during the past year is a real help to the astronomical investigator, and saves him much time and labour. In spite of the mass of material that is embodied in the work, the volume is, according to pages, only a trifle larger than its immediate predecessor, and somewhat smaller than vol. iii. As a matter of interest, it may be stated that the number of references in the present and the two preceding volumes are 2582 for vol. v., 2411 for vol. iv., and 2513 for vol. iii.

In conclusion, the statement made with regard to the earlier volumes, namely, that they should be found in every astronomical library and observatory, may be repeated in the present case. W. J. S. L.

## LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of NATURE. No notice is taken of anonymous communications.]

## The Forest-pig of Central Africa.

I HAVE seen Mr. Oldfield Thomas's interesting letter in your issue of October 13 relative to the remarkable forestpig (which he has named Hylochoerus meinertzhageni). With regard to the discovery of this remarkable beast, there are perhaps other names which should be associated with it as well as those of the late Sir Henry M. Stanley and myself. No mention of this forest-pig appears in Sir Henry Stanley's published works, but in conversation with myself and others he frequently told us that, in addition to hearing of a "donkey-like animal with large ears" (which afterwards turned out to be the okapi), he once saw a huge black pig, and he had reason to believe that a strange new species or genus of pig inhabited that portion of the Congo Forest near the Semliki River. I heard and transmitted similar stories told me by the natives of that forest; but even more detailed accounts were collected and sent later on by the late W. G. Doggett, who, to the great loss of zoological collecting in Africa, was drowned in the River Kagera in the early part of the present year. But I think the first definite accounts of this pig (or at any rate of Hylochoerus meinertzhageni) were transmitted by Mr. C. W. Hobley, C.M.G., a sub-commissioner of the East Africa Protectorate, who has recently been acting as Com-missioner after the departure of Sir Charles Eliot. Mr. Hobley sent a drawing of the skull and a description of the creature from imperfect specimens he had seen on the slopes of Mount Kenia. Unfortunately his letters were delayed in transmission, so far as their reaching the Zoological Society was concerned. Mr. Hobley is now in England, and it is to be hoped that he will furnish the Zoological Society in detail with the extremely interesting particulars he has given me in conversation regarding this remarkable animal. I would remind your readers that Mr. Hobley (who as regards length of service is almost the senior Reitich official connected with Reitich Fact Mains senior British official connected with British East Africa) made the important discovery last year of marine organisms in the Victoria Nyanza.

So far, the native stories of the okapi and the big forestpig have turned out to be true. It only remains to complete the trilogy by the discovery of a third mysterious animal, also alluded to in conversation, if not in writing, by Stanley, and mentioned by Doggett and myself. This, so far as native accounts can be crystallised into a definition, would seem to be some large tragelaphine antelope resembling the nilghai in appearance, with short, twisted horns. A horn or a pair of horns attributed to this animal was, I believe, brought home by a member of Stanley's expedition, and is possibly in the British Museum. It was seen by Dr. P. L. Sclater, and attributed by him to an abnormaliy developed cow eland; but so far as I could learn from my own researches and those of Doggett, the natives of the Semiliki Forest were careful to differentiate this creature from either the forest eland or the bongo. Their accounts of it certainly coincide to a great extent with their stories of the okapi, though they insisted on the difference between

NO. 1825. VOL 70]

the two animals. Perhaps there is as much truth in their stories of this large antelope with small twisted horns as there has been shown to be in connection with the okapi and the forest-pig. H. H. JOHNSTON.

## Mendel's Law: a Crucial Experiment.

I SEE from the published account of a recent discussion at the Cambridge meeting of the British Association that the facts of Mendelian segregation are still disputed by the biometric school of evolutionists. I venture, therefore, to submit to your readers the result of an experiment carried out at the Royal Botanic Gardens, Peradeniya, which, in my opinion, proves conclusively that in a particular crossbred form a particular pair of characters did become segregated in equal numbers of germ cells, both male and female. The characters in question were:—the appearance and absence respectively of a yellow coloration in the endosperm of grains of Indian corn (Zea Mays). These characters are discontinuous in the strain examined. Among about 100,000 grains which passed under my notice, I saw only two which were partly yellow and partly white; these were counted as yellow, being presumably heterozygotes. Some of my specimens were exhibited by Mr. Bateson at

Some of my specimens were exhibited by Mr. Bateson at the recent meeting of the British Association, but I can now add the results of a further generation. The facts are represented in the following scheme, in

The facts are represented in the following scheme, in which the absence of the yellow pigment is expressed by the term " white."

I. 
$$\begin{cases} (1) \text{ White flint corn }; \\ extracted recessive \\ from a mongrel strain \end{cases} \begin{array}{l} \mathbb{Q} \times \mathcal{J} \\ \left\{ \begin{array}{c} (2) \text{ Vellow flint corn }; \\ of the same mongrel \\ strain as (1) \end{array} \right\} \\ \\ \text{II.} \\ \left\{ \begin{array}{c} (3) \text{ Vellow} \\ grains \end{array} \right\} \begin{array}{l} \mathbb{Q} \times \mathcal{J} \\ \mathbb{Q} \\ \mathbb{Q}$$

The plants arising from these grains, both white and yellow, were used as seed parents in the next generation, the pollen parent being "Boone County White" dent corn. There resulted :—(a) Offspring of white grains—some 30,000 white grains and 27 yellow grains (0.09 per cent.); the latter were accounted for by the escape of "yellow" pollen. (b) Offspring of yellow grains—generation iv. :—

IV. 26,792 yellow (50.03 per cent.) + 26,751 white.

 $\begin{pmatrix} Self-\\ pollinated \end{pmatrix}$ 



The plants arising from the above yellow grains (generation iv.) were also used as pollen parents for a cross in which the seed parents were the offspring of "Boone County White" crossed with a strain of extracted recessives from the original mongrel flint corn. There resulted :---

## 2507 yellow (49.2 per cent.) + 2593 white.

I would direct particular attention to the following points :---

(1) That a perfect Mendelian result was obtained among the offspring of an impure race.
(2) Lest it should be objected that possibly the ancestry

(2) Lest it should be objected that possibly the ancestry of this mongrel strain included equal numbers of yellow and white individuals, a pure recessive strain ("Boone County White," imported from U.S.A.) was introduced into the pedigree, so that the next generation (iv.) possessed at least three times as many white ancestors as yellow. On self-pollinating the offspring of yellow grains, the Mendelian proportion 3 yellow to I white was obtained.

(3) In two generations the female germ cells borne upon the heterozygotes were tested by crossing with the recessive form. In each case half of the germ cells were found to