XI
THE LIBRARY

Shortly after the publication of the Bulletin had begun, it became clear that there should be some one responsible for arranging exchanges and caring for periodicals after they had arrived. And thus, in Feb. 1892, four months after the first number of the Bulletin had appeared, the constitution was amended so as to provide for the annual election of a Librarian as a new officer. In May 1892 Prof. D. A. Murray was appointed by the Council as the first incumbent in the office until his later election for 1893. The librarians coming after him were as follows:

G. Legras, 1894    D. E. Smith, 1902–1920
E. L. Stabler, 1895    R. C. Archibald, 1921–1938
P. Ladue, 1896–1901

Librarians were elected annually through 1923, and thereafter for terms of three years.

In Dec. 1892 the Librarian reported that in the Library there were 36 v. and 54 pamphlets, and that 15 journals had been placed on the exchange list of the Society. In its minutes for 5 Dec. 1890 is the following aggravating entry: “It was moved and carried that the thanks of the Society be presented to the donor of the first volume in the library of the Society.” Nothing more. The administration of Pomeroy Ladue as Librarian was notable and won a vote of commendation from the Council. His six excellent annual reports for 1896–1901 were published in the List of Officers . . . Annual Reports, and Annual Registers (1897–1902). They list the exchanges, and the last one contains a complete record of the considerable accumulation of unbound periodicals owned by the Library. These v. had been acquired by exchanges for the Bulletin and Transactions, mainly through the assiduity of Ladue, who held them in custody for the Society. The desirability of properly caring for the Library (in part by binding the periodicals) and of making it readily available for consultation by members of the Society and others, induced the Council to accept the offer of Columbia U., resulting in an agreement entered into 30 Oct. 1901 between the Council of the Society and the trustees of Columbia U. This agreement provided, in brief, that the books, periodicals, and other printed matter forming the Library of the Society shall be deposited in the Library of Columbia U. The U. agreed to bind, catalogue, and care for the Library and to keep it as a separate collection to be used only as a reference library by persons other than members of the Society. Members of the Society may borrow the books under regulations to be determined by the
Council of the Society and the Librarian of the U. The title of the books remains in the Society and they may be withdrawn from the U. upon payment of the initial cost of binding.

In accordance with this agreement the Library was turned over to Columbia U.; the periodicals were substantially bound and ready for reference and loan by the close of 1901. The Library then contained 121 v., 32 of periodicals and 89 non-periodical; there were 64 periodicals on the exchange list.

With the election of Professor Smith as Librarian for 1902 enormous strides were almost immediately made in the Library's development. The new items of the very first year included 663 v. of periodicals, 159 non-periodical v., and 52 additions to the exchange list. Sixty-two v. were given to the Library by publishers. Considerable use of the books was made by members. Library rules and a complete catalogue of the Library were published in Jan. 1903 as final pages (14) of the Annual Register and Catalogue of the Library. Among the gifts for 1904, Prof. Smith recorded 39 v. of Nouvelles Annales de Mathém. from Dr. G. W. Hill, the Society's former president, and 48 v. of their Bulletin from the St. Petersburg Acad. Sci. In 1906, 500 mathematical dissertations were acquired by purchase or gift and also a complete set of Prince Boncompagni's Bullettno. Among the important runs reported in 1908 were The Analyst, v. 1–10; SMF Bull., v. 1–20; Berlin Sitzungsberichte, 1857–90. The first complete Catalogue of the Library as a separate publication (35 p.) was issued in Jan. 1910. This catalogue did not, however, include 500 unbound dissertations, and 91 bound dissertations of members of the Society. Up to the end of 1910 Columbia U. had, in accordance with its agreement, spent about $900 in binding journals for the Society. Since this amount would have to be refunded to Columbia U. in case the Society decided to move its Library elsewhere, the Council decided that beginning with 1911 the Society should itself pay for all necessary binding in its Library. The year 1912 was marked by valuable gifts from two former presidents. Dr. McClintock presented a collection of about 500 v. consisting of important journals (including Quart. Journ. Math., v. 1–20) and treatises, together with many textbooks, reprints, etc. Dr. G. W. Hill's gift of over 100 v. included the Paris Comptes Rendus, v. 1–65, a set of Ferrusac's Bulletin, and the first 13 v. of Darboux's Bulletin. Up to the time of the World War, publishers were generous in presenting to the Society two copies of nearly all of their new books, one of them being for the Library, the other for the reviewer. Since the war, however, such Library gifts have almost entirely ceased.

The Library's present excellence is almost wholly due to Prof. Smith who, with his wide specialist's knowledge, was constantly alert to seize opportunities, never to return, for accumulating mathematical publications of enduring value. The Society's debt for his nineteen years of remarkable service is indeed very great. Some statistics may be given to
indicate the extraordinary growth of the Library in this period; stars (*) occur in connection with totals excluding unbound dissertations.

<table>
<thead>
<tr>
<th></th>
<th>Volumes of periodicals</th>
<th>Volumes, non-periodical</th>
<th>Total number of volumes</th>
<th>Periodicals on exchange list</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1902</td>
<td>32</td>
<td>89</td>
<td>121</td>
<td>64</td>
</tr>
<tr>
<td>Jan. 1907</td>
<td>1,941</td>
<td>608*</td>
<td>2,549*</td>
<td>167</td>
</tr>
<tr>
<td>Jan. 1912</td>
<td>2,984</td>
<td>887*</td>
<td>3,871*</td>
<td>180</td>
</tr>
<tr>
<td>Jan. 1921</td>
<td>4,360</td>
<td>1,502*</td>
<td>5,862*</td>
<td>123</td>
</tr>
</tbody>
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Eleven detailed reports of the Librarian, 1902–12, are in the Annual Register, 1903–13. The Plimpton Library, The David Eugene Smith Library and The Dale Library of Weights and Measures, all so important for the student in the history of mathematics, have been installed together in magnificent quarters of the Low Memorial Library building. Happily the Library of the Society and the Columbia U. Mathematical Library are admirably housed together, with a competent custodian, on the floor above. Readers desiring to be informed with regard to Prof. Smith, the scholar and inspiring teacher, who profoundly influenced the teaching of mathematics in the United States for many years, may turn to Osiris, v. 1, which was presented to him on his 76th birthday 21 Jan. 1936; see also Scripta Mathem., v. 4, p. 182.

The first Librarian of the Society, D. A. Murray (1862–1934), a Nova Scotian by birth, was assoc. prof. math. at the time he was in office, and later author of a number of books, and long prof. of applied math. at McGill U. See Amer. Men Sci., 5th ed. and Scripta Mathem., v. 3, p. 185.—The second Librarian G. Legras (1858— ), one of the charter members of the Society, was tutor and instr. math. at C. of the City of New York, and later an assoc. prof. there. See Amer. Men Sci., 2d ed.—E. L. Stabler (1865— ), a charter member who joined with Fiske and Jacoby in the first call for the founding of the Society, was an actuary of the Manhattan Life Ins. Co., and is still living.—Pomeroy Ladue (1868— ), prof. math. New York U., has been a public accountant in Detroit, Mich. since 1910. See Amer. Men. Sci., 6th ed.

The present Librarian, R. C. Archibald, was elected in 1921 and has been reelected ever since. During the seventeen years of his administration the Library has been appreciably increased in size through exchanges, purchases made by small grants and sale of duplicates, and gifts. The sales of duplicates included 75 v. of Euler’s Opera Omnia acquired in the following manner. As a part of international cooperation, the Society in 1910 joined with academies and individuals in subscribing five thousand Swiss francs (about $950) towards the publication of Euler’s Opera Omnia by the Swiss Society of Naturalists; this amount was paid 1910–14, 1920–23. A further subscription of $1000 was paid 1926–35. In this way the AMS acquired four copies of all v. published (25, one in 2 parts). One set was
put in the Library. In order to define responsibility for exchanges the Council in Dec. 1920 voted that the Librarian and editor of the Bulletin “should have control of all exchanges”; but the By-Laws of Oct. 1923 enacted that “The Librarian shall have charge of arrangements for the exchange of the Society’s publications.”

In 1925 a complete Catalogue of the Library (82 p.) was published and it listed all dissertations owned by the Society (more than a thousand). In Jan. 1932 a much more elaborate Catalogue (126 p.) appeared, and this is the last one issued. Recent purchases included many French and German dissertations, and v. to complete sets, such as Messenger of Math., Proc. Amsterdam Acad. Sci. and Encyk. d. Math. Wiss. Numerous important v. were acquired by exchange. In 1931 through the generosity of Clark U. and the initiative of Prof. F. B. Williams the Library acquired the mathematical Bibliography (156 drawers and 35 boxes of cards) of the late Prof. W. E. Story (1850–1930). In the same year the Society’s former president E. B. Van Vleck enriched the Library with a fine set of Cayley’s Coll. Math. Papers. In 1932 filing cabinets were purchased and a start made in preserving reprints (of which there are now several thousand) which constitute an important addition to the Library’s resources. In 1933 the gifts included 50 v. from Mr. E. U. Frey, a New York engineer.

For many years the Library of the Society was housed in the basement of the old Columbia U. Library. The most notable event of the years 1934–35 was the removal of the Library to commodious and exceedingly pleasant quarters on the second floor above in the same building. The reorganization led to a new agreement between Columbia U. and the Society which, among other things, relieved the Society from paying insurance premiums on about $18,000. The agreement is given in full below. Among the interesting gifts of 1935 were: (1) the computations of Prof. D. H. Lehmer proving that the Mersenne number 2^{149}−1 is composite; (2) a Factor Table of the Sixteenth Million calculated by W. P. Durfee, dean emeritus of Hobart College. This gift (500 sheets 8½×14 in.) was from Dean Durfee and his son W. H. Durfee. Prof. Lehmer pointed out that 15485303 there listed as a prime is divisible by 109.

Apart from the Reprint Collection referred to above there were in the Library, in June, 1938, 9069 v. of which 6554 were periodicals. The Society then received 224 current journals.

May the day not be too far distant when the Library shall have an endowment which will make possible the regular purchase of fundamental periodicals, and bibliographies, and reference works. At present almost anything of this kind is out of the question. For example, all v. of Zentralblatt f. Math. are lacking, as well as recent v. of Math. Annalen, and Math. Zeitschrift, and most current treatises of importance. In the table of annual disbursements, in the chapter on Finances, it will be observed
that expenditures connected with the Library including clerical outlays, binding, and printing of the catalogues 1897–1937, have amounted to something over eleven thousand dollars.

The Library’s great debt to Columbia U. is appreciably increased by reason of the many v. from among her duplicates which she has quietly added to our collection. Discoveries of these have usually been made when reading the shelves. The current agreement is as follows:

This Indenture, made the twenty-seventh day of October, one thousand nine hundred thirty-four, between the Trustees of Columbia University in the City of New York, hereinafter referred to as “the University,” party of the first part, and the American Mathematical Society, Inc., hereinafter referred to as the “Society,” party of the second part:—

Whereas the Society has heretofore deposited its collection of books with the University, for the joint use and benefit of the members of the Society and the students and other persons using the Library of the University;

Now, Therefore, this indenture witnesseth:

I. That the books and other printed matter of the Society, comprising its Library, which are now or may hereafter be deposited in the Library of the University, shall there remain until this contract is terminated as hereinafter provided, but the title of such books and publications shall continue to be in the Society, and its ownership shall be indicated by the book plate which shall be placed in each volume.

II. Such books shall be prepared for binding by the Society and the cost of the binding borne by the Society, but pamphlets shall be bound by the University with material supplied by the Society. Such books and pamphlets shall be catalogued and cared for by the University, and shall be kept as a separate collection (duplicating so far as may be the general University Library) and shall be accessible at the usual Library hours, as determined by the University, and not otherwise, and such collection shall not necessarily be kept in a separate room or building, or under the charge of a separate custodian.

III. In a Record Book provided by the Society the custodian of the collection shall require the signature and address of everyone using the Society's Library in the Reading Room. In this book the custodian shall also enter the titles of any book loaned for use outside the building, together with the name of the borrower, the date of the loan, and the date of return. The Record Book shall be the property of the Society.

IV. The Society’s books shall be accessible to members of the Society applying in person, and shall be loaned to members of the Society, either through the Librarian of Columbia University or through the Librarian of the Society, under regulations determined by the University and Librarian of the Society, but such books shall not be loaned except to members of the Society, and the collection shall be held and used solely as a reference Library for all other persons.

V. The University shall pay all necessary and proper expenses of maintenance, except for losses which are clearly chargeable to members of the Society or for loss caused by fire. The University shall carry insurance on the collection against fire, the valuation per volume to be determined by the Librarian of the University and the Librarian of the Society. The Librarian of the Society, as the representative of its Council, shall be the sole representative of the Society in all official correspondence between the University and the Society concerning this agreement and the execution of its provisions.

VI. The University shall annually read the shelves and furnish to the Society on or about December first of each year a list of all missing volumes in, and accesses to, the collection of the Society, since the preceding annual statement.

VII. It is understood and agreed that either party to this agreement shall have the right to terminate the same upon five years' notice to the other; and whenever the collection shall be returned to the Society, the initial cost of binding before one thousand nine hundred and eleven, namely nine hundred dollars ($900), shall be paid to the University by the Society.
In Witness Whereof, the parties hereto have caused these presents to be executed and their corporate seals affixed, on the day and year first above written.

This indenture was signed by a representative of The Trustees of Columbia U. in the City of New York, and by J. R. Kline, assoc. secy., for the AMS. [In paragraph VII, “eleven” has been substituted for the erroneous “one” of the agreement, since, as noted above, the Society began to pay for its own binding in 1911.]