

S. Strathy and Dr. L. Bruce Robertson, Toronto, and Drs. Foster and James E. Davey, Hamilton. Dr. H. B. Yates, Montreal, is to be second in command to Dean Herbert S. Birkett of the medical faculty of McGill University and of the McGill University General Hospital, which is to go to France. The other officers who are to be appointed to the various ranks are: Drs. John M. Elder, John McCrae, J. George Adami, W. Henry P. Hill, Edward W. Archibald, A. Howard Pirie, L. J. Rhea, William G. Turner, C. P. Howard, Herbert M. Little, William B. Howell, Colin K. Russel, John W. Hutchinson, John C. Meakins, William W. Francis, J. A. MacMillan, R. H. M. Malone, Laurie H. McKim, and Mr. David Law, all of Montreal.

THAT Baltimore is gambling with the health of the people and the commerce of the port against the probability of an epidemic of the bubonic plague and that preventive measures ought to be taken to prevent a development of the plague here was stated by Dr. William C. Rucker, Washington, D. C., of the U. S. Public Health Service, in an address before the Public Health Conference, recently held in Baltimore, which is quoted in the *Journal* of the American Medical Association. He made it plain that every municipality that failed to take preventive measures is likely to find itself in the position of New Orleans, where the government, state and city authorities were spending hundreds of thousands of dollars to wipe out the bubonic plague, which might have been prevented, had there been a rodent survey of the city. The federal government has been willing to cooperate with the city authorities of Baltimore in making a rodent survey, but the city has refused to appropriate any money for such a purpose, although Health Commissioner Gorter has asked for such an appropriation.

New exhibits in the department of vertebrate paleontology of the American Museum of Natural History have recently been opened to the public. The first of these is a skeleton of *Scelidotherium*, which is a part of the Cope Pampean collection secured through the

generosity of the late Morris K. Jesup, former president of the museum. This animal belongs to the sloth family and is interesting anatomically in its approach to the anteaters. Two nearly perfect skulls of horned dinosaurs have been added to the reptile collection. These are a part of the collection made by the museum expedition to the Red Deer River, Alberta, in 1913. The skeleton of the giant carnivorous dinosaur, *Tyrannosaurus*, is being mounted in the Pleistocene hall, and the new duck-billed dinosaur, *Corythosaurus*, in the dinosaur hall.

#### UNIVERSITY AND EDUCATIONAL NEWS

GIFTS of \$25,000 to Yale University were announced at a meeting of the Yale Corporation held on February 15. Mrs. Charles W. Goodyear and Anson Conger Goodyear, of Buffalo, N. Y., have given \$15,000 for the establishment of the Charles W. Goodyear fund in the Forestry School. The income of \$10,000 from John B. Thomas, of New York, is to be used for providing for lectures by men of distinction on "The Real Purpose of the College Course," and kindred topics. These lectures are planned primarily for the academic freshmen.

THE new science building at Goshen College which is in process of construction will be dedicated on May 27. The principal address will be delivered by Dr. Eugene Davenport, dean of the college of agriculture and director of experimental station of the University of Illinois. This event will also mark the formal opening of the new departments of agriculture and domestic science at Goshen College.

THE University of Oregon has just completed a new psychological laboratory for both practise and research work. It consists of a suite of nine rooms, in addition to the lecture room, all of which are equipped with power circuits, gas, compressed air and an intercommunicating system of wires and speaking tubes.

At Yale University, Lorande Loss Woodruff, Ph.D. (Columbia), assistant professor in the Sheffield Scientific School, has been elected professor of biology in Yale College.

IN the University of London, Dr. Edward Barclay-Smith, of Cambridge, succeeds Professor Waterston in the chair of anatomy at King's College, and Dr. E. P. Cathcart, of Glasgow, succeeds Professor Leonard Hill in the chair of physiology at London Hospital Medical College.

#### DISCUSSION AND CORRESPONDENCE

##### EFFECT OF CYANIDE OF POTASSIUM ON TREES

TO THE EDITOR OF SCIENCE: My attention has been attracted to an article in your columns by Professor H. A. Surface relative to the use of cyanide of potassium for eliminating insect attacks on trees. While I have not investigated the claim of the firm at Allentown, Pennsylvania, referred to in his article, and know nothing about their process, however, from my own results with cyanide of potassium, especially on elms and black locusts, I am convinced it is a valuable remedy.

The article above referred to gives the general impression that cyanide of potassium is the cause of tree death as well as various staining effects found in the bark, cambium, etc. My opinion is that the staining comes from the reaction between the tannic acid found in all trees and the iron found in this so-called "tree food" in the form of iron sulphate. It is well known that when solutions of tannic acid are brought into contact with iron or any iron salt, dark colored compounds resembling ink are formed. These are very permanent dyes and no doubt account for the dark color observed.

The cyanide of potassium as I have used it for years in eliminating borers from various trees has never caused any staining, nor have I ever known of its killing or in any way injuring a tree. I have been using it and prescribing it for the use of others for about twelve years in connection with my forestry work, and we have saved the lives of thousands of trees by means of it.

Large groves of thrifty elms and black locusts in Kansas and other parts of the west have been completely rescued from the attacks of boring and girdling insects by means of

cyanide of potassium, and this article is the first intimation I have ever had to the effect that it is deleterious to tree growth. I am strongly inclined to feel that the blame is not properly placed and that a highly useful chemical for insect eradication is being condemned because of damages produced by other substances.

C. H. SHATTUCK

UNIVERSITY OF IDAHO

##### GOSSYPOL—A TOXIC SUBSTANCE IN COTTONSEED. A PRELIMINARY NOTE

We have separated from cottonseed kernels a substance which appears to be identical with the substance which Marchlewski<sup>1</sup> separated from crude cottonseed oil and called gossypol.

We have administered in various ways, to rabbits, gossypol as prepared by us and have found it toxic in every case.

We have found as did Marchlewski that gossypol is quickly oxidized in an alcoholic solution of sodium hydroxide.

In a previous paper from this station<sup>2</sup> it was stated that "(alcoholic) alkaline treatment, very greatly diminishes if it does not entirely remove the toxic properties of the (cottonseed) meal," and it was suggested that the beneficial effect "may be due to hydrolysis or to the formation of a sodium salt or to some other change not yet determined definitely."

We now offer as an explanation that gossypol is a toxic substance and that its oxidation by an alcoholic alkali renders it nontoxic and thus diminishes if it does not entirely remove the toxic properties of cottonseed meal.

W. A. WITHERS,

F. E. CARRUTH

N. C. AGRICULTURAL  
EXPERIMENT STATION,  
RALEIGH, N. C.,  
December 31, 1914

#### SCIENTIFIC BOOKS

*Bausteine zu einer Biologischen Weltanschauung.* Von JAKOB, BARON VON UEXKÜLL. München, F. Bruckmann A.-G. 1913.

<sup>1</sup> *J. für Prakt. Chem.* (1899), 60, p. 80.

<sup>2</sup> Withers and Ray, *SCIENCE* (1912), 36, p. 31.