VASSAR STUDENTS' AID SOCIETY.

THE first annual meeting of the Vassar Students' Aid Society was held at Sherry's, Fifth Avenue and 37th Street, New York, on Saturday, Oct. 25, 1890.

The meeting was called to order by the president, Mrs. J. R. Kendrick, who emphasized in a brief address the relation between the work of this society and the general movement of the day toward the wider extension of the higher education, and spoke of the enduring nature of its task.

The secretary reported that the society now numbers 17 life-members and 374 annual members, including residents of Mexico, Germany, South America, and India. Many encouraging letters were received from former students, expressing sympathy with the objects of the society, and no little pleasure in being allowed to claim a place among the daughters of Vassar and in the opportunity for acknowledging their indebtedness for the benefits received at her hands. The work of securing new addresses has been continued through the generosity of a member who gave printed lists covering the years from 1865 to 1869. A non-graduate who received a copy of one of these wrote forty letters, and obtained information in regard to seventeen former students,—an incident which illustrates not only the amount of work involved in this search, but also the general willingness to help, which has made possible the measure of success the society has achieved.

In March the state of the treasury warranted the announcement of a scholarship, to be awarded in June, 1890. As the society represented widely separated sections of the country, it was deemed fairest to all to open as widely the competition for the scholarship. The late announcement prevented the majority of the applicants from adapting their preparation to the college requirements, and but two passed the examination unconditionally. Both are now in college, the second as the recipient of aid from the college.

The treasurer reported a total of $751.98 received since October, 1889,—from 17 life-members $425, from annual members $326.98; cash paid for scholarship, $200; for printing, postage, and sundries, $117.93; and a balance in treasury, including life-membership fees, of $434.05.

The organization of a Minnesota branch at St. Paul, Nov. 22, 1889, has been followed by the formation of branches in Boston, New York, Brooklyn, Poughkeepsie, Orange (N.J.), and Louisville (Ky.), and the appointment of committees in other centres. These branches reported the details of their organization, their plans for extending their influence by the admission of associate members and by giving series of lectures, and made announcement of local scholarships as follows:—

The Boston branch, to residents of localities represented by the branch, a scholarship of $200 for competition in June, 1891. Application must be made to Mrs. Frank H. Monks, Monmouth Street, Brookline, Mass.

Brooklyn branch, to residents of Long Island, a scholarship of $100, tenable four years, to be awarded in June, 1891. Application should be made to Mrs. Charles O. Gates, 100 Greene Avenue, Brooklyn.

Kentucky branch, to residents of the State, a scholarship, probably of $400, for competition in June, 1891; application to be made to Mrs. Patty B. Semple, 1222 Fourth Avenue, Louisville.

The New York and Poughkeepsie branches anticipate being soon able to announce one each for award in June.

The parent society also offers two scholarships, of $200 each, for general competition in June, 1891 and 1892 respectively. Application must be made to Miss Jessie F. Smith, South Weymouth, Mass.

Application for these scholarships must be made before May 10

The balloting to fill the vacancies caused by the expiration of terms of office resulted in the election of Professor Abby Leach, Mrs. George H. Mackay, Professor Mary W. Whitney, and Miss Rachel Jacobs.

Invitations to the public meeting had been sent to about five hundred friends of education and of Vassar. Dr Mary Taylor Bissell presided. In a stimulating address, Dr. Taylor dwelt upon the advantages of the principle of co operation in the bestowal of aid to students, and pointed out the importance of extending assistance to those who were willing to prove their capacity by entering a competitive examination, and who showed their desire to be self-reliant in their willingness to accept these scholarships in the form of a loan.

THE PRESERVATION OF TIMBER.

IN countries where timber is cheap, labor expensive, and money scarce, it does not pay to apply preservative substances to wood to delay or prevent its natural decay. A very rapid calculation will show that wages, cost of chemicals, and compound interest together, represent a sum greater than the cost of frequent renewals. However, the wastefulness of settlers in new countries, and the steady accumulation of capital in the old ones, are rapidly doing away with this condition of affairs. Timber is growing both scarce and dear, while increased means of communication have reduced wages in places formerly on the outskirts of civilization. Even in this country, where timber was once so plentiful that care was not even exercised to cut it at a period of the year when it was at least filled with sap, and when "seasoning" was never thought of in the hurry of railway construction, considerable attention is now being given to preservative processes. Unfortunately the desire to carry them out cheaply has often brought them into discredit. Homœopathic quantities of antiseptics have been not unfrequently used, the action being confined to the outside of the timber, and being quickly dissipated by the action of air and moisture.

Engineering of Nov. 21 gives a history of attempts at prolonging the life of timber, from which we take the following:—

In 1836, Dr. Bouchorie, a French chemist, tried to impregnate timber by vital suction; that is he tapped the tree, and allowed the ascending sap to carry up a preserving solution. This, however, did not give satisfactory results, and in place of it a cap was supplied to the end of a newly cut log, and the solution forced along the sap ducts by hydraulic pressure Sulphate of copper was the chemical used; and, when it was applied to newly felled timber, it gave good results. Lime water has been tried, and also salt, but the effects have not repaid the trouble. There is a strip of road in the Union Pacific Railroad, in Wyoming Territory, where the sleepers do not decay at all. The analysis of the soil shows that it contains sodium, potassium chloride, calcium, and iron, which act as preserving agents. An inventor named Foreman brought out a process by which dry arsenic and corrosive sublimate were inserted in holes in sleepers, and covered with plugs. The materials became dissolved, and effloresced on the surface, when the cattle licked them and died by scores. The farmers rose in arms and forced the railroad company to burn all the sleepers. Many other attempts might be narrated: indeed, the entire list of antiseptic substances appear to have been ransacked to find something both cheap and effective.

The chief processes that have been employed for the preservation of timber are kyanizing, burnettizing, and creosoting; that is, impregnation with bichloride of mercury, with sulphate of zinc, and with creosote. Many others have been proposed and tried, but only these three have survived. The first seems to be well adapted for bridges, or for timber exposed to weather alone, and not to constant moisture. Examples have been found in this country which were in a good state of preservation after twenty eight years' exposure; but, when kyanized timber has been used for railway sleepers and pavements, it has had only a doubtful success, probably in consequence of the washing-out of the corrosive sublimate. The wood is allowed to steep one day for each inch in thickness of its least dimension, and one or two days in addition. The solution contains 1 per cent by weight of corrosive sublimate and from four to five pounds of this are absorbed per thousand feet, board measure. Burnettizing may be performed in the same way, sulphate of zinc being the chemical employed; but it is usual to steam the timber first to open the pores, and then to subject it to a vacuum to withdraw the sap. If this be not done, the timber must be stored for a considerable time to allow it to dry naturally. When treated, the wood should not be placed in exposed situations, such as bridges, or else the zinc will be washed out and leave it unprotected. This is partic-