NOTES AND NEWS.

J. McKeen Catttell, M.A., Ph.D., Professor of Experimental Psychology in Columbia College, has in preparation a work entitled "A Course in Experimental Psychology." Laboratory instruction in experimental psychology is now given in the leading universities of America, Great Britain, Germany, and France, but owing to the recent introduction of the subject, there is no text-book. A laboratory handbook on the lines which have been proved useful in physical and biological science will make instruction easier for the teacher and more profitable for the student, and will permit the introduction of the subject in colleges where it could not otherwise be taught. It is to be published by Macmillan & Co.

-Probably no American vegetable product is appeciated less than the commonest and most useful of all, namely, our maize or Indian corn, which Dr. John W. Harshberger of the University of Pennsylvania, has made his especial study for the past three years. His results have just appeared in an attractive volume which forms the second number of the contributions from the Botanical Laboratory of the University. Its botanical side is now more valuable than its study of the history of the plant and its economic importance. Dr. Harshberger has carefully exhausted the field of philology, archæology, and history in his investigation into the origin of the plant, which has hitherto been so uncertain. His conclusion, based upon a series of well-represented convergences, is that the plant originated in Central Mexico, between the 22nd parallel and the river Coatzocoalcos, and was first cultivated by the Navas. From them it was spread southward along the entire west coast of South America, and northward over the great territory where it is now found. Light was thrown on this research by botany and meteorology, a very primitive form of maize having been found in 1890 in Mexico, which has afforded many points in the evolutionary history of the plant. Probably no part of the work would attract more attention from the average reader than the table of the principal products of the maize plant, ranging from whiskey to soap, and from paper to baskets. Improved machinery is making it possible to use every part of the plant, and its utility, as exhibited by Dr. Harshberger, is quite surprising. The economic portion of the work is a careful review of the conditions determining the agricultural prosperity of the nation, and an appeal for a wider cultivation of maize in the districts for which it is best fitted. The work is accompanied by several excellent maps and botanical charts, and has been recognized already in scientific circles as an important addition to our knowledge of American plants.

-The first volume of the new series of the catalogue of scientific papers published by the Royal Society of London is now ready. Vols. I to VI form the first series and cover the years 1800-1863, while the second series is from 1864 to 1873. Vol. IX commences the third series, which comprises the titles of papers published or read during the decade 1874-1883. They have been compiled on the same plan as the second series, and in like manner include a certain number of titles which were omitted in former The numbering of the titles of the papers of each author whose name does not now appear for the first time is consecutive with that in former volumes. The list by no means comprises the whole of the scientific periodicals, which at the present day are being constantly published in various languages, but a supplementary volume will probably be issued, in which will be catalogued all the most important papers that have appeared from 1800 to 1883 in periodicals not hitherto indexed. XI, completing the third series, are already in press.

—Richard L. Lull has been appointed assistant professor of zoology at the Massachusettes Agricultural College. Since his graduation from Rutgers Professor Lull has been in the employ of the Entomological Division of the United States Department of Agriculture at Washington, and has

done special work in Maryland.

BRAIN

WORKERS.

HORSFORD'S ACID PHOSPHATE

is recommended by physicians of all schools, for restoring brain force or nervous energy, in all cases where the nervous system has been reduced below the normal standard by overwork, as found in lawyers, teachers, students and brain-workers generally.

Descriptive pamphlet free on application to

Rumford Chemical Works,

Providence, R.I.

Beware of Substitutes and Imitations.

FOR SALE BY ALL DRUGGISTS.

EXCHANGES.

[Free of charge to all, if of satisfactory character, Address, N. D. C. Hodges, 874 Broadway, New York.]

FOR SALE.—A small collection of bird skins, consisting of 135 specimens of New England species, most of which are in good condition and all have full data. Nearly all were collected in the Connecticut valley in Massachusetts. Price, \$10. Address, H. L. Clark, 3922 Fifth Avenue, Pittsburgh, Penna.

FOR SALE.—Price \$150, cost originally between \$300 and \$400, a microscope and following accessories: Acme (No. 2), stand and case lost, \$75; Crouch, one-fifth collar adjustment and objective, \$25; Tolles, four-tenths ditto, \$45; Tolles and the solid eye piece, \$20; Hartinet Land Lamb, half solid eye piece, \$20; Hartinet Land Lamb, acromatic condenser, \$10: Hartinet Polarizer, \$30; turn-table, \$6; Hartnock, camera lucida, \$20. D. T. Marshall, Metuchen, N. J.

TO EXCHANGE.—Works on entomology, botany and palaeontology for works on Indians and archæology. H. Justin Roddy, Millersville, Pa.

FOR SALE.—A Zertmayer new model U. S. Army Hospital managelar stand, cost \$110. H. C. Wells, 151 Browning, New York.

WANTS.

DOUBLE honor graduate in Science and Philosophy of the bind patients of the hold patients. Address, E. A. Beckett, Trinity College, Toronto, Ontario.

WANTED.—Theory of the Earth, by Hutton. Principles of Geology, by Lyell. Manual of Geology, by Phillips. Lehrbuch der Geolgie und Petrefacenkunde, by Carl Vogt. Etudes sur le Métamorphisme, by Daubrée.

WANTED.—Second-hand books on osteology, embryology, and comparative anatomy. Send list, stating condition and cash price. Can offer a few good sets of birds' eggs if desired. R. C. McGregor, Palo Alto, California.

WANTED.—A copy of Chapman's Flora of the Southern United States. I have on hand for sale or exchange sets of the lichens of this vicinity. List furnished on application. Address, C. F. Maxwell, Box 127, Dublin, Tex.

WANTED.—Addresses of persons interested in archæology. Copies of the new archæologic journal in exchange for lists of collectors. A collection of 10,000 valuable objects, the results of my nine years' exploration in the Mississippi Valley, for sale. Price, \$7,650. Warren K. Moorehead, Waterloo, Indiana.

WANTED.—Vol. Birds of the Standard or Riverside Nat. Hist, Preferred in parts. F. A. Lucas, U. S. National Museum, Washington, D. C.

WANTED.—Vols. I and II of Proceedings of the Entomological Soc. of Pha. and Vols. III to VI inclusive of Transactions of the American Entomological Soc. C. P. Gillette, Pt. Collins, Colo.

A GEOLOGIST thoroughly conversant with the geology of the Southern States desires an engagement. Has complete knowledge of the economic geology of Iron, Coal, Lignite, as well as Clay and Kaolin. Five years' experience with Geological Surveys. Address, K., 509 West Sixth Street, Austin, Texas.

Geo. L. English & Co., of No. 64 East 12th Street, New York, announce that they have added to their stock of minerals, during the past six weeks, more choice specimens than during any similar period in their history. In order to make quick sales they have marked the prices very low, and as a further temptation to customers to forget the hard times, they have decided to allow a discount of ten per cent, on all minerals sold during the month of February.