nebulæ discovered on the negatives, and new determinations of the positions of the nebulæ previously known in the regions of the sky covered. It is hoped that the regular correspondents of the Lick Observatory can be supplied promptly with copies. The cost of the volume has been unusually high on account of the expensive processes and materials employed. There are 71 full-page heliogravure reproductions, printed by hand press on suitable paper.

The Cleveland Chemical Society has organized itself into a local section of the American Chemical Society with the following officers: President, Franklin T. Jones; Secretary, Sherley P. Newton; Board of Managers, H. V. Arny, W. R. Veazey, president and secretary ex-officio; Councilor, C. F. Mabery. A charter has also been granted for the formation of a section of the American Chemical Society comprising the western portion of the state of Washington with headquarters at Seattle.

AT the recent meeting of the Southern Society for Philosophy and Psychology, held at the Johns Hopkins University, Baltimore, Md., the following officers were elected for 1909: President, Professor Albert Lefevre. University of Virginia; Vice-president, Dr. Shepherd Ivory Franz, Government Hospital for the Insane, Washington, D. C.; Secretarytreasurer, Professor Edward Franklin Buchner, Johns Hopkins University. three years as members of the council: Professor James Franklin Messenger, State Normal School, Farmville, Va.; Professor Robert Morris Ogden, University of Tennessee. Other members of the council are: Dr. William Torrey Harris, Washington, D. C.; President D. B. Purinton, West Virginia University; Professor James Mark Baldwin, Johns Hopkins University; Principal Reuben Post Halleck, Louisville, Ky.

## UNIVERSITY AND EDUCATIONAL NEWS

Mrs. Esther Gowen Hood has given the University of Pennsylvania \$100,000 to estab-

lish graduate fellowships in the law department. The gift is a memorial to her father, the late Franklin B. Gowen.

Mr. Adolphus Busch, who last August promised to contribute \$50,000 towards the \$300,000 necessary for the erection of the new building for the Germanic Museum at Harvard University, has increased his gift to \$100,000.

THE General Education Board has offered to give Bryn Mawr College \$250,000 on condition that friends of the college subscribe \$280,000 by June, 1910. This is in addition to the \$100,000 recently given by the alumnæ. Of this sum \$130,000 is to be used to pay the debt of the college, and the balance is to be reserved as an endowment fund.

The building for the new California Museum of Vertebrate Zoology, at the University of California, is now under construction. Its cost, which is to be about \$14,000, is to be met in part by the regents' appropriation of \$7,000, and in part by an arrangement with Miss Annie Alexander, the patron of this new department, whereby she adds \$7,000 with the provision that her annual grant for maintenance for the next seven years shall be \$6,000 instead of \$7,000, as at first proposed by her.

THE regents of the University of Colorado have authorized the establishment of a summer laboratory for botany and zoology at Tolland, Colo., altitude 8,889 feet. The laboratory will be in charge of the regular instructing staff of the university, and there will be courses in elementary biology, plant anatomy, plant taxonomy and ecology. The location of the laboratory is such that students can study the plants and animals of all the different life zones from plains to alpine heights. Work done at the laboratory will count toward a degree in the university.

Dr. FAIRBAIRN, who will retire from the principalship of Mansfield College, Oxford, at Easter, has given to the college his valuable theological and philosophical library.

Dr. E. A. Noble was installed as president of the Woman's College of Baltimore on February 2, when addresses were delivered by

President Noble, Dr. H. S. Pritchett, president of the Carnegie Foundation for the Advancement of Teaching; Dr. Elmer E. Brown, U. S. commissioner of education; Dr. Ira Remsen, president of the Johns Hopkins University and Mr. John E. Semmes, president of the Baltimore school commissioners.

DR. FRANK L. MCVEY has been elected president of the University of North Dakota. He was formerly professor of economics at the University of Minnesota and is now chairman to the tax commission of the state.

The trustees of Columbia University have appointed Dr. William G. MacCallum, professor of pathological physiology in the Johns Hopkins University, to be professor of pathology in succession to Dr. T. Mitchell Prudden, who will retire from active service on July 1 next. At the same time the trustees have made provision for the development and extension of the departments of bacteriology under professor Philip H. Hiss, Jr., and of clinical pathology under Professor Francis C. Wood. Increased attention will be paid by these departments to the needs of advanced students and investigators.

At the College of the City of New York, Dayton J. Edwards has been appointed tutor in natural history. He is a graduate of the University of Maine, and has lately been an assistant at Columbia University.

Mr. G. H. Cox has been appointed instructor at the University of California in geology and mineralogy.

## DISCUSSION AND CORRESPONDENCE

## EDUCATION AND THE TRADES

To the Editor of Science: In your issue for November 14 Mr. William Kent asks a question which interests me greatly and which, although I can not answer, I believe I can lay down the lines along which the answer must be made.

In the first place, I wish to express my unqualified approval of the letter of Stella V. Kellerman in your issue of November 13, with which Mr. Kent expresses agreement, but which causes him to ask the question referred to. Latin, Greek and the mathematics have been taught for so many centuries that we have learned how to get out of them the highest possible degree of pedagogic value. This merely means that we have learned how, by means of studies of this character, to get hard work out of the student, while at the same time we maintain his interest. I assume that the pedagogic value of a study is largely comprehended in the possibility of teaching in the manner above mentioned. A great many people who honestly believe that our system of education should take more account of the daily affairs of life fear that when we replace any of the old studies by new ones which relate to modern industries, the work of the schools will lose its pedagogic value. Speaking in a general way, I believe this will be true, but this is not because the new studies do not have this value in them, but because we have not yet learned how to get it out of them. I believe there are some things which have higher pedagogic value than anything taught in our schools to-day, else why is it that with only 29 per cent. of our population actually living on the farm, with miserably poor school facilities as compared with our city population, this 29 per cent. furnishes about 70 per cent. of the leaders in every phase of activity in this country?

The point I wish to make is further illustrated by an instance that occurred in connection with the school garden work in Washington city schools. The teacher in charge had found difficulty in getting boys twelve to fifteen years old to lay off the plats properly. Two little boys, six and eight years old, from the hills of Virginia, came into school, never having seen plats laid off, but it was found that even the younger of these, if put in charge of a squad of boys twice his age, would have the work done according to directions. This greatly puzzled the teacher, and she asked me to explain it. I gave as an explanation the fact that these two small boys had enjoyed better pedagogical advantages than the others. But the teacher thought this im-