of chemistry of the Rensselaer Polytechnic Institute to cost $175,000. The new wing will be devoted to laboratories for quantitative analysis, organic chemistry and physical chemistry. The new construction is necessary because of the growth in the number of students taking the courses in chemical engineering and general science.

DR. E. J. KRAUS, dean of service departments at the Oregon Agricultural College, has been appointed professor of applied botany at the University of Wisconsin.

PROFESSOR ALFRED ATKINSON, professor of agronomy in the Montana State College, succeeds President J. M. Hamilton, who has retired after serving for fifteen years.

MAJOR HENRY A. MATTILL, Sanitary Corps, formerly assistant professor of nutrition at the University of California, returned early in March from France, where he had charge of instruction in food and nutrition in the army schools at Langres. Dr. Mattill has accepted a junior professorship in biological chemistry at the University of Rochester.

DR. V. BUSH, now engineer of the American Radio and Research Co., has been appointed associate professor of electrical engineering at the Massachusetts Institute of Technology.

THE following promotions at Lehigh University have been announced: Assistant Professor R. L. Charles, physics, to become associate professor; Mr. P. B. Fraim, physics, assistant professor; Mr. J. S. Beamensderfer, mechanical engineering, assistant professor; Mr. H. C. Payrow, civil engineering, assistant professor, and Mr. M. S. Knebelman, mathematics, assistant professor.

AT Cambridge University Mr. W. E. Dixon, Downing College, has been appointed reader in pharmacology; Mr. J. E. Purvis, Corpus College, university lecturer in chemistry and physics in their application to hygiene and preventive medicine; Dr. Graham-Smith, university lecturer in hygiene, and Mr. T. S. P. Strangeways, St. John's, university lecturer in special pathology.

DISCUSSION AND CORRESPONDENCE

LIMICOLOUS OLIGOCHÆTA FOR LABORATORY USE

TO THE EDITOR OF SCIENCE: I should like to bring to the attention of teaching zoologists the advantages of living limicolous oligochæta, preferably a *Tubifex* or a *Limnodrilus,* for laboratory purposes in connection with exercises on the earthworm. In the movement which is developing in elementary courses to get away from mere study of structure, the introduction of some convenient and usable form for demonstrating functional activity in connection with so important a type as the earthworm is desirable. At Ohio State University we have used *Limnodrilus* with success. It is sufficiently transparent to allow the internal structures and processes of the annelid body to be observed. The entire alimentary tract is visible and the peristaltic action of the intestine can be demonstrated together with the effect this has on the material in the intestine. Frequently, too, it is possible to see the movements of the pharynx during ingestion. The contraction and the direction of blood flow in the main blood vessels can be observed. The movement of the setæ and their connection with the muscles operating them are also to be seen. The relation of the septa to body wall and intestine and the division of the cœlom into compartments is clearly apparent. It will thus be seen that these worms not only illustrate the annelid body, but also demonstrate functions of general application.

For laboratory use it is best to anesthetize the worms to the point of immobility. They should be placed in a watch glass partly filled with water and to this should be added a few drops of a saturated solution of chloretone. It is best to use a little at first, allow it to work for a while and then if necessary add more. The dish should be covered. With a little practise it is possible to have the worms immobile and yet keep the blood vessels and intestine active. For demonstrating ingestion and movement of the setæ no anesthetic should be used. Of course all activities are at their best in the unanesthetized worm if students have time and patience to follow the speci-

men. A binocular microscope or a 40-mm. lens on a compound instrument should be used. The worms are usually to be found in the bottom of almost any body of water where there is mud mixed with decayed vegetation. They can be kept indefinitely in aquaria having a layer of mud on the bottom.

F. H. Krecker

Ohio State University

THE CUMBERLAND FALLS METEORITE

The stone described by Professor A. M. Miller in Science for June 6 of the present year, and of which the National Museum has secured the major portion, proves of exceptional interest. In fact, it is scarcely too much to say that it is one of the most remarkable falls yet reported on the American continent. The stone is a coarse enstatite breccia, closely compacted, showing evidences of compression while under a considerable load and other indications of its having formed a portion of a body of considerable size, even of planetary dimensions. The most striking macroscopical features aside from its brecciated structure are the occasional enclosures sometimes 4 or 5 cm. in diameter, of a dark, nearly black, chondritic stone. I do not recall another instance of so plain an admixture of stones of quite different type. Such a stone finds no exact position in the classification of Brezina. Following out the general plan, however, I have made a place for it among the achondrites and designated it a *Whitleyite*—a magnesia-rich stone brecciated in structure, consisting essentially of enstatite, poor in iron and carrying enclosures of a black chondrite. The results of further studies will be published elsewhere.

Geo. P. Merrill

U. S. National Museum,
Washington, D. C.,
June 20, 1919

THE THIRD EDITION OF THE BIOGRAPHICAL DIRECTORY OF THE AMERICAN MEN OF SCIENCE

The compilation and publication of the third edition of the *Biographical Directory of American Men of Science,* postponed on account of war conditions, will now be completed as rapidly as possible. The work is intended to be a contribution to the organization of science in America, and the editor will greatly appreciate the assistance of scientific men in making its contents accurate and complete. Those whose biographies appear in the second edition are requested to forward such alterations and additions as may be necessary or desirable, and to obtain biographical sketches from those who should be included or send their names and addresses. All those engaged in scientific work whose biographies are not included in the second edition are requested to send the information needed. For this purpose the blank that is given on an advertising page (ii) of the current issue of Science may be used.

It is intended that each entry shall contain information as follows:

1. The full name with title and mail address, the part of the name ordinarily omitted in correspondence being in parentheses.
2. The department of investigation given in italics.
3. The place and date of birth, including month and day.
4. Education and degrees, including honorary degrees.
5. Positions with dates, the present position being given in italics.
6. Temporary and minor positions; scientific awards and honors.
7. Membership in scientific societies with offices held.
8. Chief subjects in which research has been published or is now in progress.

All those in North America should be included in the book who have made contributions to the natural and exact sciences. The standards are expected to be about the same as those of fellowship in the American Association for the Advancement of Science or membership in the national scientific societies which require research work as a qualification.

The compilation of the new edition will of necessity involve much labor, but this will be materially lightened if men of science will reply promptly to this request.

J. McKeen Cattell

Garrison-on-Hudson, N. Y.