

receive army pay; he is free to accept or reject the training.

DR. WILLIAM ALLAN NEILSON was installed as president of Smith College on June 13. Because of war conditions other educational institutions were not asked to send representatives.

B. R. BUCKINGHAM has been appointed head of a bureau of research which forms a part of the newly established college of education of the University of Illinois.

DR. A. R. BAILEY, assistant professor of engineering at the University of Michigan, has resigned.

DURING the past year Professor Leo F. Rettger, of Yale University, gave the course of lectures in general bacteriology at Wesleyan University which for many years was one of the regular courses conducted by the late Professor H. W. Conn.

DISCUSSION AND CORRESPONDENCE

MEADE COTTON

THIS name has been given to a new Upland long-staple variety representing the nearest approach to Sea Island cotton in length and fineness of fiber. The original selection was made in 1912 at Clarksville, Texas, in a field of a variety locally called "Blackseed" or "Black Rattler," but not the same as the varieties that have borne these names in other parts of the cotton belt. The possibility of securing from this stock an Upland variety that would rival the Sea Island in length and fineness of staple appealed very strongly to Mr. Rowland M. Meade, at that time an assistant in cotton breeding in the Bureau of Plant Industry, and his enthusiasm now appears fully justified by the results of the work that he began.

Three generations of progenies from select individuals had been raised and a superior stock had been separated before the sudden and untimely death of Mr. Meade at San Antonio, Texas, in June, 1916, at the age of twenty-seven. The new variety has been called Meade as a tribute of personal regard of his associates, and to commemorate his services as a plant breeder. Though his work

ended at an age when men are supposed to be prepared only to begin such investigations, he had studied cotton intensively for more than a decade and had made notable contributions to our knowledge of the habits of the plant and to the breeding of superior varieties.

Brief statements regarding the Meade variety have appeared in the current annual reports of the chief of the Bureau of Plant Industry and of the chief of the Bureau of Markets. Tests of the strength and spinning qualities of the fiber have given favorable results, so that the possibility of substituting this type of cotton for corresponding lengths of Sea Island is definitely indicated. The length of staple equals or may slightly exceed much of the "mainland" Sea Island crop of Georgia and Florida, Meade fiber under favorable conditions being usually about $1\frac{1}{2}$ inches, seldom falling below $1\frac{1}{4}$, and sometimes attaining $1\frac{3}{4}$. There is little tendency to "butterfly," that is, to shorten the fibers at the base of the seed, which was one of the undesirable traits of the older long-staple varieties, such as Floradora, Sunflower and Allen.

When compared with Sea Island in adjoining rows or plots, the cultural superiority of the Meade cotton is clearly shown. It produces earlier and more abundant flowers, the bolls are nearly twice as large, a heavier crop can be set in a short period, and the fiber matures in advance of the Sea Island, all tending to avoid damage by the boll weevil. Even when a large proportion of the buds or young bolls are shed, as a result of severe weevil injury or other unfavorable conditions, the Meade rows often yield two or three times as much as the Sea Island. And since buyers are accepting the Meade fiber as practically equivalent to the Sea Island the advantage to the farmer is clear. Some of the 1917 crop of Meade cotton was sold for 73 cents on the Savannah market.

Substitution for the Sea Island is also facilitated by the fact that the seeds of the Meade cotton do not have a dense covering of fuzz like most of the Upland varieties, but are naked on the sides like the seeds of the Sea Island and Egyptian cotton, so that it is pos-

sible to use the roller gins with which the Sea Island growers are already equipped. The only difficulty arises from the fact that the Meade seeds average somewhat larger than the Sea Island, but this can be avoided by a slight modification of the ginning equipment.

Another consequence of the larger size of the seeds is that the percentage of lint is lower than with some of the Sea Island varieties, although the lint index, the number of grams of lint produced by 100 seeds, is higher. Thus a sample of Meade cotton with a lint percentage of 26.6 had a lint index of 5.45, while Sea Island cotton with a percentage of 30.7 had an index of 4.93. In addition to producing more lint per acre the Meade cotton produces more seed than the Sea Island, the increase being at the rate of about 250 pounds of seed for each 500-pound bale. In such cases the popular idea of the supreme importance of the lint percentage is clearly erroneous.

That the Meade variety was not produced by hybridization, but by the discovery and selection of a superior type already existing, is of interest in relation to heredity. Confusion is likely to arise, as already shown by unauthorized statements appearing in newspapers and agricultural journals, in which the Meade variety appears as a new early Sea Island cotton or as a hybrid between the Upland and Sea Island types. The usual reasoning in such matters is to assume that a variety like Meade must be a hybrid because the plant is like Upland cotton and the lint like Sea Island, but the uniformity of the Meade cotton at once places it in a different class from any stock known to have a direct hybrid origin.

The need of combining the superior fiber of the Sea Island or Egyptian types of cotton with the superior cultural characters of the Upland type has appealed strongly to breeders, and many attempts have been made to secure this result by hybridizing different Upland varieties with Sea Island or Egyptian sorts. Crossing is readily accomplished and the results usually appear promising in the first and second generations. Thousands of natural and artificial hybrids have been raised, compared,

and selected, and progenies of such hybrids have been carried through numerous generations, but without finding any hybrid stock with a sufficiently uniform and stable combination of the desirable characters of the parental types to justify commercial planting. While it is doubtless true that need of uniformity is greater with cotton than with many other crops, on account of the industrial uses of the fiber, the failure to secure sufficiently stable combinations of characters from hybrids between widely different types may be significant.

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INTERNATIONAL ZOOLOGY AND THE INTERNATIONAL CODE

DISCUSSION of the famous Piltdown jaw has developed one of the best examples imaginable of evil due to a disregard for established rules of zoological nomenclature. The great interest shown in this specimen by men other than professional zoologists makes the case a particularly good one on which to base an earnest plea for universal use of the International Code without restrictions and evasions. Three comparatively late papers on the Piltdown remains are enough to cite in the present connection.

Miller,¹ in describing the jaw as the type specimen of a new species of extinct chimpanzee, called it *Pan vetus*. Pycraft,² in a totally adverse reply to Miller, attempts to set his readers straight in matters of nomenclature by the statement that "when Mr. Miller speaks of the genus *Pan* he means the genus *Simia*." Boule³ in a review of Miller's paper in which he agrees with that author in every detail except nomenclature, uses for the chimpanzee the generic name *Troglodytes*.⁴

¹ Smithsonian Misc. Coll., Vol. 65, No. 12, November 24, 1915.

² *Science Progress*, No. 43, pp. 389-409, January, 1917.

³ *L'Anthropologie*, Vol. 28, pp. 433-435, July-October, 1917.

⁴ More expansive than Pycraft, he explains as follows: "Pour ceux de mes lecteurs qui ne serai-