

joint work a most successful undertaking. I hope that I shall succeed in making similar arrangements with the botanists of other countries.

The report comments upon the foregoing as follows :

The committee feels that the Society is greatly indebted to the editors of the *Centralblatt* for their courteous letter and must be highly gratified with their statement of the changes which they express themselves prepared to make in the near future. The changes, as will be seen from Dr. Uhlworm's letter, are in conformity with the suggestions made by the committee in its report and will meet with the approval of all American botanists. It is proposed to include in the *Centralblatt* proper, only reviews and the index of literature; the *Beihefte* will contain only original articles; the *Centralblatt* may be subscribed for without also subscribing for the *Beihefte*, and, lastly, the price of the *Centralblatt* is to remain as at present. On these points, therefore, the letter of Dr. Uhlworm is entirely satisfactory.

The suggestions that American editors be nominated by a representative body of American botanists seem to be excellent and likely to prove helpful to the *Centralblatt* by stimulating our botanists to make a determined and combined effort to do all in their power to enable the editors of the *Centralblatt*, so far, at least, as American botanical literature is concerned, to make their journal indispensable to all botanists. Hereafter, it will be a matter of pride to us to show that our interest is not merely passive, but that we are ready to make active individual and collective effort to secure a desirable result.

The Committee closes its report with the following recommendations :

*First*, that the Secretary be directed to write to Dr. Uhlworm and express our hearty approval of the changes proposed, and our readiness to cooperate.

*Secondly*, that a committee of three be appointed by the Society with full power to represent the Society in further negotiations with the management of the *Centralblatt* up to such time as the selection of American editors shall have been definitely made, the committee to report to the Society at its next annual meeting.

*Thirdly*, that the committee thus appointed be requested to invite one botanist from the Central States and one botanist resident on the Pacific Coast to serve with them in the selection of American editors, and in such preliminary business as may be necessary for the furtherance of the plans proposed by the editors of the *Centralblatt*.

*Fourthly*, that a copy of this report, or of such

parts of it as may seem desirable in order to call the attention of our botanists to the changes to be made in the *Centralblatt*, be sent to the *Botanical Gazette*, the *Bulletin of the Torrey Club* and to SCIENCE.

In accordance with the second recommendation, Messrs. Farlow, MacDougal and Ganong were appointed upon the new committee to carry out the work to completion, and Messrs. Trelease and Campbell have since been added, in accordance with section three above. The botanists of the country are to be congratulated upon the results achieved by these negotiations. The changes proposed, and in part already put into effect, promise to make the *Botanisches Centralblatt* an efficient and economical journal of reviews indispensable to every working botanist. It is hoped that those of America will manifest their appreciation of its advantages, and their acknowledgment of the efforts of its editors and publishers to meet their wishes, by a cordial and practical support. Upon this latter subject a further communication is expected from the Committee. CHARLES E. BESSEY.

#### SCIENTIFIC BOOKS.

*Proceedings of the Society for the Promotion of Engineering Education.* Vol. VIII. 1900. Edited by PROFESSORS JOHNSON, KINGSBURY and JACOBY. New York, Engineering News Publishing Co. 1900. 8vo. Pp. 377.

It may be doubted whether, in any other department of applied science, a larger, a more important, or a more fruitful work is being done than in the field occupied by the Society of which the transactions are here recorded. The members of the Society are engaged in the technical schools and colleges of the country in the professional training of men who are to hereafter lead in the application of the discoveries of science, of the inventions of the useful arts and of the methods of modern industrial operation in the new century. Their work is the instruction of youth who, having completed the general education that their parents' money and their own time and scholarly proclivities may afford them, turn their attention to the

scientific principles which are the recognized foundation of their professional work and the basis of professional success. The work is that which has brought Germany up from insignificance, industrially, and made her one of the world's most important producers, placing her people in the foremost rank in all applied sciences and in all arts based upon science. Their opportunities are greater than those of their German colleagues; they recognize the facts and are evidently seeking to make the most of them. The record is rich in instructive and suggestive matter.

The earlier pages of the volume are given to the lists of officers, council, committees and members. The last number already—the Society was organized at the World's Congress at Chicago in 1893—nearly 300, of whom New York and Massachusetts claim 29 each; Ohio, 20; Pennsylvania, 18; Indiana and Illinois, each 15; Michigan, 13; Minnesota, 12, and other States smaller numbers; 36 States being represented, one Territory, and also Canada, England, France, Germany, Switzerland and Australia, mainly single representatives, although Canada has six. Any one occupying, or who has occupied, a position as a teacher in any branch of work in the engineering school or college is eligible to membership. The conventions occur annually and usually in conjunction, as to time and place, with the American Association for the Advancement of Science. The finances of the Society seem to be in admirable shape.

The proceedings for the year 1900 include an address by the President on the work of the nineteenth century in this field, the report of the committee appointed to answer the question, regarding industrial education generally: 'What shall it be?' an abstract of which has already been given in these columns, and a total of about twenty papers and reports of committees of a most valuable and interesting character. Those on the form of the industrial educational system, on 'Personality in Teaching' and on 'Business Methods in Teaching Engineering,' gave rise to earnest and helpful discussions of very general interest; as did, also, the two papers, coupled together, on the 'Present Status and Tendencies of Engineering Educa-

tion in the United States' and on 'The Promotion of Engineering Education.' The last two papers on the list, one on 'The Modern Mechanical Laboratory,' presented simultaneously, also, to the Paris Congress on Applied Mechanics, and the other on 'Operating Work as a Feature of Electrical Laboratory Training,' were received too late for discussion.

Of these papers, the report first alluded to above, already noticed in these columns, is here printed, with a discussion of great extent and exceeding interest and in some respects perhaps more valuable than the report which provoked it. The report of the committee is strongly endorsed, and the speakers, including some of the ablest in the field, present a great variety of new views and of crucial problems such as must long afford food for thought to all interested in this subject. And what intelligent citizen is not thus interested? Heads of engineering and technical schools, practitioners, famed and expert, teachers, distinguished and likely to become distinguished, and every department of technical instruction and practise give testimony. The paper on 'Secondary Technical Education' and those on details of work may be taken to be extensions of this discussion; and most helpful they are likely to prove to all who are either directly or indirectly concerned in this most important to the industrial community of all modern departments of applied science.

R. H. THURSTON.

*Kant's Cosmogony.* Edited and Translated by W. HASTIE, D.D., Professor of Divinity in the University of Glasgow. New York, The Macmillan Co. 1900. Cr. 8vo. Pp. cix + 205. Price, \$1.90.

This is an excellent bit of work, not only admirable in the scholarship and learning that go to its execution, but noteworthy in its timeliness as a contribution to English 'Kant philology.' So far as the editor is concerned, the book means that the days of heat and partisanship about the critical philosophy are past, that a man dare call attention to Kant's place in scientific evolution and yet keep a whole skin. No doubt there are those who will squirm uncomfortably when they read; Kant's 'Natural