their real affinities (which the reviewer does not share). But they should have been placed somewhere, for they are important types, both known from skulls and skeletons, and upon no theory of their affinities is their evidence negligible. No reference is made to the gigantic and peculiar rhinoceroses first discovered by Cooper in Baluchistan, reported by Borissiak from Turkestan, and quite recently found in Mongolia by Andrews and Granger. There are unfortunately a good many misprints, and the quality of the paper is not up to the old pre-war standards.

But with allowance for all defects, which, after all, are very few or of quite minor importance in comparison to the enormous mass of facts stored within its covers, the authors deserve the cordial thanks and appreciation of all who are interested in fossil vertebrates, in their completion of a revision that involves an immense amount of labor and erudition and a comprehension of the essential facts of the discoveries they have summarized that is far from common, to judge from the misstatements and misunderstandings of the average critical review.

W. D. MATTHEW AMERICAN MUSEUM OF NATURAL HISTORY

## QUOTATIONS

## THE ANNUAL EXPOSITION OF CHEMICAL INDUSTRIES

THE Ninth Annual Exposition of Chemical Industries is to be held in New York City, Grand Central Palace, September 17 to 22, 1923. The exposition has always been a place where those with inquiring minds could learn much in a short time regarding chemical equipment and the chemical industry. In late years the junior chemical engineers at Yale have assembled under Professor Read to devote the mornings to serious study and the afternoons and evenings to gaining a more intimate acquaintance with chemical equipment on display. The Advisory Committee of the Exposition recommended that a special feature be made of these facilities this year, and an announcement has been issued offering students of chemistry and chemical engineering a course on the fundamentals of chemical engineering and industrial chemical practice. Lectures will be given by men prominent in the various specialties, and a committee of educators has undertaken to make the course as attractive and profitable as possible. Three principal topics are to be the centers about which the work will be done. These are:

- 1—Plant Equipment in the Chemical Engineering Industries.
  - (a) Disintegration-Crushing and Grinding.
  - (b) Mechanical Separation-Grading.

- (c) Separation of Solids from Liquids-Thickening, Filtration, Centrifugal Separation.
- (d) Separation with Phase Change—Evaporation, Distillation, Drying.
- (e) Handling of Materials.
- 2-Materials of Construction-What materials to use, when, where and why.
- 3—Chemicals in Commerce—The distribution of chemicals.

It is expected that no charge will be made to students. The Exposition management asks instructors to advise how many of their students will care to avail themselves of this opportunity, and further undertakes to assist students in securing living accommodations while in New York. The seriousness of the work is indicated by the announcement that a report or examination on some phases of the course may be required by the committee.

We urge chemists and chemical engineers, whether students in institutions of learning or otherwise, to take advantage of this unusual opportunity. The men most familiar with the equipment and unit processes will be present. Exceptional facilities for examining devices of different designs and makes will be offered. It will be possible to meet those interested in the same field of work and discuss problems with them. Here is an opportunity to gain in one short week information of value, comparable perhaps to the concentration of data commonly found only in hand-books. Do not miss it!—*The Journal of Industrial and Engineering Chemistry*.

## SPECIAL ARTICLES

## THE PRODUCTION OF "BROWN-SÉQUARD'S EPILEPSY" IN NORMAL NON-OPERATED GUINEA PIGS

BROWN-SÉQUARD was the first to report that operative insults to the nervous system, such as lateral hemisection of the cord, section of the dorsal columns, section of one or both sciatic nerves, produced after a certain lapse of time a variety of interesting motor disturbances in the guinea pig. These disturbances were characterized by attacks of complex, coordinated, tonic and clonic contractions of the muscles of the head, neck, trunk and legs. The motor discharges occurred spontaneously or as the result of pressure stimulation of a certain receptive field of the skin which Brown-Séquard called "epileptogenic zone." This area comprehended roughly the side of the face below the eye and extended backwards, including the scapular region. The zone was unilateral after unilateral lesions and was always located on the operated side when the cord was involved; after damage to the brain, however, the "epileptogenic zone" shifted to the opposite side. In addition to the manifestations mentioned Brown-Séquard also described a transient