state in 1926. Isolated specimens of the pest have already been found in the western part of the state.

THE French Chamber of Deputies has provided for a tax of 5 centimes on each 100 francs paid in salaries by French commerce and industry. The products of the tax, which it is estimated will bring in about fourteen million francs a year, is to be allocated to French scientific laboratories.

THE collection of astronomical and mathematical instruments, dating back to the tenth century, and illustrating the early history of the sciences, which has been presented by Mr. Lewis Evans to Oxford University and housed in the Old Ashmolean building, was opened for public exhibition on May 5 by Lord Crawford. The degree of honorary doctor of science was conferred on Mr. Evans. A volume containing the *Transactions* of the Oxford Philosophical Society from 1683 to 1690, transcribed from the minute-book long preserved in the Ashmolean Museum, was published on the same date. The editor was Mr. R. T. Gunther, of Magdalen College, known for his researches in the early history of science.

THE Vienna Exposition of Hygiene was opened on April 28 by President Hainisch. The exhibition is divided into two parts—"the human body" and "the modern household." Austria and Germany cooperated in the work of establishing it, the well-known Dresden exhibit of hygiene forming its basis. Among interesting features are demonstrations by institutions for preventing tuberculosis and the treatment of chronic drunkards. The city of Vienna occupies a large space for showing modern institutions for social welfare, especially model tenements erected at the cost of the municipality of Vienna to solve the housing problem, as also land settlements outside of Vienna. These model tenements are said to surpass tenements anywhere in Europe or the United States in modern construction, labor-saving devices and space areas.

UNIVERSITY AND EDUCATIONAL NOTES

HARVARD UNIVERSITY has received a gift of $125,000 from Harold S. Vanderbilt to provide a gymnasium for students in the medical school. Provision is also made for payment of the salary of a competent gymnasium instructor during the next five years.

AS a memorial to the late Marion Leroy Burton, president of the University of Michigan, $100,000 has been collected, the income of which will be paid to Mrs. Burton during her life time and to her children until they reach the age of thirty years. Thereafter the fund will revert to the university.

SAMUEL INSULL, president of the Edison Commonwealth Company of Chicago, has made a gift of $25,000 to Union College at Schenectady.

A LAW becomes effective on July 1 creating a board of regents, which has the authority and duties formerly conferred on the state board of administration, relating to the University of Kansas, Kansas State Agricultural College and its experiment stations and the Kansas State teachers colleges of Emporia, Hays and Pittsburg. The board will be composed of nine members appointed by the governor for a term of four years.

AT Vanderbilt University, Dr. Walter E. Garrey, professor of physiology at Tulane University, has been appointed professor of physiology; Dr. Barney Brooks, associate professor of clinical surgery at Washington University, St. Louis, professor of surgery; Dr. Horton Casparis, associate in pediatrics, the Johns Hopkins Medical School, associate professor of pediatrics; Dr. Francis A. Swett, instructor in anatomy at the Johns Hopkins Medical School, associate professor of anatomy; Dr. Arthur W. Wright, of the Boston City Hospital, assistant professor of pathology.

DR. EDWARD F. MALONE, professor of histology at the University of Cincinnati, has been appointed professor of anatomy in the medical college to succeed Dr. Henry McE. Knower, who recently resigned.

PROFESSOR EMIL F. GUBA, of the department of plant pathology of Cornell University, has been appointed assistant research professor in botany at the Massachusetts Agricultural Experiment Station at Amherst.

DR. GEORGE R. HARRISON, who received his college and university degrees from Stanford University, has been appointed assistant professor in the department of physics. He is at present a National Research Council fellow. He was graduated in 1919, became master of arts the next year and doctor of philosophy in 1922.

DISCUSSION AND CORRESPONDENCE

THE ETHER DRIFT

THE recent important announcement by Professor Miller of the detection of an ether drift on the summit of Mt. Wilson makes it advisable for us to look carefully over the whole subject in its proper perspective.

The theory of relativity was not founded wholly upon the negative result of the Michelson-Morley experiment. There were other similar experiments with negative results and of equal importance, though not so generally known. Such were the experiments of Trouton and Noble, who looked for the production of a torque upon a suspended charged condenser; the experiments of Rayleigh and of Brace, who failed to find any trace of double refraction in transparent moving bodies, and certain experiments designed to

test the electrical conductivity of conductors in different orientations with respect to the earth's motion in space. True, all these experiments were performed at or near sea level; and in view of the difference in Professor Miller's results as between Cleveland and Mt. Wilson, it is certainly desirable that some or all of these other experiments should be performed at as great an altitude as possible; for no final conclusion in the matter can be reached until all the different lines of experiment give concordant results.

Of these other lines of experiment, the simplest and most practical would seem to be those of Rayleigh and of Brace (*Phil. Mag.*, December, 1902, p. 678; *ibid.*, vol. 7, 1904, p. 317). It ought to be possible to test this point with an apparatus compact enough to be carried up to a height in an airplane.

The Trouton-Noble experiment is still so uncertain in theory that we do not know exactly what to look for. (Kennard, *Bulletin* of the National Research Council, vol. 4, part 6, December, 1922, No. 24.) Its experimental prosecution may well be delayed until its theory is clear.

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BUREAU OF STANDARDS

THE DISAPPEARANCE OF HELIUM IN GEISSLER TUBES

THE recent comment by S. C. Lind and D. C. Bardwell in the March 27 number of SCIENCE, entitled "Mercury and Ionized Helium," in which experiments are described which appear to show that helium and mercury do not interact as a result of alpha particle bombardment, suggests our calling attention to some interesting phenomena associated with the disappearance of helium in Geissler tube discharges which produce the spectra of the first negative Deslandres group of carbon, and the so-called comet-tail bands.

Using tubes of the Wood type of four millimeters bore with pressures of twenty millimeters of helium and a small partial pressure of 10^{-4} mm of residual compounds of carbon from activated charcoal, on several occasions during energetic excitation of the above mentioned spectra, together with the brighter lines of helium, the latter has been observed entirely to disappear. The tube changes in color from pink to blue, and the Ängstrom bands and triplet band system, described by Merton and Johnson, are developed. The disappearance of helium in its usual form under these conditions is inferred from the complete disappearance of its spectrum and a marked reduction of gas pressure within the tube, as exhibited by the length of the dark space.

Conditions hardly permit of the hypothesis of occlusion in the ordinary sense, since subsequent baking the tube to the softening point of pyrex glass does not recover the helium spectrum. Neither can one ascribe the phenomenon to diffusion through the glass walls, since the tube is not heated much above 50° C. by the discharge which causes the extinction of the helium spectrum. One is reminded of some early work of Berthelot, *Ann. Chem. Phys.* (VII), 11, p. 219, 1897, on the apparent disappearance of helium when associated with carbon compounds.

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THE CLASSIFIED CONTINUATION CARD CATALOGUE OF THE BIBLIOGRAPHY OF FISHES

IN the *Anatomical Record* of December 25, 1924, Vol. 29, pp. 128–129, I published under the above title a preliminary abstract of a paper which I read on January 1, 1925, before a joint meeting of the American Society of Zoologists and the American Ecological Society. The purpose in publishing this abstract and in reading this paper was to give notice that the "Bibliography of Fishes" is being kept up to date, to ask "fish men" to send in their articles for immediate carding and to ask all interested in any subject wherein fishes touch the life of man to come to the American Museum to get their references brought as near to the actual date as is humanly possible. In order to secure the widest possible notification of this purpose to scientific men in America I am publishing in SCIENCE this note on the plans and work now under way.

A large number of the letters and reviews received since the publication of the "Bibliography of Fishes" have expressed the strong hope that the bibliography, which includes the literature to and ending with 1914, might be continued. My own feeling is that having learned how to do bibliographical work, I owe it to science in general and to ichthyology in particular to keep the "Bibliography of Fishes" up to date in the form of a classified card catalogue. For a year and a half this work has been carried on in tentative fashion and it has been demonstrated that it can be done without any outside assistance and without any outside expense to the museum—*i.e.*, it is being done as a part of the regular routine work of the department.

The sources of additional reference for the "Bibliography of Fishes" are primarily those papers which have appeared since the close of the bibliography (1914). These references come in to us in three separate ways: First, in the current bibliographies which generally appear about two years later than the literature which they record. Of these the "Zoological Record" has been checked up to date, and I plan shortly to begin on the "Archiv für Naturgeschichte." When that is done the continuation (post 1914) of the "Royal Society Catalogue," the "Concilium Bibliographicum" and other like annual works will all be