

independently of the initial stress, and that the strain is given by

$$x^2 \left(\frac{4}{12} \right) + S$$

where S is the strain produced in the wire by the initial stretching and π is the depression.

Platting $\frac{M}{x}$ against x^2 we get the graph shown in

Fig. 4 where the crosses show the values for the table quoted above and the dots show a similar set obtained from another piece of the same wire *but under a much smaller initial strain*.

It will be noted that the slope of the line AB multiplied by the ratio of the constants $\left(\frac{g}{4\pi r^2} \right)$ and $\left(\frac{4}{12} \right)$ gives Young's modulus for the copper used.

B is the elastic limit and C the "yield point." The variation of the level of the fiducial mark from its original position for each of these points is shown by the double line on the plot (scale to the right hand of plot). It will be observed that the break at E corresponds with the elastic limit at B , and that F (where the large yield occurs) corresponds with C on the line of stress and strain.

And finally, if one extends the line BA back to cut the axes, $OA \times \left(\frac{g}{4\pi r^2} \right)$ gives the initial stress in the wire and $OD \times \left(\frac{4}{12} \right)$ gives the initial strain.

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THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE REGULAR FALL MEETING OF THE EXECUTIVE COMMITTEE

THE regular fall meeting of the executive committee of the American Association was held at the Urbana-Lincoln Hotel, in Urbana, Illinois, on Monday, October 17, 1927. Three sessions were held, each of about two hours, beginning at 10:00, 3:00 and 8:00 o'clock, and the members who were present dined together at 6:15 at the same hotel. The following members were present: Cattell, Fairchild, Livingston, W. A. Noyes and Ward. The following items of business were transacted, with the approval of those present and with the subsequent approval of Dr. Humphreys, who added his vote to the five votes of those who were present at the sessions. Each item of business consequently has the approval of a majority of the com-

mittee and becomes a legal action of the association. The members of the committee who were unable to be present at this meeting are Humphreys, Kellogg, Moulton, A. A. Noyes, Pupin and Wilson. The official minutes of the meeting have now been approved by means of a mail vote.

1. The permanent secretary reported that the minutes of the last preceding meeting had been approved by mail.

2. The permanent secretary read a communication from the treasurer (dated May 12, 1927), calling attention to the will of the late Benjamin Pickman Mann, of Washington, D. C., by which the American Association is to receive the balance of a trust established by the will, after certain provisions have been cared for.

3. The permanent secretary's annual financial report for 1926-27, of September 30, 1927, was accepted and referred to the council.

4. The permanent secretary's proposed budget for the fiscal year 1927-28 was unanimously approved. This is based on prospective receipts (entrance fees of new members and annual dues) of \$70,000, of which \$43,000 is to be expended for journal subscriptions for members (*SCIENCE* or *The Scientific Monthly*).

5. The permanent secretary's annual report on membership for the fiscal year 1926-27 was accepted. On September 30 the total number of members in good standing was 13,930, representing an increase of 537 since the preceding annual report. The total enrolment (including, besides members in good standing, those whose names were retained on the roll although in arrears for one or for two years) was 14,862, representing an increase, since last year's report, of 496, or 3.4 per cent. New members and reinstatements amounted to 1,327 for the fiscal year just closed. The total loss in enrolment amounted to 831, including 178 deaths, 281 resignations and 372 names dropped October 1, 1926, at the close of two years of arrears. On October 1, 1927, 412 names were dropped from the roll on account of two years of arrearage. The permanent secretary added that 450 new members had been enrolled since September 30, 1927. (This number has now increased, November 14, 1927, to 1,114 and the total enrolment is now 15,572.)

6. The permanent secretary reported that \$1,310.00 had been received as contributions from members to the Agassiz Bust Fund (see *SCIENCE* for December 10, 1926) and that that amount had been paid over to the Hall of Fame, New York University. The expenses of the committee on the Agassiz Bust Fund were \$362.33, met from the current funds of the permanent secretary's office and not charged against the fund. This report was approved and the permanent secretary was asked to make arrangements, if possible,

by which a photograph of the Agassiz bust, when it is unveiled, may be published in *The Scientific Monthly* and copies of the picture may be sent to all contributors to the fund. (Work on the bust is now in progress.)

7. Dr. Ward presented a report for the special committee on academy relations and in response to this report the executive committee took action as indicated in paragraphs 8-12 below.

8. The executive committee recognized the newly formed Colorado-Wyoming Academy of Science, which will hold its first meeting at Laramie, November 25 to 26, 1927, and recommended to the council that this academy be affiliated with the association. The region of the academy is Colorado and Wyoming.

9. It was voted that the special committee on academy relations consist of the representatives of the affiliated academies in the council (one from each affiliated academy), together with all members of the committee on inter-academy relations that was appointed by the academy conference at Philadelphia and three members representing the executive committee of the association (Ward, Cattell, Livingston). Dr. Ward is chairman.

10. It was voted that a session of the committee on academy relations be arranged to occur immediately following the first council session at Nashville, on the afternoon of Monday, December 26.

11. The permanent secretary was asked to arrange a complimentary dinner of the committee on academy relations, to be paid for out of the current funds of his office, for the evening of Monday, December 26, following the committee session and preceding the opening session of the Nashville meeting. The permanent secretary was asked to invite Dr. Wilhelm Segerblom, recently president of the New Hampshire Academy of Science, to be a guest of the committee for the session and for the dinner, requesting that he take part in the discussions. Dr. Segerblom has made a study of the state academies of sciences and gave some of his results in his retiring presidential address before the New Hampshire Academy at Waterville, N. H., on June 4, 1927. His address is soon to appear in *SCIENCE*.

12. The official affiliation of the Society for Experimental Biology and Medicine was ratified. The society has 784 members, of whom 390 are fellows of the association. It is to have two representatives in the association council.

13. The official affiliation of the South Carolina Academy of Science was ratified. The academy has 54 members, of whom 18 are now members of the association.

14. One hundred and seventy-two fellows were elected, distributed among the sections as follows:

Section B (Physics)	1
Section C (Chemistry)	65
Section F (Zoological Sciences)	15
Section I (Psychology)	79
Section L (Historical and Philological Sciences)	1
Section M (Engineering)	3
Section N (Medical Sciences)	7
Section O (Agriculture)	1

15. The rules for the award of the American Association prize of \$1,000 were reviewed and it was voted that the Nashville award is to be made according to the rules followed at the fifth Philadelphia meeting. These rules were published in *SCIENCE* for December 2.

16. The executive committee made an appropriation of \$100, from the treasurer's funds, to aid the work of the National Conference on Outdoor Recreation.

17. A request was considered, from the mayor of Southwark, for a financial contribution to the Faraday Memorial Collection, kept in the Central Reference Library, Southwark, London, and the permanent secretary was asked to inform the mayor that the association has no funds that might be employed in this way but that it highly approves of the Faraday Memorial Collection. Through its official journal, *SCIENCE*, the association will be glad to give publicity among American scientists to a letter or note on this subject that may be sent to the permanent secretary.

18. Evening and afternoon lectures of a non-technical nature were approved for the Nashville meeting, as these may be arranged by the permanent secretary.

19. The executive committee approved the plan of having at the Nashville meeting a lecture by a British scientist if that can be arranged.

20. The following resolution was adopted:

Resolved, That the American Association, as one of the sponsor organizations for this project, approves the list of standardized mathematical and engineering symbols referred to in *SCIENCE* for August 12 and September 9, 1927. The list has been published in full in the *Journal of Engineering Education* for June, 1927; the *Journal of the Society of Automotive Engineers* for July, 1927, and *Mechanical Engineering* for August, 1927.

21. Dr. Fairchild presented an invitation from the president of the University of Rochester, requesting that the annual meeting of December, 1933, be held at Rochester, N. Y. This invitation was tentatively accepted, pending detailed arrangements.

22. The executive committee adjourned to meet at the Andrew Jackson Hotel in Nashville at 10:00 o'clock on Monday, December 26, 1927.

BURTON E. LIVINGSTON,
Permanent Secretary