

tween 1,800 and 1,900 students in the spring term. The number of students entering the College of Civil Engineering and the College of Agriculture shows large percentages of increase, and the attendance in the New York State Veterinary College is somewhat increased. 431 degrees were conferred in June, 1897, an increase of 50 over any preceding year.

DR. WALDEMAR LINDGREN, of the U. S. Geological Survey, will deliver a course of lectures on mining and metallurgy at Stanford University, but has not accepted a permanent appointment, as has been announced.

MISS JULIA SNOW, PH.D. (Munich), has been appointed instructor in Botany in the University of Michigan.

DR. W. H. R. RIVERS, of St. John's College, Cambridge University, has been appointed university lecturer in experimental psychology. Mr. W. L. H. Duckworth, of Jesus College, has been recognized as a lecturer in anthropology.

MR. J. W. W. STEPHENS, B.A., M.B., Caius and Gonville, has been elected John Lucas Walker Student in Pathology, Cambridge University, *vice* Mr. L. Cobbett, M.A., M.B., Trinity; and Mr. H. K. Wright, M.D., C.M., McGill University, Montreal, has been awarded an exhibition of the value of £50 from the John Lucas Walker Fund.

DISCUSSION AND CORRESPONDENCE.

THE AGONOID GENUS PERCIS OF SCOPOLI.

THE generic name *Percis* of Scopoli has been universally forgotten, but must be revived, and lest it should be overlooked in the great work of Drs. Jordan and Evermann I would call attention to it now. The genus for which the name was proposed by Scopoli is generally known as *Hippocephalus* of Swainson (1839). It was, however, well defined by Scopoli in 1777, and based on the *Cottus japonicus* of Pallas. The description will be found in Scopoli's 'Introductio ad Historiam Naturalem' (p. 454). The only species mentioned was *Percis japonicus*.

The genus *Percis* is the representative of a sub-family distinguished from the *Agoninae* by the anterior position of the first dorsal fin and

may be called *Percidinæ*. The other genera are *Agonomalus* and *Hypsagonus*.

WASHINGTON, D. C.

THEO. GILL.

SCIENTIFIC LITERATURE.

RECENT MATHEMATICAL BOOKS.

Elements of Plane and Spherical Trigonometry.

By EDWIN S. CRAWLEY, Assistant Professor of Mathematics in the University of Pennsylvania. Second edition, revised and enlarged. Philadelphia, E. S. Crawley. 8vo. Pp. 178.

In the writing of a text-book on Trigonometry there is now-a-days practically no opportunity for any assertion of individuality. The subject is of small extent, definitely bounded, and crystallized into final shape. There is, indeed, a possibility of trimming the treatment down to the absolutely indispensable part of plane trigonometry, which might then be gone over by a class in ten weeks or even less. But the whole tendency is the other way, and chapters on trigonometric equations, De Moivre's theorem, etc.—in short, a pretty complete discussion of the whole field—are now demanded in a text-book. The teacher must decide for himself how much of the whole material he will cover, and he will do well to bear in mind two facts, or rather two phases of the same fact, viz: (1) that teachers of applied mathematics constantly complain that their students do not bring to them a practical working knowledge of trigonometry; (2) that no student, however gifted or however taught, ever fully understands his elementary mathematics until he has gone through the Calculus.

Professor Crawley's book first appeared in 1890. The present second edition has been revised and enlarged by: (1) the adoption of definitions of the trigonometric functions applicable to angles of any magnitude; (2) the addition of a large number of exercises to illustrate the best methods of trigonometric reduction and analysis; (3) a large increase in the number and variety of the examples; (4) additional theorems on the described circles and Brocard's points; (5) a new chapter on De Moivre's theorem and the hyperbolic functions. A previous knowledge of logarithms is expected of the student, and the book is without tables. The plane trigonometry occupies 119 pages, and