

mines of Pennsylvania in 1908 was caused by a stimulated activity due to an apprehension of a suspension on April 1, 1909, when the wage agreements would terminate. This activity continued through the first three months of 1909, and the shipments in March, 1909, were the largest in the history of the trade. With the renewal of the wage scale in April, which was in fact a continuance of the awards of the anthracite strike commission for a third period of three years, production fell off, and the shipments of the summer months of 1909 were much less than in either 1907 or 1908.

THE Department of Superintendence of the National Educational Association will meet at Indianapolis on March 1, 2, 3 and 4. With the department will meet the societies for the Scientific Study of Education, the Society of College Teachers of Education, the Conference of State Superintendents of Education, the National Committee on Agricultural Education, the Educational Press Association of America, the American School Hygiene Association, the American Physical Education Association and the Public School Physical Training Society. The National Educational Association will hold its annual meeting this year either in San Francisco or in Boston.

THE opening of the International Scientific Congress to be held in Buenos Aires has been deferred from May 25, the original date, until July or August. The following Americans living in Argentina form a committee of the congress representing the United States: Professor Walter Gould Davis, chairman (chief of the Argentine Meteorological Service); Professor C. D. Perrine (head of the Córdoba Observatory); Professor R. H. Tucker (in charge of Carnegie Observatory, San Luis), and L. G. Schultz (chief of Magnetic and Solar Physics Division, Meteorological Service).

WE are requested by the director of the Treptow Astronomical Observatory to print the following note in the "redactionnal part" of SCIENCE: "Professor Dr. A. Korn will be so kind as to hold some mathematical lectures

about: 'Freie und erzwungene Schwingungen, eine Einführung in die Theorie der linearen Integralgleichungen,' in favor of the Treptow-Sternwarte. The inquiries about this theory take a first place in the mathematical inquiries of our time, and have given us already well-known results in new forms, as well as completely new ones. The lectures will take place in the new auditory of the Treptow-Sternwarte, from January 20 till March 20, 1910, on every Monday and Thursday from 6-7 hour. (One lecture is on Thursday, January 20, 1910.)"

UNIVERSITY AND EDUCATIONAL NEWS

MR. J. PIERPONT MORGAN has given \$100,000 to Yale University, to establish a chair of Assyriology and Babylonian literature in memory of William M. Laffan, late editor of the New York *Sun*.

THE directors of George Washington University have announced that they propose to raise an endowment fund of \$2,000,000. Mr. Henry C. Perkins, a member of the board, made an initial subscription of \$50,000 toward the fund on condition that the sum be raised.

DR. CHARLES GRAHAM, formerly professor of chemical technology in University College, London, has left his residuary estate (estimated to be £35,000) to the college for research in the School of Advanced Medical Studies of the University of London.

THE new Carnegie Physics Laboratory, University College, Dundee, has been formally opened by Professor Sir Joseph J. Thomson, of Cambridge University.

DR. JOHN W. BAIRD, assistant professor of psychology at the University of Illinois, has been appointed professor of psychology at Clark University, to succeed Dr. Edmund C. Sanford, who has become president of Clark College.

MR. F. J. M. STRATTON has been appointed assistant to the professor of astrophysics in Cambridge University to succeed the late Mr. Cookson.

DR. J. L. SIMONSEN, assistant lecturer and demonstrator in chemistry in the University

of Manchester, has been appointed professor of chemistry in the University of Madras, and Dr. A. Holt has succeeded him at Manchester.

DISCUSSION AND CORRESPONDENCE

INTERNATIONAL LANGUAGE

THE history of artificial languages for international communications presents some of the same features as many other human inventions. At first people began to work out such languages from so different points of view that the first attempts are extremely unlike one another and have only that one point in common that they are just as impracticable as the first flying machines were. But gradually all phantastic elements were eliminated, and now we have reached a period where practically every one works on the same basis and where only small differences are found between the various systems proposed or practised by all serious believers in an international language. As Ostwald puts it, "the international language is no longer the matter of more or less noisy enthusiasts, but a serious and technical problem, which we are going to solve just as well as we are solving the flying problem."

The first "universal languages," such as those of Dalgarno (1661) and Wilkins (1668), were "philosophical" or *a priori* systems, in which each thing was denominated according to its place in a universal logical system. In one *bu* is mammal, *be* fish, *ba* insect, the various orders and suborders being denoted by added letters and syllables; but as there is no earthly reason why we might not just as well use *ub* and *eb* and *ab* or *mi*, *mo*, *mu*, no two such systems have one syllable in common. The next step is represented by such languages as Schleyer's Volapük, which is only semi-philosophic, most of the words being English roots, many of them, however, strangely disfigured to fit in with the requirements of the completely philosophical and arbitrary grammar: *vol* = world, *pük* = speech, *Melop* = America, because no word was allowed to contain an *r* or to begin or end with a vowel, as that would interfere with Schleyer's prefixes and suffixes.

An enormous step in advance was made in Dr. Zamenhof's Esperanto (1887), because in the majority of words he retained the forms that were already international. But unfortunately he still has too many Volapükisms in his language. Not only does he disfigure many of the words taken from actual languages, as when *alert* becomes *lerta* (with an arbitrarily changed signification, too) or when French *aboyer* becomes *boji*; but he also quite arbitrarily coins some words with no foundation whatever in any language. As these are among the most frequently used in the language (pronouns, etc.) they give an air of strangeness and unfamiliarity to nearly every Esperanto sentence and probably more than anything else have deterred a great many people from taking the trouble to learn the language.

Since 1887, many people have worked out closely related artificial languages which all tend to keep the good features of Esperanto and to eliminate the bad ones. When the scientific committee elected by the Delegation for the Adoption of an International Auxiliary Language set to work in 1907, it found in the works of Liptay, Beerman, Molenaar, Peano and others, but above all in those of the "Academy" that had created the *Idiom Neutral*, a wealth of valuable suggestions all tending practically in the same direction, namely, in the direction of those elements of Esperanto which had never been criticized. On the other hand, it found an almost unanimous criticism of much in Esperanto not only on the part of believers in the possibility of an international language, but also on the part of such skeptics as the famous Leipzig philologists, Brugmann and Leskien; the points criticized in Esperanto were in all cases practically the same, namely, those in which Zamenhof had arbitrarily created something instead of finding out what was already the most international expression.

The language resulting from a careful investigation of all previous attempts is Ido: it must appeal to all unbiased minds because it is nothing but a systematic turning to account of everything that is already international,