

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,<sup>1</sup> in describing the jaw as the type specimen of a new species of extinct chimpanzee, called it *Pan vetus*. Pycraft,<sup>2</sup> 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*." Boule<sup>3</sup> 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*.<sup>4</sup>

<sup>1</sup> Smithsonian Misc. Coll., Vol. 65, No. 12, November 24, 1915.

<sup>2</sup> *Science Progress*, No. 43, pp. 389-409, January, 1917.

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

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

Here we have three authors, writing about one specimen and using three generic names for the chimpanzee. The subject is further complicated by the action of a group of European mammalogists who have petitioned the International Commission on Zoological Nomenclature to fix the name of the chimpanzee by fiat, not as *Pan*, *Simia*, or *Troglodytes*, but as *Anthropopithecus*.<sup>5</sup> One of these zoologists, after making his recommendation to the Commission, does not wait for action by that body, but immediately proceeds to use *Anthropopithecus* when he has occasion to mention the chimpanzee in print.<sup>6</sup> Four generic names are thus current for this one ape. One of these names, *Simia*, is applied by Boule to the orang-utan, and the fiat petitioners ask that it be fixed on the same animal; but by some authors, it is correctly applied to still another primate, the Barbary ape.<sup>7</sup> Another name, *Troglodytes*, would mean to most people familiar with generic terms in zoology, past and present, either the gorilla, or a wren.

All this confusion might be avoided if authors would observe the rules of the International Commission on Zoological Nomenclature and use the correct names for these anthropoids, *Pan* for the chimpanzee, *Pongo* for the orang-utan, and *Gorilla* for the gorilla. These names are now well known, and are entirely free from ambiguity.

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ent pas familiarisés avec la nomenclature américaine, je dois dire que nos confrères des Etats-Unis ont récemment débaptisé, sans raisons bien sérieuses, les Chimpanzés et les Orangs. A leurs vieux noms latins, universellement connus et employés, de *Troglodytes* et de *Simia*, ils ont substitué les termes de *Pan* pour les Chimpanzés et de *Pongo* pour les Orangs, sous le prétexte que ce sont là les noms les plus anciennement donnés.”

<sup>5</sup> *Zoolog. Anzeiger*, Vol. 44, pp. 284-286, May, 1914.

<sup>6</sup> *Kungl. Svenska Vet. Akad. Handl.*, Vol. 58, No. 2, pp. 18-27, 1917.

<sup>7</sup> Thomas, *Proc. Zool. Soc. London*, 1911, p. 125; Miller, "Mamm. Western Europe Brit. Mus.," p. vii, 1912; Elliot, "Review Primates," Vol. 2, p. 172, 1913.

#### HELPING TO STABILIZE NOMENCLATURE

TO THE EDITOR OF SCIENCE: In these days when there are so many workers in the science of entomology, and when many of the workers have had but little experience in the taxonomic side of the science and, therefore, do not realize its requirements and value, it is especially important that the periodicals should have certain definite, recognized policies, which will make it necessary for all authors to so make up their communications that they will contain at least the most of the important, although seemingly minor, details which are of great assistance to contemporaneous and future workers and tends to stabilize our nomenclature. With this in mind the Entomological Society of Washington has recently adopted the following rules and suggestions governing publication in their *Proceedings*:

*Rule 1.*—No description of a new genus, or subgenus, will be published unless there is cited as a genotype a species which is established in accordance with current practise of zoological nomenclature.

*Rule 2.*—In all cases a new genus, or subgenus, must be characterized and if it is based on an undescribed species the two must be characterized separately.

*Rule 3.*—No description of a species, subspecies, variety or form will be published unless it is accompanied by a statement which includes the following information, where known: (1) the type-locality; (2) of what the type material consists—with statement of sex, full data on localities, dates, collectors, etc.; and (3) present location of type material.

*Rule 4.*—No unsigned articles, or articles signed by pseudonyms or initials will be published.

*Rule 5.*—The ordinal position of the group treated in any paper must be clearly given in the title or in parentheses following the title.

*Suggestion 1.*—All illustrations, accompanying articles, should be mentioned in the text and preferably in places where the object illustrated is discussed.

*Suggestion 2.*—It is desirable in describing new genera and species that their taxonomic relationship be discussed, and that distinguishing characters be pointed out.