studies, 160-163
Church history, 69-73, 77, 80-81, 83, 102-103
City planning, 64-65
Cleveland Public Library, 156-157
College of Pharmacy, 174-175
College of Physicians, 1, 5-6, 10, 13, 16, 83, 174, 185
Columbia University, 63, 156-157, 162
Commerce, 41-44
Commercial Museum, 16, 21, 25, 32, 41-42, 47-48, 86, 120
Consumers' credit, 32
Consumption (Economics), 21
Cornell University, 70
Corporations, 27-29, 44-47
Costume, 64, 99, 106, 109
Credit, 29-34
Criminology, 145-146, 185
crozer Theological Seminary, 50, 171
Dentistry, 6, 8, 10
Dictionaries, 191
Divinity School, Protestant Episcopal Church, 70, 163, 171
Drama: American, 119-120, 122-125; English, 106-111; French, 128-129,
131-132; Russian, 187; Spanish, 130, 134-136
Droopsie College, 154, 171
Earth sciences, 181-183
Economics, 20-22, 29-34, 61, 82-83
Education, 12, 50-57, 76, 81, 98-99
Egyptian studies, 152-156
INDEX

Encyclopedias, 190
Engineering: Chemical, 58, 174-176; Civil, 58-60; Electrical, 58, 60-62; Mechanical, 58-60
English language and literature: Old English, 89, 100-103; Middle English, 103-105; Elizabethan and Jacobean, 105-109; Eighteenth century, 110-113; Nineteenth and twentieth centuries, 113-119
Engravings, 176
Esthetics, 164
Ethics, 164
Ethnology, 16-17, 102-103
Federal Reserve Bank of Philadelphia, 32
Finance, 21, 27-29, 38
Folger Shakespeare Library, 106
Folk-lore, 17, 94, 99, 104
Forestry, 2-3
Franklin, Benjamin, 21, 188-189
Franklin Institute, 10, 58, 61-62, 174-176, 178
Freer Art Gallery, Washington, 162
French language and literature, 125-129
Friends Historical Library, 24
Geographical Society of Philadelphia, 47-48
Geography, 97
Geology, 181-183
German Society of Pennsylvania, 95
Germanics, 93-100
Government. See: Politics and government
Government documents, 25, 39-43, 45, 47-48, 51, 56, 59, 70, 74, 76-77, 79-80, 82-83, 86, 139-140, 165-166, 181-182
Greek studies, 90-92
Harvard University 15, 63-64, 128-129, 156-158, 162
Haverford College, 50, 77, 80-81, 92, 154, 180
Historical Society of Pennsylvania, 1, 24, 50, 77, 82-84, 86, 95, 111, 120-121, 139
History: Ancient, 17, 68; Medieval, 69-73, 92; Modern, 73-76, 99, 126; Balkans, 75; Baltic, 75; Belgium, 71; Byzantine, 71; Canada, 79; China, 160-163; England and Great Britain, 76-79, 101-103, 105, 108-109; Ireland, 78-79; Scotland, 78-81; Wales, 79; France, 70, 74; Germany, 70-71, 99; India, 156-160; Italy, 71, 73; Latin America, 85-88; Netherlands, 71-73; Oriental, 68, 160-163; Russia, 187; Scandinavia, 97; Spain, 71-72; United States, 82-84
Horsemanship, 8, 189-190
Horticultural Society, 1
Incunabula, 1-2, 10, 104, 108
Indic studies, 156-160
Industry, 48-49
Inscriptions, 68-69, 91-92, 152-156
Institute of State and Local Government, 65, 165-166
Insurance, 36-39
International relations, 73-76, 86, 147-148, 169
Investment, 29, 38
Italian language and literature, 127, 130-131, 138a
Johns Hopkins University, 129, 156-157
Judaica, 72, 152-156
Landscape architecture, 63-65
Languages. See names of languages, e.g. French
Lantern slides, 63-64
Latin studies, 91-93
Law, 70, 79, 139-156; History, 71, 73, 81; Philosophy, 147; English, 102-103, 109, 141-142, 145; British Empire, 142-143; French, 143-146; German, 99, 144; India, 159-160; Italian, 144; Latin American, 143; Netherlands, 144-145; Roman, 146; Scottish, 70, 145; United States, 139-141; Business, 150-151; Comparative, 145-146
INDEX

Learned societies. See: Society publications
Library Company of Philadelphia, 24, 50, 83, 111, 121
Library of Congress, 157, 162
Literature. See names of literatures, e.g. American
Lutheran Theological Seminary, 95, 171
Magic, 70, 72, 177
Manual training, 50, 53
Manuscripts, 24, 64, 68-69, 79, 91, 104, 106, 123, 158-160, 177, 194-195
Maps, 47-48, 64, 181
Marketing, 39-41
Mathematics, 61-62, 172-174, 185-186
Medicine, 6-10, 109, 160
Mercantile Library of Philadelphia, 1, 86, 111
Metallurgy, 59
Military history, 75
Mineralogy, 181-183
Money, 29-34
Music, 98-99
Mythology, 17, 94, 99, 104
Naval history, 75
Near Eastern studies, 152-156
Negro, 184-185
Newspapers, 28, 74
Numismatics, 99
Oriental studies, 152-156
Paleontology, 98, 181
Patents, 61, 151, 176
Pennsylvania Hospital, 6, 10
Pennsylvania School of Social Work, 184
Pennsylvania State Library, 95
Periodicals, 192
Personnel management, 12-14, 166
Philadelphia Housing Association, 34
Philadelphia Museum of Art, 64, 156-157
Philadelphia Real Estate Board, 34
Philadelphia Society for Promoting Agriculture, 2, 8
Philosophy, 12-13, 63, 159-160, 163-164
Physics, 61-62, 164, 178-180, 183
Poetry. See names of literature, e.g. American
Politics and government, 28, 165-169
Portuguese language and literature, 131
Presbyterian Church, General Assembly, 50
Princeton University, 15, 63-64, 128, 156-157, 162
Printing, 98, 104
Psychology, 10-15, 50, 53, 89
Public utilities, 44-47
Real estate, 34-36
Ridgway Branch. See: Library Company
Robert Morris Associates, 32
Romance languages and literature: French, 125-129; Italian, 127, 130-131; Portuguese, 131; Spanish, 129-130
Russian language and literature, 89, 187-188
Sanskrit, 156-160
Scandinavian languages and literature, 96-97, 99
Science: History, 76; Philosophy, 61, 64; Astronomy, 180; Biology, 1-5, 183; Chemistry, 7-8, 116-118, 174-178; Earth sciences, 181-183; Mathematics, 61-62, 172-174, 185-186; Physics, 61-62, 164, 178-180, 183
Securities, 29, 38
Shakespeare, William, 105, 107-109
Shakespeare Society of Philadelphia, 105
Society publications, 40, 46, 49, 51, 59-60, 70-71, 76-78, 80-84, 99, 105-106, 109, 173, 181, 188
Sociology, 184-186
Spanish literature, 129-130, 134-138a
Speech correction, 12, 89
Spiritualism, 170-171
Sports, 8, 109, 189-190
Statistics, 61, 173, 185-186
Swarthmore College, 12-13, 24, 50, 92, 180
Taxation, 28
Textbooks, Early, 51, 55-56, 177
Theater, 99, 106, 109, 122, 124. See also: Drama
Theses, 9, 51, 56, 68-69, 99, 103-104, 121, 145, 173, 193
Transportation, 44-47
Travel, 86-87, 108
Union Library Catalogue of Philadelphia, 84, 86
University of California, 156-157, 162
University of Chicago, 156-157
University of Pennsylvania:
Bechstein, 93-94, 97-100
Berendt, 18-19
Biddle Law, 23-25, 28, 33, 35-36, 39, 41, 44-47, 50, 70, 75-76, 79-83, 139-152, 155-156, 165-167, 185
Brinton, 17-19
Carey, 21, 83
Charlemagne Tower, 89, 187-188
Clothier, 119-120, 122-125
Colwell, 21, 83
Crawford, 134, 138-138a
Curtis, 188-189
Dental, 8-10
Fairman Rogers, 8, 189-190
Fine Arts, 63-65, 68, 164
Furneas, 106-109, 111
Hurlburt, 131-132
Institute of State and Local Government, 65, 165-166
Lea, 70-72, 75, 87, 127-130, 170
Lippincott, 13, 22-23, 25-26, 28-30, 35-49, 75, 150-161, 165-167, 184, 186
Macaulay, 127, 130, 132-134
Mathematics, 62, 172-174
Medical, 2, 5-6, 174, 184
Moore School, 44, 46, 49, 58-62, 164, 178
Morris Arboretum, 2-3, 8, 65
Penniman Memorial, 13, 50-57, 68, 75, 110, 166
Penniman-Gribbel, 158-160
Physics, 62, 174, 178-180
Randal Morgan, 178-180
Rennert, 129, 134-138
Singer, 111-113
Smith, 83, 174, 176-178, 183
Théâtre français, 128-129, 132
Towne School, 49, 58-60, 174, 181
Union Depository Catalogue, 196-197
University Hospital, 7-8
University Museum, 13, 16-17, 63-64, 68-69, 85, 87, 91, 120, 152-158, 162-163
Veterinary, 2, 6, 8, 189-190
Wistar Institute, 4-6, 10, 16, 184
Zoology, 2, 4-5, 164
University of Wisconsin, 93
Veterinary medicine, 6, 8
Wagner Free Institute of Science, 183
War Documentation Service of Philadelphia, 74
Wistar Institute, 4-6, 10, 16, 184
Witchcraft, 70, 72
Works Progress Administration. Bibliography of American Literature, 121-122
Yale University, 15, 156-157
Zoology, 4-5