

## SCIENCE:

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Communications will be welcomed from any quarter. Abstracts of scientific papers are solicited, and twenty copies of the issue containing such will be mailed the author on request in advance. Rejected manuscripts will be returned to the authors only when the requisite amount of postage accompanies the manuscript. Whatever is intended for insertion must be authenticated by the name and address of the writer; not necessarily for publication, but as a guaranty of good faith. We do not hold ourselves responsible for any view or opinions expressed in the communications of our correspondents.

Attention is called to the "Wants" column. All are invited to use it in soliciting information or seeking new positions. The name and address of applicants should be given in full, so that answers will go direct to them. The "Exchange" column is likewise open.

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## UNIVERSITY AND SCHOOL EXTENSION.

THE design of the University and School Extension recently started in this city is to supplement the university and the school systems by means of outlines for courses of study, class instruction, courses of lectures, correspondence, examinations, etc. The executive committee of the faculty consists of President Timothy Dwight, president of Yale University; Francis L. Patton, president of Princeton University; Seth Low, president of Columbia College; N. A. Calkins, superintendent of school extension; W. T. Harris, United States commissioner of education; Seth T. Stewart, general secretary. The officers of the board of directors are, president, James W. Alexander (Princeton); vice-presidents, Chauncey M. Depew (Yale), Charles S. Fairchild (Harvard), W. Bayard Cutting (Columbia); treasurer, George Foster Peabody (16 and 18 Broad Street, New York City); secretary, Matthew J. Elgas (121 West 87th Street, New York City).

The purpose is to develop a taste for further education and broader culture among those who, from necessity, have been debarred from some of the advantages of college or academic training, and to provide the skilful guidance of college professors and other experts in the study of the various subjects common to school and to university education. The courses of instruction will be marked out by carefully prepared syllabuses, with directions as to what is most essential to the subject.

Individual students can be graded in lines of study and investigation; and plans are provided for securing the interest, sym-

pathy, and mutual help that come through class instruction and lectures. Teachers and others associated in small or large classes may be guided in their studies, or they may enjoy the presence and advice of an approved class instructor in their chosen subject. In this way societies organized for the study of any language or department of history or science can be provided with reliable guidance and competent instruction. The classes will be formed for day or evening, at hours and places to suit the convenience of the class. Individuals or classes may also have the benefit of instruction by correspondence.

Syllabuses have been prepared by the professors named in connection with the following subjects, and others are now in the process of publication: German (four years), Professor H. H. Boyesen, Columbia; French (four years); Latin (four years), Professor Tracy Peck, Yale; Greek (three years), Professor T. D. Seymour, Yale; English literature of the seventeenth, eighteenth, and nineteenth centuries, Professor F. J. Child, Harvard; Shakespeare and Chaucer, George Lyman Kittredge, Harvard; American history to 1789, American history from 1789, European history from 1600 to 1750, European history from 1750, Professor S. M. Macvane, Harvard; law (two years), Professor Theodore Dwight, Columbia; physical geography (first and second years), Professor William Libbey, jun., Princeton; geology, Professor N. S. Shaler, Harvard; physics, Professor C. F. Brackett, Princeton; chemistry (two years), Professor William G. Mixter, Yale; astronomy, Professor C. A. Young, Princeton; elements of zoölogy, Alpheus Hyatt; political science, Professor John W. Burgess, Columbia; descriptive psychology and physiological psychology, Professor George T. Ladd, Yale; philosophy of education, N. A. Calkins; plane and solid geometry, plane trigonometry, and spherical trigonometry, Professor A. W. Phillips, Yale.

The registration fee of one dollar entitles each registered student to one syllabus, one book-list with prices, the privilege of purchasing the books through the general secretary at list or wholesale prices, and an examination-paper in any one of the subjects in which an examination is held. It also entitles members to receive information as to the formation of classes, and to register for correspondence classes and for examination; but the correspondence fee of ten dollars, or the examination fee of two dollars, will be required before said correspondence or examination begins. Additional syllabuses may be had at twenty cents each, or six for a dollar.

Societies guaranteeing minimum charge for course of lessons or lectures will be accommodated as to time, place, and choice of instructor or lecturer. Ladies and gentlemen desiring to become patrons of a special subject of learning may organize auxiliary societies under a prescribed constitution, involving an annual membership fee of ten dollars per share. Any one desiring to promote the work among any class of people may assist in organizing them under constitutions involving membership fees of five dollars per share, or of one dollar per share, covering registration fee, the latter requiring extra charge for work done. A few general courses of lectures will be announced in New York City this year; but other courses will be given if a sufficient number register for the same in any chosen subject. The registration fee of one dollar will hold good until the member in any place shall have had an opportunity to attend class instruction or lectures in some one subject, or to receive correspondence instruction or lectures in a desired subject. Thereafter the fee will be an annual fee.

The registration fee should be sent to the general secretary, or in New York City to Matthew J. Elgas, secretary, 121 West 87th Street. Persons interested in the formation of classes, or lecture courses, or auxiliary societies, will be provided with the necessary forms and information on applying, with stamp enclosed, to Seth T. Stewart, general secretary, P. O. Box 192, Brooklyn, N.Y.

## LETTERS TO THE EDITOR.

## Dr. Hann's Studies on Cyclones and Anticyclones.

UNDER this heading appeared in *Science*, May 30 of this year, a notice, by Professor W. M. Davis of Harvard College, of a memoir by Dr. Hann of Vienna on "The High-Pressure Area of November, 1889, in Central Europe," etc., which has been recently