

lege of the middle west. And this from a president of one of the state universities:

I have to say in humiliation that practically nothing has yet been done in this state and in our institution as to tuberculosis. . . . I am going to take up the matter in the university next year. I regard the movement as one of supreme importance and hope to bear my share in the beneficent cause.

What results may we expect from the cooperation of all the colleges when it is once secured? Each year we shall enlist hundreds of thousands of the best young men and women of the country. We shall obtain through them the cooperation of the secondary schools whose teachers they supply. And as our students go out into every city and town and village in the land to take their places as citizens of exceptional influence in their communities, we shall secure the cooperation of the leaders of the future. The harvest sown in the college may be some years in ripening, but it is no less sure.

In summation let me say that we may reasonably ask the college and university to help us by giving instruction on tuberculosis in general lectures before student assemblies and in specific teaching in the class rooms of the social, economic and biological sciences. We may ask for exemplary sanitation of college buildings, for inspection of college herds, and for care over the health of students by regulations securing immunity from house infection and by the early detection of incipient cases of the disease. We may ask for the exertion of effective influence in securing model sanitary conditions in the immediate college environment and for help in promoting the propaganda throughout the state and nation in every possible way.

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PROPOSED PUBLICATION OF EULER'S WORKS

STRENUOUS efforts are now being made to secure the publication of the complete works of Leonhard Euler (1707-83), one of the most prolific writers of all times on pure and applied mathematics. Euler lived at a time when the differential and integral calculus was still young, and he was most influential in making this powerful instrument of thought more easily available in the various fields of mathematics. The enormous extent of his writings has been a great obstacle in the way of securing a publication of his complete works and has thwarted earlier efforts along this line. From a recent circular issued by the Swiss Society of Natural Sciences, it appears that we may reasonably expect that the publication of this great work will begin at an early date. The following extract from this circular should be of interest:

On the initiative of the German Association of Mathematicians, the International Mathematical Congress, meeting at Rome in April, 1908, unanimously passed the following resolution:

"The fourth International Congress of Mathematicians, held in Rome, regards the publication of the whole collection of Euler's works as an undertaking of the greatest importance, both to pure and to applied mathematics. The congress gratefully welcomes the initiative taken by the Swiss Society of Natural Sciences in this matter and expresses the wish that the great work may be carried out by that society in common with the mathematicians of the other nations. The congress begs the International Association of Academies, and more particularly the Berlin and St. Petersburg academies, of which Euler was so preeminent a member, to support the enterprise in question."

Immediately on the adoption of this resolution the representative of the Paris Academy, Mons. G. Darboux, made known that the International Association of Academies had discussed the Euler question at Vienna in the preceding year, and had expressed entire sympathy with the movement. The correspondence which has since taken place between the president of the Swiss Euler Committee and Mons. Darboux, as also with Herr Lindemann, who had aroused interest in the matter in Vienna, leads us to hope that the support of the Association of Academies will be

accorded to the Swiss Society of Natural Sciences, as desired at the congress in Rome.

At its annual meeting, on August 30, 1908, the Swiss Society of Natural Sciences passed the following resolution, proposed by the Central Committee:

§ 1. The Swiss Society of Natural Sciences is willing to publish a complete edition of Leonhard Euler's works, on condition that this undertaking be adequately supported by the government authorities of the Swiss Confederation and of the cantons, as well as by learned bodies and scientists, both at home and abroad, and that the scientific cooperation required for its accomplishment be forthcoming.

§ 2. The Swiss Society of Natural Sciences entrusts to the Euler Committee in cooperation with the Central Committee the execution of all preliminary work.

§ 3. On the conclusion of the preliminary work a further resolution on the part of the society will be necessary before proceeding to publication.

To § 2 some special remarks were added, the last of which demanded "the creation of a fund, by means of private contributions and subscriptions, for the eventual publication of Euler's works."

The Central Committee and the Euler Committee of the Swiss Society of Natural Sciences have always regarded it as a matter of course that the collection of voluntary contributions should begin in Euler's native land. And we are pleased to be able to announce that this idea has been cordially seconded in all parts of Switzerland. The list is not yet closed, but the subscription will most probably reach the amount of 100,000 francs (\$20,000). We accordingly consider ourselves justified in turning now to other countries for their support.

Two distinguished scientific bodies have already set a praiseworthy example in this direction.

In September, 1908, the German Association of Mathematicians decided at their annual meeting at Cologne to hand over 5,000 francs to the Swiss Society of Natural Sciences for the publication of Euler's works. This amount is of great significance when we add that the German Association of Mathematicians was thus devoting one third of all its available funds to the object in question.

The resolution unanimously proposed by the managing committee and warmly recommended by the chairman, Professor Dr. Felix Klein, was accepted by the Cologne meeting in a spirit of noble enthusiasm, unanimously and without discussion.

The wording of the reasons given for the motion deserves special notice: "In consideration of the great importance of Euler's ever-fresh works to the whole field of mathematical science, the German Association of Mathematicians hereby declares its readiness to actively support the publication of Euler's works as proposed by the Swiss Society of Natural Sciences and the association places at the disposal of the above-named society the sum of 5,000 francs to be taken from the funds of the association."

Further, in January last, the Paris Academy resolved to subscribe for 40 copies of the Euler edition (payable on receipt of each volume), on condition that it should appear in the original languages. This condition has been recently declared agreed to by the Swiss Euler Committee.

The entire cost of the Euler edition as planned has been estimated, after careful calculation and information received from competent firms, at 400,000 francs (\$80,000), against which we may place at least 150,000 francs receipts from the sale of the books. If, as we confidently hope, the example of the Paris Academy is followed, and subscriptions come in in sufficient number, the financial effect would, of course, be more favorable.

We therefore now appeal to the mathematicians in every quarter of the globe and to all friends of the mathematical sciences for support and cooperation. We request them earnestly to procure for us as quickly as possible the subscriptions necessary for carrying out the enterprise, urging especially scientific libraries to become subscribers. The Euler edition will consist of about 40 volumes, and the price per volume will not exceed 25 francs (\$5). The yearly expenditure will be thus comparatively insignificant, even if several volumes should appear in the course of the twelvemonth. And surely every mathematician will in future all the more insist on finding Euler's works in any library to which he has recourse, as at present these works are rarely to be met with, particularly in newer libraries, for example in America.

We further appeal to all the great mathematical associations to follow the example of the German Mathematical Association. At the same time, we beg their members to arrange the collection of voluntary contributions. As in Switzerland, so surely in other countries, the insurance companies, the more important technical societies, especially those of civil engineers, and such extensive industrial concerns as are based on mathematical-technical science, will be ready to cooperate for the success of our undertaking. For are

not Euler's works to be classed amongst the greatest of all ages, not only on the subject of pure mathematics, but also for their manifold technical applications!

We are hopeful that our appeal will meet with that interest on the part of all mathematicians which a complete edition of Euler's works may justly claim. So much preparatory work has already been done that it needs now but a comparatively slight effort from individuals and from scientific associations to insure the success of our great plan, the publication of Euler's works!

This appeal is signed by the presidents of the central committee and the Euler committee of the Swiss Society of Natural Sciences. Subscriptions may be sent to Professor F. Rudolphi, Dolderstrasse 111, Zurich V., Switzerland.

G. A. MILLER

*REPORT OF THE COMMITTEE TO VISIT THE
MUSEUM OF COMPARATIVE ZOOLOGY*

To the Board of Overseers of Harvard College: The committee wish to report that they visited the museum on April 29, and were received by Mr. Agassiz, the director, and by Mr. Henshaw, the curator, under whose auspices an inspection of the collections of the museum was made.

A walk through the museum can not fail to impress the observer with the careful forethought for great simplicity and security of construction, and the thoroughly scientific arrangement and handling of the vast collections therein contained. The architectural arrangement of the various departments is of the simplest character, and one can not but be impressed with the high degree of scientific accuracy displayed everywhere. The material on exhibition forms but a small part of the whole collection—more than two thirds of the specimens being stored for the purpose of scientific study. Among these are many great special collections—for instance, those of the Brazilian Expedition of Professor Louis Agassiz, and those of the numerous dredging expeditions of Mr. Alexander Agassiz, which have been the subject of classic memoirs.

Among the recent acquisitions of the museum which have already been described in

previous reports, is the large model of the Bora-Bora coral reefs, which has been carefully prepared under the direction of Mr. Agassiz, and is now cased in the museum. It serves in its own way to commemorate the extensive and fruitful investigations into coral reef formation which he has made during recent years.

There are at present more than 45,000 volumes in the library, which, owing to its scientific value, has become one of Harvard's great possessions. It is eagerly sought out and consulted by students and masters in several departments of science, and not from Harvard alone, but from the whole United States and Canada. This great growth has made it necessary to place the books in stacks, and owing to this somewhat compact arrangement, the facilities for consulting the books are not so convenient as they would be if provision could be made for a more perfect system of artificial illumination.

With the growth of the museum, the need of a number of expert assistants in the preparation and mounting of specimens has been felt.

The first need to which we call attention would not involve great increase in the expenditures, but the second is a large item. As the resources of the museum and the director's private generosity are already taxed to the utmost, it rests with the university itself, or with the public, rather than with the museum, to bear this additional burden. Your committee feel strongly that the university should assume it.

It is appropriate on this occasion to call attention to the fact that this year marks the semi-centennial of the establishment of the Museum of Comparative Zoology. On April 2, 1859, the legislature of Massachusetts voted that the sum of \$100,000 should be granted to the Museum of Comparative Zoology. In June, 1859, articles of agreement were made and executed between the trustees of the museum and the president and fellows of Harvard College. A piece of land about five acres in extent was deeded by the corporation to the museum, for the purpose of erecting a