SCIENCE

DR. SAM FARLOW TRELEASE has been appointed assistant professor of plant physiology in the agricultural college of the University of the Philippines. He sailed on July 18 and begins his work on arriving at Los Baños.

## DISCUSSION AND CORRESPONDENCE MAN AND THE ANTHROPOIDS

In our current scientific literature one frequently meets the assertion that man is a lineal descendant of the anthropoid apes. The evident implication is that the extant anthropoids, orang, gibbon, gorilla and chimpanzee, are intended. Thus in the issue of "SCIENCE," of February 23 ultimo, Professor Stewart Paton remarks:

The time is rapidly passing, as Yerkes has pointed out, when on account of the disappearance of the higher apes it will be possible to trace the various gradations in our ancestral line.

The correction of this common error lies all along the line of technical evolutionary thought from Huxley to the present, but it does not seem to have penetrated popular science. Our leading authority in this field, Professor Duckworth, in his "Morphology and Anthropology," Volume I, page 238, Second Edition, 1915, writes:

We must conclude that the existing anthropoid apes, constituted as they now are, did not figure in the ancestral history of man.

This should relieve our anxieties regarding "our ancestral line."

While our knowledge of the anthropoids is not as complete as we might wish, the whole of it is against the supposition of the natives of the Congo and of Borneo that man is ascended from the anthropoids or the latter are descended from man. The thraldom of morphology accounts for much biological belief both ancient and modern, but the science of the present puts much more weight on anatomy and physiology. It appears to be a sound principle that groups showing inverse developments are not genetically related. Duckworth points out some of these inversions as regards man and the anthropoids, such as in dentition, in the spheno-ethmoidal angle, and in the spheno-maxillary angle. Metchnikoff, while he assumes as a hypothesis that man is descended from "some anthropoid ape," pointed out that the present anthropoids have the os penis which does not appear in man, and that the hymen which is unique to the genus Homo is absent in the anthropoids. Several anatomists have followed Aristotle in holding that the hand places man in a distinct order, while Topinard was equally emphatic regarding the human foot. Evidences along these lines are supplemented by pre-historic archeology, as all the older human crania are dolichocephalic, while the crania of all anthropoids are extremely brachycephalic.

Whether "scientists" are entitled to believe what they please or are to be guided by observations and verifications is perhaps an open question. Weismann accepted generatio aequivoca, although he admitted "all the evidence is against it." Still, many of us believe that a sound science and a sound education demand fidelity to the facts of experience and to those theories alone which grow out of them. MATTOON M. CURTIS CLEVELAND

## A GIRDLING OF BEAN STEMS CAUSED BY BACT. PHASEOLI

DURING a field trip in Michigan in July, 1914, the writer found a peculiar girdling of the stems and branches of field beans to be prevalent in several localities. Specimens were collected from Kent, Newaygo and Tuscola counties. Since then specimens of this disease have been collected from various parts of the state each year.

The disease appears at the nodes of stems and branches as small water-soaked spots. These enlarge, encircling the affected parts. Later these diseased areas become ambercolored. This girdling is usually completed by the time the pods are about half mature. The affected tissue is so weakened that from the weight of the tops the stem breaks at the diseased node. These signs of the disease may appear before any evidence of the bacterial blight upon the pods.