

developed and corrections determined for records of velocity already accumulated. Experimental values of the factors or constants of anemometers, throughout the range of velocities occurring in nature, are now available for the first time, and much information useful in the design and construction of these instruments has been obtained. In advance of publication of final results it may be stated that the velocities recorded by the standard Robinson anemometer now in use are about 22 per cent. too high and that the rate of the instrument is more nearly constant than that determined by means of tests on whirling-machines. The three-cup pattern suggested by Dr. Patterson, of the Canadian Meteorological Office, appears to be more satisfactory than the four-cup pattern in general use. This investigation is being conducted by Messrs. S. P. Fergusson and R. N. Covert, of the Instrument Division.

It is stated in *Nature* that a biological expedition has left Antwerp for Brazil. It is under the direction of Professor C. Massart, of the department of botany in the University of Brussels, and there are four other members of the expedition, two of whom are students. For several years before the war the universities of Belgium and Holland organized expeditions to enable students to go into the field under the guidance of their professors, and it is one of these expeditions, to Brazil, which has now been promoted by the University of Brussels. The party will not aim at exploring Brazil; the object is rather to put the young naturalists directly in touch with tropical nature; they will have the opportunity of collecting botanical and zoological material for study and demonstration and of making ethnological observations. Brazil has been chosen on account of its salubrity and also because, some twenty days' journey from the starting-place, the party will be in the virgin forest. The expedition will remain in Brazil from August until January or February next, and visits will be paid to the state of Rio de Janeiro and Bahia, to the Campos de Minas Geraës, a region in the state of Bahia which is almost deserted, and to some of the peaks of the Sierra de Mantiqueira.

THE *Eugenical News* states that, under date of June 4, 1922, Dr. A. Govaerts, secretary of the Société Belge d'Eugénique, who spent eight months, from September, 1921, to May, 1922, studying the organization of eugenics in the United States, writes that efforts to establish a governmental eugenics office in Belgium have been successful. The new office will be located in the Institute Solvay in Brussels and will be supported by the government. It has been decided to provide regular courses of lectures in eugenics in the State School of Social Service. This school is an organization which prepares its students to undertake actual social service in connection with societies and institutions devoted to charity, the protection of children, and other welfare activities. Professionally, the students of this school will, in the future, be trained, not only as visiting nurses and social workers, but also as eugenical field workers. Dr. Govaerts will organize and give the courses of lectures in eugenics. In general, the courses will be modeled after the instruction provided for the annual training corps of the Eugenics Record Office. Closest contact will be maintained between the Belgian and the American organizations. In Dr. Govaerts' first course of weekly lectures, the following subjects will be treated: Meaning of eugenics; laws of heredity in plants, animals and man; selective matings; the relation between natality and mortality and the national welfare; the technique of eugenics; the field workers' interviews and questionnaires; charting family pedigrees; tracing the descent and recombination of human traits in actual pedigrees; mental and physical measurements in man.

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#### UNIVERSITY AND EDUCATIONAL NOTES

PRINCETON UNIVERSITY has established a library of industrial relations, the expense of which, \$12,000 a year, will be defrayed for the first five years by a gift from Mr. John D. Rockefeller, Jr.

MISSION and educational bodies of East China have set in motion a project to build in Shanghai a union medical school at a cost of \$500,000. St. John's University of Shanghai,

which now has a medical department, is one of the institutions supporting the project.

WE learn from the *Journal of the American Medical Association* that two chairs in the University of Cincinnati College of Medicine, honoring John D. Rockefeller and Andrew Carnegie, donors of munificent sums to the medical school, were founded at a meeting of the board of directors on July 19. The professorship in obstetrics will be known as the John D. Rockefeller Chair of Obstetrics and the professorship in biochemistry as the Andrew Carnegie Chair of Biochemistry. Dr. William Gillespie holds the chair of obstetrics, and Albert Prescott Mathews, Ph.D., is professor of biochemistry.

DR. STEPHEN RUSHMORE, associate professor of gynecology, has been appointed dean of the Tufts Medical School. The deanship has been vacant since the resignation of Dr. Charles F. Painter, one year ago. Dr. Rushmore is a graduate and former instructor of the Johns Hopkins Medical School.

DR. WILLIAM MOULTON MARSTON has been appointed professor of experimental psychology in the American University at Washington, D. C.

DR. R. W. SHUFELDT, of Washington, has accepted the position of lecturer on art anatomy and zoology on the faculty of the Research University of that city. He will also give a course of lectures at the Catholic University of America on "The Essentials of Natural Science."

DR. H. F. PIERCE, who has been for three and a half years in the department of pathology at the University of Oxford, engaged in research for the British Medical Research Council, has been appointed associate in physiology at the College of Physicians and Surgeons, Columbia University.

M. PRUVOST has been appointed to the chair of geology and mineralogy newly established at the University of Lille.

M. Hesse has been appointed professor of zoology at the University of Dijon.

In the University of London, Dr. J. C. Drummond has been appointed to the univer-

sity chair of biochemistry tenable at University College, and Professor Adrian Stokes to the Sir William Dunn chair of pathology tenable at Guy's Hospital Medical School.

## DISCUSSION AND CORRESPONDENCE

### PASTEUR ON SCIENCE AND THE APPLICATIONS OF SCIENCE

IN his address as president of the American Association for the Advancement of Science, *SCIENCE*, 54: 650, 1921, Dr. L. O. Howard makes the following quotation from the address of Edwin Linton at the Baird Memorial meeting in Washington in 1916:

As I look over the titles of theses for doctorate degrees in biology, however, knowing that they must, in some fashion, reflect the activities of our biological leaders, I am led to wonder if the failure of science to influence legislation in the interests of the people is not to be charged to the propensity on the part of these leaders to shun the practical. Is there a hierarchy in science that frowns upon independence of thought and action in her sanctuary? That can hardly be. Let the heads of departments of biological research in our universities then take heart, and not be afraid to follow the lead of Pasteur, who surely committed no violence upon science by undertaking the solution of practical problems.

This reminds me that, about fifty-one years ago, Pasteur had some pretty definite things to say about this matter. In the preface to the fourth edition of "Fragments of Science," December, 1871, Tyndall says:

My friend M. Pasteur, of the Institute of France, sent me some time ago, among other important books and papers, a short essay entitled "Quelques Réflexions sur la Science en France." It consists of three articles, the first published in January, 1868; the second unpublished, though laid before the Emperor Napoleon at the Tuileries in March, 1868; and the third communicated to a public journal last March. All three articles are conceived in the same spirit, and directed to the same end. The last of them, entitled "Pourquoi le France n'a pas trouvé d'hommes supérieurs au moment du peril," contains many remarks which may wisely be laid to heart in England. In our eager pursuit of "practical" results, the high