

*Notes on the Founding
of the*

DUKE MATHEMATICAL JOURNAL

DUKE MATHEMATICAL JOURNAL

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RESOLUTION

The Council of the American Mathematical Society desires to express to the officers of Duke University, to the members of the Department of Mathematics of the University, and to the other members of the Editorial Board of the Duke Mathematical Journal its grateful appreciation of the service rendered by the Journal to mathematical science, and to extend to all those concerned in its management the congratulations of the Society on the distinguished place which it has assumed from the beginning among the significant mathematical periodicals of the world.

December 31, 1935
St. Louis, Missouri

INTRODUCTION

In January 1936, just weeks after the completion of the first volume of the *Duke Mathematical Journal*, Roland G. D. Richardson, professor and dean of the graduate school at Brown University, longtime secretary of the American Mathematical Society (AMS), and one of the early proponents of the founding of the journal, wrote to Duke President William Preston Few to share the AMS Council's recent laudatory resolution and to offer his own personal note of congratulations:

In my dozen years as Secretary of the American Mathematical Society no project has interested me more than the founding of this new mathematical journal. . . . It was not thought by anybody that a new journal could start off at such a high level in quality and quantity.¹

Discussions about a new journal at Duke spanned nearly a decade before the launch of the first volume in 1935. It was not until the fall of 1934 that final arrangements were in place with the Duke University Press and *DMJ*'s first managing editor, Joseph M. Thomas, was given the go-ahead to form an editorial board and recruit authors and referees for the journal. The first issue was published by Duke University Press just a few months later in March 1935.

Perhaps Richardson should not have been surprised that *DMJ* could “start off at such a high level in quality and quantity,” given that he and several other leading mathematicians working in the United States at the time played key roles in shaping and supporting *DMJ*'s initial

editorial direction and selection of early papers. A true collaborative effort, the launching of *DMJ* involved a notable contingent of the mathematicians working in the late 1920s and early 30s—such strong representation from the community immediately established *DMJ*'s credibility and influence, as well as its national and even international reach.

The primary reason for starting a new journal, at least from the viewpoint of many within the community of research mathematicians, was to relieve the four existing primary research journals of their backlogs and to provide ample room for the almost certain growth in the near future. The first issue of *DMJ* relied almost exclusively on transferred papers, most of them from the *Annals of Mathematics*. In particular, Solomon Lefschetz at the *Annals* provided invaluable guidance and support to Thomas, as he and his colleagues at Duke worked to build on the journal's auspicious start.

* * * * *

Considering that Duke and UNC cohosted the AMS's annual joint meeting with the Mathematical Association of America in December 1936, it might be said that the founding of *DMJ* helped draw the increasing attention of mathematicians to both Durham and Chapel Hill. *DMJ* has received valuable service and support from the UNC mathematics department over the years but perhaps none as valuable as the service given by Jonathan Wahl as managing editor since 1997. One of Professor Wahl's graduate course instructors at Harvard, David Widder, who was on *DMJ*'s editorial board for its first volume, would no doubt be pleased to see that the journal is still going at "such a high level in quality and quantity."

* * * * *

The basic story of the founding of *DMJ* has been documented before, including in the late Robert Durden's 1993 history of the school, *The Launching of Duke University*.² The excerpts presented here from the extensive collection of letters and other documents related to the founding of *DMJ* at both the Duke University Archives and the Archives of American Mathematics at the University of Texas, however, reveal many details that may not be widely known among the journal's readers. As is evident in the quotations, the founding of *DMJ* was a true collaborative effort forged during a notable period in the history of American mathematics.

PLANNING A NEW JOURNAL

Initial Efforts

The first efforts to launch the *Duke Mathematical Journal* date to the mid-1920s, by which time the remarkable growth in professional, U.S.-based scholarly research that had begun in the late nineteenth century, driven largely by the increasingly greater availability of both public and private funding, made it necessary to find additional publishing outlets, particularly scholarly, peer-reviewed journals.

Throughout the 1920s, the four main journals publishing mathematical research in the United States at the time—the *American Journal of Mathematics* (*AJM*), the *Annals of Mathematics*, and the *Transactions and Bulletin* of the American Mathematical Society (*AMS*)—saw significant increases in the number of papers that, to the editors' view, ought to be published. The number of papers submitted to the *Annals*, for example, grew from 44 in 1925 to 79 in 1926, and the number of pages published per volume increased from 316 to 576 during the same period. Moreover, by the time that *DMJ*'s inaugural volume was published in 1935, the *Annals* was publishing nearly 1,000 pages per volume. In all, from 1920 to 1927, the number of pages published in all four journals combined increased about 80 percent, and there was no indication that the trend would slow anytime soon.³

It was also in the mid-1920s that William Preston Few began leading the transformation of Trinity College into Duke University. Spurred by the establishment of the Duke Endowment in 1924, President Few and his administration

sought to both strengthen the undergraduate program and establish graduate and professional schools.

With regard to mathematics, Few, along with vice president Robert L. Flowers and dean William H. Wannamaker, recognized that their support for the establishment of a new journal at Duke would strengthen the department's recruitment efforts by demonstrating the university's commitment to professional research activities.⁴

One of the prominent mathematicians with whom Few began to correspond about joining Duke and editing a new journal was Robert D. Carmichael of the University of Illinois. Carmichael had obtained his PhD under the direction of George D. Birkhoff at Princeton in 1911 and, by the late 1920s, had published several research articles and textbooks. He is perhaps best known today for his work constructing the "Carmichael numbers" that satisfy Fermat's "little theorem." Carmichael had also been an associate editor of the *Annals* and editor in chief of the



Duke University, West Campus
construction, August 1930

American Mathematical Monthly and so was familiar with the requirements of running a journal office.⁵

By April 1927, Few had offered Carmichael a professorship in the mathematics department and the editorship of a new research journal if it could be brought to Duke. Carmichael saw the possible editorship as the most attractive part of the offer. He was pleased to tell Few that some of his trusted colleagues at Illinois responded with “considerable enthusiasm” to the idea of starting a new journal and that

four mathematicians, Birkhoff of Harvard, [Hans F.] Blichfeldt of Stanford, [Luther P.] Eisenhart of Princeton and [Virgil] Snyder of Cornell, attending the National Research Council meeting, discussed the matter carefully at lunch and reported to me through Professor Snyder the following conclusion as their unanimous decision: “We believe there is room for another journal, and that you are suitable to be its editor-in-chief. It should be entirely independent of existing publications, and its associates chosen from those not already tied up with such duties. We are all thankful that Duke University is able and willing to subsidize such an undertaking, we believe it is as worthy an investment in the cause of scholarship as it can make.”⁶

Birkhoff, Eisenhart, and Snyder were well-established mathematicians and journal editors and were thus well acquainted with the mathematics publishing landscape in the United States. Birkhoff and Snyder were also on the AMS Council, and Few and Carmichael were well aware that formal approval for the project from that entire body would be needed before it could move forward. Carmichael had good reason to be optimistic about the chances of securing the Council’s approval for launching a new journal at Duke;

however, he held off on formally accepting Few's offer until after the spring AMS meeting, which was held on May 7, 1927, in New York. In hindsight, Carmichael might have been glad that he did, as the meeting did not produce the outcome for which he and Few had hoped.⁷

First Discussion with the AMS

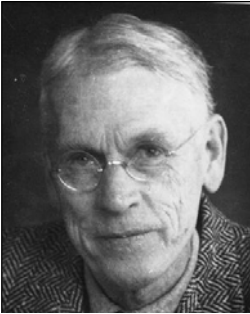
On May 13, 1927, a disheartened Carmichael reported to Few that "there is not sufficient agreement concerning the need for such a journal to justify the venture now, even though it is true that the majority of the mathematicians appear to be in favor of it." Carmichael noted that, specifically, "the mathematicians at Chicago and Princeton were found to be strongly opposed to the proposal of a new journal."⁸ One of those Princeton mathematicians was the renowned geometer Oswald Veblen, past president of the AMS, and an editor of the *Annals*. Carmichael told Few that



Robert Carmichael
Carmichael was an early choice to be the first managing editor of *DMJ*.

Professor Veblen of Princeton maintained with force his judgement that we are not at present in need of more space, that the amount of space we now have is none too small if we are to have that competition which will tend to a higher quality of published material. Some of those who originally were enthusiastically favorable to the new journal began to doubt the wisdom of starting it now.⁹

While the concerns raised by Veblen and others about the founding of a new journal are certainly understandable, it is possible that the uproar had more to do with the state of affairs at the *Annals* than with anything else. In his report to Few about the meeting on May 6, Carmichael wrote that “the discussion of the proposal for a new journal brought out the fact that it might be possible to transfer *The Annals of Mathematics* from Princeton to Duke,” but added that “after full consideration I did not think that this would be so valuable to Duke as it would be to found a new journal.”



Oswald Veblen

Initially opposed to the idea of a new journal, Veblen favored raising the standards for acceptance even further at the existing journals as a response to growing backlogs.

Moreover, Richardson indicated in August 1927 that “Princeton has done valiant service in . . . support (both scientific and financial) [of the *Annals*], but will likely seek to be relieved of it soon.”¹⁰ In any event, at the New York meeting it seems that Veblen’s colleagues on the Council gave him the benefit of the doubt and decided to refrain from issuing a resolution on the establishment of a new journal at Duke. But the matter would be raised again just a few months later, at the next Council meeting on September 6, 1927, in Madison, Wisconsin.

Carmichael and Few no doubt anticipated a better turn of events in New York. The actual outcome convinced Carmichael that it would take perhaps a year or two before any further progress would be made toward starting a new journal, and so he decided to decline Few’s offer. In a lengthy letter dated May 13, Carmichael explained to Few his lingering concerns and ultimate reasons for staying at Illinois. Carmichael would spend the rest of his career there, and from 1931 to 1936 he was an editor of the *Transactions*. Despite declining the offer, Carmichael still

pledged to Few his support for the journal project and for the overall development of the Duke mathematics department and library. Once the journal was launched, Carmichael continued his commitment by serving as an adviser to the new editors and by refereeing papers; he also published a paper in *DMJ* in 1936.¹¹

While the timing was not right for Carmichael and *DMJ*, AMS secretary Richardson feared that declining Few's offer altogether would amount to a missed opportunity for the society and the wider community of research mathematicians. Richardson was not alone in his support of the new journal; another key supporter—a North Carolina native and quite possibly one of the biggest Duke fans in New York City at the time—did not want to see the opportunity missed either.¹²

Galvanizing Support for a New Journal at Duke

One interesting aspect in the story of the founding of *DMJ* was the involvement of George B. Pegram, a Trinity College graduate and prominent dean and head of the physics department at Columbia. Pegram had strong connections to Trinity and Duke. His father William Howell Pegram was a Trinity professor and his maternal grandfather, Braxton Craven, had founded the college. As Pegram told Few, he was “deeply interested in everything that goes on at Duke,” and would provide key assistance to Few in establishing the journal as well as in building up the chemistry and physics departments there.¹³

Few went to New York in mid-July 1927 and visited with members of the mathematics department at Columbia, including Cassius Jackson Keyser, as well as Earle R. Hedrick, editor in chief of the *Bulletin*, who was visiting

from UCLA for the summer session. Pegram was traveling at the time and missed the meeting with Few, but on his return he spoke with Keyser and Hedrick about their discussion; not surprisingly, their talks had centered on the proposed journal and the outcome of the AMS Council meeting in May. Once informed, Pegram initiated a letter-writing campaign to galvanize support for the project in the mathematics community and at Duke University. As he told Few later that summer:

It was a surprise to me to learn that when Professor Carmichael very properly brought up informally before the Council of the American Mathematical Society the proposal of a new mathematical journal, the Council, due, I believe, chiefly to the reaction of Professor Veblen, seemed to take so little interest in the matter. Accordingly I ventured to undertake to ascertain whether that represented the real attitude of the members of the Council of the Mathematical Society by addressing [. . .] a number of those most closely identified with publication in mathematics.¹⁴

While Pegram was certainly eager to assist Few and Duke University on a personal level, he was also genuinely interested in scholarly publishing matters through his own editorial work with the American Physical Society.¹⁵

On July 22, 1927, Pegram wrote to the editors of each of the four main existing journals, as well as to the sitting president and secretary of the AMS about the proposed journal: Dunham Jackson, editor of the *Transactions*; J. H. M. Wedderburn, editor of the *Annals*; Snyder, president of the AMS at the time; Birkhoff, editor of *AJM*; Richardson, secretary of the AMS; and Hedrick, editor of the *Bulletin*. Pegram asked for their general opinions about the proposed journal as well as the grounds for them. He also posed two specific questions:

Could Duke University use five or six thousand dollars per year to the best advantage of science by publishing such a journal or would the starting of what would be practically a fifth journal of mathematics in this country not justify the outlay of expense and editorial effort that would be required?

Can the present journals of mathematics print all the papers that ought to be printed or is mathematical research likely to go beyond the capacity of the other journals for publication?¹⁶

Pegram received the first two replies—from Hedrick and Snyder—within one week. Of course, from their previous conversations at Columbia, Pegram already knew that he could count on Hedrick’s support. In his response to Pegram, Hedrick acknowledged that the “four principal mathematical journals in this country would be more than full before the end of the summer” and that “the material presented for publication in the next twelve months will be correspondingly greater than in any twelve months of the past.”¹⁷



George B. Pegram

A native North Carolinian, Trinity graduate, and physicist at Columbia, Pegram lent his support to establish a new mathematical journal at Duke.

Snyder, the sitting AMS president in 1927, also responded with his support for a project at Duke. Snyder believed that the society could not bear an increased financial commitment for publishing activities, given its responsibilities to its own journals as well as to *AJM*. Snyder told Pegram that the AMS “would be much better balanced by undertaking less publication and making more liberal provision for administrative details” and that he believed “it is unwise to have so large a proportion of the publication

in the hands of one agency.” Snyder welcomed the “generous offer of Duke University,” adding that a new journal there would be a real stimulus and incentive to sound growth in the mathematical and physical sciences”¹⁸

Wedderburn was the next to respond to Pegram, penning a letter of guarded support for the journal project on July 31. Perhaps echoing his Princeton colleague Veblen, Wedderburn told Pegram that “it is very difficult to give a decided answer to the main question of your letter. A short time ago I should have said there was no need for another journal nor likely to be any for sometime. But now, in spite of a material increase in the size of the Transactions and Bulletin of the American Mathematical Society, and of the Annals, the number of papers offered for publication has increased so much as to strain *somewhat* the space available”¹⁹ For Wedderburn, the rationale for starting a new journal at this time was more about planning for the inevitable than in relieving any of the existing journals of their present burden: “I think that for a time the space available at present *may* be sufficient, especially if standards are raised, but that the probability is that in two



Jacob D. Tamarkin, William Prager, and Roland G. D. Richardson at Brown University, where Richardson was dean of the graduate school. Tamarkin had a hand in directing Otto Szász’s paper “Generalization of two theorems of Hardy and Littlewood on power series” to Thomas for inclusion in the first issue of *DMJ*.

years time the lack of space will be badly felt.”²⁰ Wedderburn also provided Pegram with data on submissions and publications in the *Annals* from 1911 to July 1927, confirming the journal’s rapid growth. Wedderburn also agreed that Pegram’s predicted expenditure by Duke University of five- to six thousand dollars per year would be suitable to start the project.

The next to submit his favorable opinion for a new journal was Richardson, an ally well acquainted with the AMS’s publishing efforts and partnerships with other universities such as Princeton and Johns Hopkins. To underscore the suitability of the proposed new journal, Richardson sent to Pegram the 1927 edition of the AMS’s *Bulletin of Information as to the Aims and Privileges of the Society*. It included information about the Society’s support for publishing activities and a graph illustrating an 80 percent growth in the number of papers presented at AMS meetings from 1920 to 1927. The same growth was seen in the number of journal articles published during this time. Further, Richardson analyzed the backlogs of the other four journals and determined that 3,000 pages would be needed in 1928 to accommodate the papers already accepted for publication by the journals’ editors. He surmised that if Duke were to begin immediately, the 3,000 pages could be shared equally among the five journals at a more manageable volume of 600 pages. Although Richardson told Pegram that the AMS “is now so strong that it can tackle several difficult tasks at once,” he no doubt welcomed the prospect of having financial and intellectual support from another institution.

The partnership would be mutually beneficial, Richardson told Pegram: “Despite the immense difficulties which I foresee must arise in starting a new journal, and into which I need not enter here, I am thoroughly convinced that it is an opportune time for America to make such a move

and that Duke University would not only make a great contribution to science but would confer distinction on itself in making such a move.”²¹ Richardson also addressed the objections raised by Veblen to the founding of a new journal:

As I indicated in my previous note, Professor Oswald Veblen of Princeton, former president of the Society and former chairman of the division of Physical Sciences in the National Research Council, who is thoroughly acquainted with our problems from their various aspects believes that the demand for another journal is not clear and that we should go slow; that it is only this year that we have begun to participate in the Journal and to enlarge it; that the status of the Annals needs attention; that it would be a healthy state of affairs if the standards for publication should be raised by severer competition in publication. I can not agree with his conclusions.²²

Richardson also raised a point that Snyder, too, had mentioned to Pegram—namely, that “at present the necessity of condensation of all our published papers makes even the best of them difficult to follow and entails an amount of time in reading which can be justified only by lack of funds to publish in more detail.”²³

Dunham Jackson gave his perspective from the *Transactions* in his reply of August 4, acknowledging that his journal was experiencing “congestion”—one that he thought would “increase rather than diminish as time goes on.” He told Pegram that “the establishment of a new journal for the publication of mathematical papers appears to me justified by the circumstances, and I believe that the situation will be still more urgent in the near future.” While not failing to point out the “manifest disadvantages in the starting of a new publication, as compared with enlarging

the facilities of the existing ones,” Jackson believed that the mathematics community “ought to make grateful use of the resources offered [by Duke], in the most effective way that is practicable.” As to how a new journal might alleviate congestion at the *Transactions*, Jackson thought that since “the number of papers coming to us in applied mathematics is not so large . . . , an additional outlet for work in pure mathematics would be advantageous to us, as well as beneficial to the mathematical profession generally.”²⁴

Birkhoff was the last to respond to Pegram that summer. He wrote from Cambridge, Massachusetts, on August 15, to express his strong interest in the project. “My first inclination when I learned of the possibility of such a Journal,” Birkhoff wrote, “was to favor it strongly. It was only when the feeling was expressed by some of those in control of the *Annals of Mathematics*, in particular by Professor Veblen, that there was not room for such a Journal, that I temporarily modified my view. From what I have learned since, it seems to me clear that the time will be here shortly, if it has not already arrived, when we shall need more space for mathematical publication.”²⁵

Just a year before, Birkhoff had been in Europe for the Rockefeller Foundation, gathering information on the state of mathematics research and communications in Europe. He, like the others whom Pegram approached, saw the offer from Duke as a critical opportunity to help bolster the publishing activities needed to support scholarly research in the United States: “I regard it as very important for American mathematics that this new opportunity be made the most of, and I hope that you will feel inclined to use your influence in this direction.”²⁶

Second Discussion with the AMS

As it happened, Pegram was away in August 1927 and so did not forward to Few the positive opinions and acknowledgments of support that he had received that summer until September 16, ten days after the AMS's summer meeting and colloquium in Madison, Wisconsin, which was attended by Birkhoff, Hedrick, Jackson, Richardson, and Snyder. While no call to action for starting a new journal was issued, the assembled body did adopt and agree upon a resolution, if only for the purpose of communicating to Few and the Duke administration the Council's continued interest in the project. As Richardson and Jackson alluded to in their responses to Pegram, at least a few Council members feared at this point that Few and Duke would lose interest. Hedrick, on his way from Wisconsin to UCLA after the meeting, wrote to Pegram with some of the details. Hedrick noted that since "nothing had been heard from President Few, those present felt that an informal expression of opinion might be desirable, at least as offsetting the unfortunate impression created by the meeting in New York last spring, at which the opinion of a minority seemed to be most *heard*. Accordingly," Hedrick continued,

a group of about thirty of the most influential men was called together as an informal body by Snyder (president) and Richardson (secretary). The matter was discussed very thoroughly, and each man present spoke, *unanimously*, in favor of the establishment of the new journal by Duke. Resolutions were passed (of course unanimously), and these will be presented to President Few through Richardson. I may say the group included *all* members of the Council of the Society present in Madison, and such men as Birkhoff, Jackson, Dickson, Carmichael, etc.

Geographically the group was very well distributed, including three men from California, and at least six from the Eastern states.²⁷

Pegram was pleased to be able to include this news from Hedrick in his letter to Few on September 16. By the next day, Pegram received a letter from Richardson that included the text of the resolution Hedrick had mentioned. The text of this resolution (or “memorandum,” as Pegram referred to it) follows below. It shows the consensus among an influential group of mathematicians, acknowledges the need for a new journal, pledges support and cooperation for the new journal via the AMS (given some assurances, particularly with regard to editorial direction), and confirms the opinion that Duke would be a suitable home for it:

We, the undersigned, after due deliberation in conference assembled, unite in agreeing:

- 1) That there exists an insistent need for an additional mathematical periodical devoted to mathematical research and of the standards and scope of those already established.
- 2) That, as a necessary prerequisite to its receiving important papers from leading authors, such a periodical should have an assured financial support sufficient to guarantee its permanent existence.
- 3) That it should be conducted by a competent and representative board of editors from more than one university.
- 4) That Duke University is in a strategic position to serve the cause of mathematics by embarking on such a project.²⁸

Pegram told Few in his follow-up letter of September 17 that the action at the Madison meeting showed

clearly that the mathematicians who are in the country, who are in the best position to judge in the matter, would welcome most heartily an additional high grade mathematical research publication and again I may say it would be a source of much pride to me if such a publication could be launched and supported, in so far as it may be necessary, by Duke University.²⁹

Despite the result at the Madison meeting and the optimism of Pegram, Hedrick, and Richardson, among others, the situation was still not quite right to launch a new journal, and the project stalled for about a year and a half. One obstacle was that in the fall of 1927 there was no clear candidate for managing editor of the journal. Moreover, Few, Flowers, and Wannamaker had several other projects to mind in Durham with the transformation of Duke University already in full swing.

Regaining Initiative

The March 1929 meeting of the AMS marked the end of this period of inertia. “I told you,” Richardson wrote to Few on April 11, 1929, “that if anything of special moment was likely to occur in regard to the establishment of another journal in mathematics I would let you know.”³⁰

He reported to Few that, again in 1928, the “printed mathematical production in this country . . . increased about 200 pages.” As Richardson told Few, this was enough for the AMS Council, at its March 1929 meeting in Chicago, to organize a committee to “see what steps should be taken to relieve the congestion.” Richardson seemed eager to finalize arrangements with Duke but was still not sure that he would be able to get the immediate endorsement of the entire Council:

Whether this committee will recommend that one of our journals be issued in two volumes yearly I do not know, but a crisis is at hand and important developments are likely to follow. The Society would heartily welcome the establishment of a journal at Duke University. If such a journal could not really be gotten under way under two or three years we could tide over the crisis provided we knew definitely such steps were to be taken to found a journal to begin by 1931 or 1932.³¹

This news must have reassured Few, Flowers, and Wannamaker, as they continued their efforts to recruit more research faculty members to Duke. In fact, by 1932 they had made two important hires for the department—Joseph Miller Thomas in 1930 and Leonard Carlitz in 1932—both of whom would serve as managing editors of *DMJ*.³²

The financial outlook had been much better when conversations first began between Duke and the AMS about starting a new mathematical journal. The worsening global crisis in the early 1930s led to significant cuts to public and private funding for research, including publishing subventions to the *Annals*, *AJM*, *Bulletin*, and *Transactions*. Moreover, while the AMS's membership was still growing in the fall of 1931, as Richardson told AMS Council members, "the increase in revenue from dues in the Society is unfortunately balanced by the withdrawal of many Sustaining Members."³³

Given the circumstances, the journal project at Duke was clearly a top priority for Richardson in the fall of 1931. First, he arranged meetings with Joseph Miller Thomas,³⁴ who was tapped to be the first managing editor, to talk more about the journal project ahead of the October 31st AMS meeting in New York. There, Richardson got the Council to unanimously affirm its favorable opinion of the project—by this time even Veblen had come to accept the idea.

Richardson also acquired from the Board of Trustees a declaration that “it would look with favor on the establishment of a new mathematical periodical of the highest class by Duke University.”³⁵

Even with these declarations, Richardson knew that he would need to put the matter to a formal ballot vote, and so he drafted “a memorandum mentioning the several details which would have to be considered if a new periodical were to be launched.”³⁶ After the meeting in New York, Richardson traveled to Durham to meet with the Duke administration and discuss the details.

In the four-page memorandum that he prepared ahead of the visit, Richardson summarized the history of the project to date, noting especially that at the October 1927 meeting in Madison, the AMS had already issued a statement of support for the project. He also proposed specific ways in which the AMS might cooperate with Duke, including a plan to secure enough papers for at least the first few issues and perhaps even the entire volume:

The goodwill of the Society and of the leading mathematicians would be a considerable asset in getting the journal under way. The leading mathematical research journals in the country are forced by the financial situation to cut the number of printed pages next year. This cut will amount to at least 400 pages for 1932 and present indications are that a further cut for 1933 will be necessary. It is now several years since there has been such a considerable accumulation of accepted material which will have to wait for several months or even for a year or more before being printed. In other words, there is at this moment enough good material which has been accepted by the other journals which might be transferred to a new periodical and which would fill a volume of 500 pages or more.³⁷

Richardson had discussed with the editors of the *Annals*, *AJM*, *Bulletin*, and *Transactions* each journal's backlog and would secure by December 1931 their cooperation in shifting accepted papers toward the new journal.³⁸

Richardson also proposed that the AMS and Duke work together toward establishing the journal's editorial board, of which there should be "one or two," he urged, "with well-established international reputations." He even recommended the names of a few established printers in the United States capable of handling mathematical copy.

The last paragraph of Richardson's memorandum addressed the "effect on Duke University":

Perhaps the leading element in the building up of the originally strong Department of Mathematics at Johns Hopkins University was the setting up of the American Journal of Mathematics. I think it would be generally agreed that one of the main reasons why Princeton is in the very first rank of American universities in mathematics is because of the presence of the *Annals of Mathematics* which it supports. The founding of a first-class journal would immediately bring prestige to Duke University both in America and abroad.

The establishment of a new mathematics journal had been thoroughly debated, and informal support had been documented; it was time to put the matter to a vote. On November 18, 1931, not long after the meeting with the Duke administration, Richardson sent copies of the memorandum along with a voting ballot to the AMS Council members, some former members, and other key individuals. In the cover letter, Richardson explained that he had recently been to Durham for talks and that, while it seemed

an auspicious time to inaugurate a new journal . . . the authorities at Duke wish to be assured of two things: 1) that there is a real need of a new journal, 2) that if the periodical is founded, the Society will give it such moral support as will make it useful for building up our mathematical situation in America. On the other side, the authorities wish to make it clear that if they embark on the project, it is with the intention of giving every support to the journal now and in the long future. They feel it is not worth while to undertake its support unless it is to be permanent and of a high class.³⁹

Richardson had asked for a quick vote on the matter, and by the end of the first week of December 1931, he had received sixty-two of the sixty-three ballots that he had sent, and all were in the affirmative. On December 9, he wrote to Flowers to inform him of the result. From this point forward, Flowers would help finalize the necessary arrangements at Duke, especially those between the Duke University Press and the mathematics department, for the establishment of the journal.⁴⁰

In 1932 and 1933, however, the continuing financial crisis led to budgetary restraints at Duke University, and plans to launch a new journal would again be delayed.

By this time, the global financial crisis had affected the Duke Endowment, and many other interests at the University were competing for limited funds. As a result, it was not until the fall of 1934 that Duke and the AMS took the next firm steps toward launching the new journal.⁴¹

Final Push

On January 5, 1934, it was J. M. Thomas who wrote to Flowers with a great sense of urgency to “propose that Duke University found and subsidize a mathematical journal to be started, if possible, in the current calendar year.”⁴² Thomas told Flowers that due to the financial problem, the four journals would have to cut pages again in 1934; furthermore, and, “worst of all,” Thomas wrote, “in 1936 an annual subsidy of 4500 dollars granted by the Rockefeller Foundation is to be withdrawn because the Foundation contends that the cost of publishing research should be borne by the universities.” Thomas’s letter to Flowers repeated many of the same points that Richardson had put forth over the previous few years—namely, that the project would receive “the wholehearted cooperation and support from the American Mathematical Society that it can be a first class journal from the start” and that “the scientific prestige which will accrue to the University will be large.”⁴³

In a paragraph titled “The need for immediate action,” Thomas tried to impress a sense of urgency on Flowers and the Duke administration with regard to the matter, while at the same time trying to assure them of the great likelihood of success:

From every standpoint, except the financial, the present moment is propitious for founding the journal at Duke: the field is clear of competitors, the necessary outside cooperation and support are assured, the need is urgent, and the service to science is greater and the more appreciated if rendered in difficult times. The scientific success of a journal started now will doubtless be much greater than that of one founded after business conditions have become generally better because of the spirit of cooperation prevalent in times of crisis.⁴⁴

Thomas also repeated to Flowers that he thought an estimated subsidy of \$5,000 would be needed to support a volume of 500 pages, which, Thomas wagered, “is doubtless smaller than the annual appropriation for equipment in the science departments.” However, if it might “lighten the financial and editorial burden,” Thomas suggested that “we begin with an annual volume of 250 to 300 pages subsidized at 2500 to 3000 dollars, and when feasible expand to the full size indicated above.” Either way, “as soon as the subsidy is guaranteed,” Thomas wrote, “the work of organization can start and proceed rapidly.”⁴⁵

Arrangements with Duke University Press

Finally, in October 1934—ten months after his letter urging immediate action on the journal—Thomas received official backing from Flowers and Henry Dwire, director of Duke University Press. Thomas then officially conveyed Duke’s support for the journal at the meeting of the AMS Council that fall.⁴⁶ Now with full authority to start recruiting an editorial board, Thomas began working to prepare the first issue, scheduled to appear in March 1935.

Ultimately, the Duke administration pledged \$2,500 for the journal in the first year. Though this was only about half of what Thomas, Richardson, and others thought would be needed, the new journal still expected to benefit in 1935 from the annual subsidy provided by the Rockefeller Foundation. As mentioned earlier, those funds were to be withdrawn in 1936, so establishing the journal’s solid financial footing would pose a challenge to Thomas and his colleagues at DUP, given the budgetary situation and growing publishing crisis.

At Flowers’s suggestion, Thomas met separately with Dwire on October 24 to create a sound financial plan and finalize business and editorial arrangements for the

journal's management. Afterward, Dwire informed Flowers that he and Thomas had reached a "definite understanding" on five key points, one of which was to work toward establishing a quarterly journal of the originally planned size of about 125 pages per issue:

If the deficit on the publication for a twelve month period is less than \$2500, the balance on hand is to be applied to the enlargement and expansion of the publication until it reaches the maximum size contemplated, that is . . . five hundred pages.⁴⁷

The last two points were important for clarifying within the newly reorganized Duke University the roles and responsibilities related to editorial control and overall management of the journal:

The editorial management of the publication will be in the hands of Dr. J. M. Thomas as Managing Editor and an Editorial Board composed of members of the American Mathematics Society designated for that purpose.

The entire management will be vested in the Duke University Press. It will be a Duke University proposition, the only relation thereto of the American Mathematics Society being one of assistance and cooperation. All contracts for publishing and other expenditures will be made by the Duke University Press.⁴⁸

DUP has managed subscriptions, marketing, and finances for the journal since its inception in accordance with this "understanding." As an AMS-backed journal, *DMJ* was an important addition to DUP's growing list of influential journals—namely, *American Literature*, *Character and Personality*, the *Hispanic American*

Historical Review, and the *South Atlantic Quarterly*—that were helping to raise the level of scholarly attention to the university.



DUP logo ca. 1935
DMJ was one of a growing
number of influential journals
published at Duke by DUP.

LAUNCHING A NEW JOURNAL

Thomas certainly faced an enormous task during the winter of 1934–1935, when he took the first steps toward formally organizing the journal. But he knew that he could count on the support and assistance of a number of mathematicians, including the members of the AMS Council and the editors in charge of the four other research journals.

Selecting a Title for the Journal and Forming a Board of Editors

It was never assumed by anyone involved in its planning that *Duke Mathematical Journal* would be the name of the new serial publication. It was referred to in mostly general terms, such as “the new journal at Duke” or just “the new journal.” In fact, the journal was very nearly called the “Southern Mathematical Journal,” which had been Thomas’s first choice. As Thomas explained later,

“The matter of naming . . . the new journal has given me as big a headache as was ever experienced by fond parents in naming their offspring. . . . [T]he name Duke Mathematical Journal seemed to arouse less antipathy than any other.”⁴⁹

From the start there was concern that Duke University would be overrepresented on the editorial board. The advice given to Carmichael and Thomas, as well as to Few and the Duke administration, was that while the community would certainly expect Duke to maintain visibility on the editorial board, many mathematicians believed that the board needed to have both a wide geographical distribution and a

broad range of expertise if it had any chance at achieving long-term success.

Thomas had taken this advice to heart, but he was also aware that while under Few's leadership Duke University had national aspirations, it had also, as Durden observed, "inherited from Trinity a strong, deep-rooted commitment to be of as much service as possible to North Carolina and the southeastern region."⁵⁰ In a letter to Arthur Coble, the sitting AMS president and the first person whom Thomas invited to be coeditor of the journal, Thomas revealed that this regional commitment would influence his plans for organizing the journal's first editorial board and soliciting new papers:

Although we do not wish the contributors to come from any one geographical section, it would be wrong perhaps not to make the editing and publishing of the journal in some sense a southern project, because of the considerable importance which it may have in developing mathematics in the South.⁵¹

There were, however, limitations to this plan, as Thomas himself admitted to Coble—a native Pennsylvanian then working at the University of Illinois. When Thomas wrote to thank Coble for accepting the position of coeditor for geometry, he told Coble that he was glad that Coble's acceptance of the role "would in no way conflict with the southern plan because there is no possible candidate in the South."⁵² Still, Coble and others responded positively to Thomas's plan to try to use the new journal to develop mathematical research at southern institutions.⁵³

In addition to serving as managing editor, Thomas planned to handle the analysis papers. He also hoped to convince another Penn-trained mathematician, Harry Vandiver at the University of Texas, to serve as the third main editor focusing on algebra. In writing to Coble,

Thomas also wondered “if another name of international reputation seemed desirable, it would be quite proper to add, say, R. L. Moore and place me among the associate editors. Or a board of five could be made by taking in addition, say, [J. F.] Ritt. In either way, the southern preponderance would be maintained.” Thomas also told Coble about possible titles for the journal:

The name for the new baby has been causing me quite a headache. My first choice ‘Mathematical Researches’, has certain virtues and at the same time is open to the objections that it lacks modesty (possible false) and that it does not contain something equivalent to the word ‘journal’. A more serious objection is that it does not lend itself readily to a sententious abbreviation for current use such as ‘the Annals’, etc. A name avoiding this last difficulty is ‘Mathematical Quarterly’, but unfortunately Duke University already publishes a ‘Quarterly’ and then there is the ‘Quarterly Journal’.

At the present moment I rather favor ‘Southern Mathematical Journal’, subject of course to the approval of the editors of the American Journal. I do not believe that this name would be interpreted as limiting the geographical source of the papers. What is your reaction to it?⁵⁴

Thomas would pose the question about the name of the journal to each of the prospective editors he contacted, and reactions were mixed. Coble liked the title “Southern Mathematical Journal” but said that Carmichael, his Illinois colleague, had pointed out that “while the name would seem quite appropriate to Americans, its implications would not be understood outside of the United States.”⁵⁵ Vandiver, who would decline the offer to serve as a coeditor for *DMJ*, told Thomas that “as to the title, it seems to me best to avoid any suggestion of geography.”⁵⁶ While

Vandiver could offer no better suggestion for the title, Carmichael suggested “The Mathematical Journal of Duke University,” which, “as time went on . . . would be contracted to ‘The Mathematical Journal.’”⁵⁷

The question of the journal’s new name was a topic of “considerable discussion” at the AMS meeting in Pittsburgh in December 1934, Thomas reported. “Of course,” he wrote to prospective editor and future Duke colleague John J. Gergen, “it is impossible to get a name that will please everyone, but the title which seemed to provoke the fewest boos . . . was Duke Mathematical Journal.” Thomas told Gergen more about how this had transpired:

Although the local department in the beginning had regarded such a name with disfavor, yet it is distinctive, a characteristic which the titles of certain existing journals certainly lack, and as Duke University is sponsoring and subsidizing the project the members of the Society seemed to think it quite appropriate. In fact, both Richardson and Coble among others independently proposed putting Duke in the title. Everyone seems to feel that geographical scattering of the editorial board and the papers appearing in the early issues will forestall any misconception that the journal is particularly designed as an outlet for the research of our local department.⁵⁸

Both Flowers and Dwire at Duke agreed to the new title in January 1935, just a few weeks after the Pittsburgh meeting.

It was also in January 1935 that Thomas finalized the editorial board for the first issue. After Vandiver, both Moore and Ritt declined, too; but, at the Pittsburgh meeting, Thomas was able to secure the participation of David V. Widder from Harvard as the third main editor.

For the associate editors, Thomas had hoped to recruit among the “good material . . . found in the South, for example, G. T. Whyburn, L. W. Cohen, . . . L. R. Ford, H. E. Bray.”⁵⁹ Whyburn (Virginia), Cohen (Kentucky), Ford (Rice), and Bray (Rice) would all receive and accept invitations to serve as associate editors. The other three mathematicians appointed to the board as associate editors ahead of the first issue were J. J. Gergen (Rochester), R. E. Langer (Wisconsin), C. C. MacDuffee (Ohio State), and J. A. Shohat (Penn).⁶⁰ While Thomas at first seemed rather keen on pursuing a southern focus for the journal, by August 1935 he was telling MacDuffee that, with regard to the editorial board, “geographical distribution is of minor importance.”⁶¹

The Duke mathematics department would be represented on the editorial board as a single body of associate editors, a decision that Coble thought was “admirable from the point of view of diplomacy.”⁶² Although their names were not included on the journal’s masthead, the editorial influence of J. H. Roberts and Leonard Carlitz was evident from the start of the journal. Both had recently arrived in Durham—Roberts in 1931 and Carlitz in 1932—and both would hold the managing editorship and have a close association with the journal while at Duke.

Two additional associate editors—Øystein Ore (Yale) and E. P. Lane (Chicago)—were appointed to the *DMJ* editorial board by the AMS in 1935. By virtue of this AMS representation, the articles published in *DMJ* would be eligible for the various prizes offered by the Society. The *Annals* and *AJM* had a similar arrangement with the AMS, and Solomon Lefschetz had urged Thomas more than once to seek the same for *DMJ*, which he wisely did.⁶³

With *DMJ* now firmly established among the group of mathematical research journals in the United States, it was

time for Thomas to gather papers and prepare the first issue for publication.

Transferring Papers to DMJ

As had been discussed previously with the AMS, the first volume of *DMJ* would be supplied mostly through the transfer of accepted papers from the backlogs of the established journals, particularly *AJM* and the *Annals*. Most of the transferred articles in the first issue of *DMJ* would come from the *Annals*, and Thomas would work very closely with Solomon Lefschetz to manage this phase of *DMJ*'s launch. The two kept up a near-constant correspondence throughout the launch of *DMJ*.

Lefschetz, of course, did not summarily transfer papers from the *Annals* to *DMJ*. Both he, Thomas, and others worked throughout much of the journal's first year identifying papers for transfer and writing to authors to get their agreement—and in most instances the authors agreed. Egbertus van Kampen, for example, was fine with Lefschetz transferring his paper “On some characterizations of 2-dimensional manifolds,” as long as it “bears the mention that it was received by the Editors of the *Annals of Mathematics* on such and such a date.”⁶⁴



Solomon Lefschetz
As incoming AMS president and editor of the *Annals* in 1935, Lefschetz provided continuous support and encouragement to help launch *DMJ*.

Lincoln La Paz and Tibor Rado, however, declined the offer to have their paper transferred, “for reasons which would be of very little interest to you,” they told Thomas. But they wanted to assure Thomas that, at the same time, they “learned about [the] new journal with great interest and sympathy” and that “we shall be very glad to contribute to [it] in the future.”⁶⁵

Another aspect of the launching of *DMJ* that Lefschetz had a big part in was helping Thomas establish a business relationship with the Waverly Press in Baltimore to handle the first printing of *DMJ*.⁶⁶ Given the amount of help Lefschetz gave to Thomas, it is no surprise that Thomas chose Lefschetz's paper "Chain-deformations in topology" to be the first article in the inaugural issue of *DMJ*.

* * * * *

The completion of the first volume at the end of 1935 was not only the culmination of eight years of talks and toils; it was a historic moment in the field of mathematics research.

Global events would continue to present challenges affecting *DMJ* through its early years, but the journal survived in spite of them. Because its existence originated within the inner circle of the American mathematical research community, the journal enjoyed a respectable reputation from its inception, and the journal still continues to be a leading research journal and an international source of recognition for Duke University.

In January 1936, Thomas shared the AMS's resolution on the founding of the journal with all of his editors and associate editors, offering his own congratulations and note for moving forward: "As we start upon our second year of existence, may I add to the above my personal thanks for your past cooperation, and express the hope that we may continue to grow in size and quality."⁶⁷

CREDITS

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The letters and other documents cited here are from collections at the David M. Rubenstein Rare Book and Manuscript Library, Duke University, and the Archives of American Mathematics at the Briscoe Center for American History, University of Texas at Austin. Many thanks to those institutions for permission to reproduce material here. Source information is given below and in the notes.

Image Sources

- Page 5:* Duke University, West Campus construction, August 1930, “View taken from Medical School tower, showing main Quadrangle,” Duke University Construction Progress Photographs, 1925–1932, picture no. 386B.
- Page 7:* Robert Carmichael, Mathematical Association of America.
- Page 8:* Oswald Veblen, Oberwolfach Photo Collection.
- Page 11:* George B. Pegram, American Institute of Physics.
- Page 12:* Jacob D. Tamarkin, William Prager, and Roland G. D. Richardson, Brown University, Department of Applied Mathematics.
- Page 26:* DUP logo, from Duke University Press Records, 1812–2015, Director’s Files, 1932–

1936, David M. Rubenstein Rare Book and Manuscript Library, Duke University.

Page 32: Solomon Lefschetz, American Mathematical Society.

NOTES

1. R. G. D. Richardson to W. P. Few, January 13, 1936, William Preston Few Records and Papers, 1814–1971, David M. Rubenstein Rare Book and Manuscript Library, Duke University (Few Papers). Richardson would serve the AMS as an officer for nearly thirty years; see R. C. Archibald, “R. G. D. Richardson,” *Bulletin of the American Mathematical Society* 56 (1950), 256–65.
2. Robert F. Durden, *The Launching of Duke University, 1924–1949* (Durham, NC: Duke University Press, 1993), 98–102.
3. Since the AMS was involved in the operations of the existing mathematical journal, publication data was shared among editors and society members. See, for example, J. H. M. Wedderburn to George Pegram, July 31, 1927, Few Papers; and Richardson to Pegram, August 1, 1927, Few Papers.
4. Durden, *Launching of Duke University*, 98–99.
5. J. J. O’Connor and E. F. Robertson, “Robert Daniel Carmichael,” MacTutor History of Mathematics Archive, 2010, <http://www-history.mcs.st-andrews.ac.uk/Biographies/Carmichael.html>; Carl Pomerance, “Computational Number Theory” in *The Princeton Companion to Mathematics*, ed. Timothy Gowers (Princeton, NJ: Princeton University Press, 2008), 350–51.
6. Carmichael to Few, April 20, 1927, and April 29, 1927, Few Papers.
7. Carmichael to Few, April 29, 1927, Few Papers.
8. Carmichael to Few, May 13, 1927, Few Papers.

9. Ibid.
10. Carmichael to Few, May 13, 1927, Few Papers; Richardson to Pegram, August 1, 1927, Few Papers.
11. R. D. Carmichael, "Proof that every positive integer is a sum of four integral squares," *Duke Mathematical Journal* 2, no. 2 (1936), 243–45.
12. Veblen, of course, had valid concerns about starting an entirely new publication. A bit of pure speculation for fun: One might also wonder whether Veblen, by now well established at Princeton, was opposed to the new journal because he had heard a rumor that Duke intended to take control, not just of the journal, but of Princeton University entirely. See William E. King, "Of Myths and History, or the Duke-Princeton 'Connection,'" <https://library.duke.edu/rubenstein/uarchives/history/articles/princeton>, which first appeared in William E. King, *If Gargoyles Could Talk: Sketches of Duke University* (Durham, NC: Carolina Academic Press, 1997); see also Wes Tooke, "Princeton Myths—Debunked," *Princeton Weekly Bulletin*, May 10, 1999, <https://www.princeton.edu/pr/pwb/99/0510/myths.htm>.
13. Pegram to Few, September 16, 1927, Few Papers; Durden, *Launching of Duke University*, 79, 96, 99. Pegram's time at Columbia spanned more than 50 years (1900–56). As head of the physics department, it was Pegram who brought Enrico Fermi to Columbia in 1939 and who assembled and managed the team of scientists conducting experiments in nuclear fission. See Lee Anna Embrey, "George Braxton Pegram, 1876–1958," *National Academy of Sciences Biographical Memoirs* (1970), 357–407.
14. Pegram to Few, September 16, 1927, Few Papers.
15. See Embrey, "George Braxton Pegram."
16. Pegram to D. Jackson, J. H. M. Wedderburn, V. Snyder, R. G. D. Richardson, G. D. Birkhoff, and E. R. Hedrick, July 22, 1927, Few Papers.
17. Hedrick to Pegram, July 27, 1927, Few Papers.
18. Snyder to Pegram, July 27, 1927, Few Papers.

19. Wedderburn to Pegram, July 31, 1927, Few Papers; original emphasis.
20. Ibid.; original emphasis.
21. Richardson to Pegram, August 1, 1927, Few Papers.
22. Ibid.
23. Ibid. Snyder saw this practice of condensing articles for publication as a troubling trend among American journals: “On account of limited space, a tendency has developed to condense the material published until it has overstepped the stage of maximum usefulness. In this regard, many recent American papers are much more condensed than is the case in most papers appearing in the better European mathematical journals. This is harmful to the author and to the reader” (Snyder to Pegram, July 27, 1927, Few Papers).
24. Jackson to Pegram, August 4, 1927, Few Papers.
25. Birkhoff to Pegram, August 15, 1927, Few Papers.
26. Reinhard Siegmund-Schultze, “Birkhoff as the Leading American Mathematician, His Trip to Europe in 1926, and His Conclusions,” *Rockefeller and the Internationalization of Mathematics between the Two World Wars* (Basel: Birkhäuser, 2001), 42–49; Birkhoff to Pegram, August 15, 1927, Few Papers.
27. Hedrick to Pegram, September 11, 1927, Few Papers; original emphasis. It seems that Veblen did not attend the summer meeting in Madison. He would, however, eventually give his support to the founding of *DMJ*.
28. AMS resolution, September 6, 1927, Madison, Wisconsin, Duke Mathematical Journal Records, 1927–1934, Archives of American Mathematics, Dolph Briscoe Center for American History, University of Texas at Austin (DMJ-UT Records).
29. Pegram to Few, September 17, 1927, Few Papers.
30. Richardson to Few, April 11, 1929, Few Papers.
31. Ibid.
32. Thomas would leave the journal and Duke for a year, from 1944 to 1945, while serving with the Army in India and Burma (see records on Thomas in the Duke University News Service Biographical Files, 1960–2004, David M. Rubenstein

Rare Book and Manuscript Library, Duke University [DU News Service Biographical Files]). The prolific Carlitz would also publish 100 of his 770 research papers in *DMJ* during his career.

33. In a note to members of the AMS Council, Richardson wrote, “At the end of 1932 the subvention of \$5000 from the General Education Board through the Committee of the National Academy to the four journals is to be withdrawn, and while the Society and the two universities (Johns Hopkins and Princeton) will attempt to find other funds, the prospects are discouraging.” Richardson to AMS Council Members, November 18, 1931, DMJ-UT Records.
34. Thomas was from the Philadelphia area and had studied and taught at Penn before leaving for Durham in 1930. The move to Duke and the managing editorship of *DMJ* marked the start of a very busy and notable period of Thomas’s career. Just a year after the first volume of *DMJ* was published, Thomas obtained a one-year appointment to the Institute of Advance Study and delivered an address on differential systems at the forty-third annual meeting of the AMS, which was jointly hosted by Duke and the University of North Carolina at locations in both Durham and Chapel Hill in 1936 (see Thomas biographical data, DU News Service Biographical Files).
35. Richardson to the AMS Council, November 18, 1931, DMJ-UT Records; and Richardson, AMS Business by Mail, December 2, 1931, DMJ-UT Records.
36. Richardson to the AMS Council, November 18, 1931, DMJ-UT Records.
37. Richardson, AMS Memorandum, November 18, 1931, DMJ-UT Records.
38. Richardson to Robert L. Flowers, December 9, 1931, DMJ-UT Records.
39. Richardson to the AMS Council, November 18, 1931, DMJ-UT Archives.
40. It is not clear from Richardson’s letter whose ballot was not returned. Veblen was still on the Council at this time and cast

a “yes” vote on his ballot. See Richardson, AMS Business by Mail, December 2, 1931, DMJ-UT Records.

41. While the university’s annual endowment receipts doubled from \$500,000 per year in 1927 to one million per year in 1932, they were then reduced to \$500,000 per year again in 1933 as the depression continued, while the administration had to deal with numerous competing projects and crises. See Durden, *Launching of Duke University*, 58, 390.
42. Thomas to Flowers, January 5, 1934, DMJ-UT Records.
43. Ibid.
44. Ibid.
45. Ibid.
46. Mark H. Ingraham to Few, November 19, 1934, Few Papers.
47. Henry R. Dwire to R. L. Flowers, October 25, 1934, Robert Lee Flowers Records, 1891–1968, David M. Rubenstein Rare Book and Manuscript Library, Duke University (Flowers Records).
48. Ibid.
49. Thomas to L. R. Ford, January 19, 1935, DMJ-DU Records.
50. Durden, *Launching of Duke University*, xii.
51. Thomas to Coble, November 12, 1934, Duke Mathematical Journal Records, 1924–1985, David M. Rubenstein Rare Book and Manuscript Library, Duke University (DMJ-DU Records).
52. Ibid. The uses of upper- and lowercase letters for “southern” and “South” are per the original documents.
53. This southern focus was applauded by several mathematicians with whom Thomas corresponded about editorial appointments. See, for example, L. W. Cohen to Thomas, December 12, 1934, DMJ-DU Records.
54. Thomas to Coble, November 12, 1934, DMJ-DU Records.
55. Coble to Thomas, November 19, 1934, DMJ-DU Archives.
56. H. S. Vandiver to Thomas, December 18, 1934, DMJ-DU Records.
57. Ibid.; and Coble to Thomas, November 19, 1934, DMJ-DU Records.

58. Thomas to J. J. Gergen, January 19, 1935, DMJ-DU Records.
59. Thomas to Coble, November 12, 1934, DMJ-DU Records.
60. Gergen moved to Duke in 1936 and was chairman of the department from 1937 to 1966.
61. MacDuffee had written to Thomas on August 29 to offer his resignation as an associate editor. MacDuffee was planning to move from Ohio State to Wisconsin and assumed that Thomas would not want two people from Madison on the board. Thomas replied on August 31, asking him to stay, pointing out that there were already two people from Rice on the board (Bray and Ford). See MacDuffee to Thomas, August 29, 1935, DMJ-DU Records; and Thomas to MacDuffee, August 31, 1935, DMJ-DU Records.
62. Coble to Thomas, November 19, 1934, DMJ-DU Records.
63. See Raymond Clare Archibald, *A Semicentennial History of the American Mathematical Society, 1888–1938* (New York: American Mathematical Society, 1938), 17; S. Lefschetz to Thomas, November 7, 1934, DMJ-DU Records; and Richardson to Pegram, August 1, 1927, Few Papers.
64. Lefschetz to Thomas, January 29, 1935, DMJ-DU Records.
65. La Paz and Rado to Thomas, February 2, 1935, DMJ-DU Records.
66. Waverly also printed the *Colloquium* book series for the AMS as well as the *Annals*. DUP would eventually manage the editing and typesetting of *DMJ*, but, for the journal's early volumes, that work was handled at Waverly and directed by Thomas.

DUP's printing at the time was done in Durham by the Seeman Printery, but they were not properly equipped then to handle the typesetting and printing of mathematical formulas. Ernest Seeman, oldest son of the founder of the Seeman Printery, had been hired by Few in 1925 to manage Duke University Press (see Durden, *Launching of Duke University*, 179–84). Seeman tried to get the *DMJ* printing job but was not successful, as it was not the most expedient solution at the time. As Thomas wrote to Coble, "It would perhaps be much wiser to have the journal printed by a concern already doing similar work, in somewhat the same way that I should prefer

to have young graduates of the medical schools get their experience cutting up some one else” (see Thomas to Coble, December 10, 1934, DMJ-DU Records).

67. Thomas to members of the *DMJ* editorial board, January 16, 1936, DMJ-DU Records.