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.]

Note on the Discovery of the Human Trypanosome.

WE have recently seen in the medical Press several very inaccurate accounts regarding the authorship of the important new discovery of trypanosomes in human blood, and of the disease caused by them. For instance, the *Journal of Tropical Medicine* for November 1 (in giving an anonymous description, supported by an editorial, of a case just observed by Drs. Daniels and Manson) attributes the original discovery to Dr. R. M. Forde. It does not mention even the name of Dr. J. Everett Dutton. Dr. Dutton is an old student and assistant in this Laboratory, and is now away on the West African Coast; and we are of opinion that he has a claim to be considered in the matter of this discovery. Another periodical, *The Hospital* for November 8, while also omitting Dr. Dutton's name, states that the discovery was made "within the last few days" by the London School of Tropical Medicine. We believe that such statements are calculated to distort the history of the discovery, and should therefore like to have an opportunity for correcting them promptly in your pages.

The facts regarding the history of the discovery—which was made nearly a year ago—have already been publicly and adequately stated both by Dr. Forde¹ and by Dr. Dutton.² Dr. Forde, Colonial Surgeon, British Gambia, tells us that the case in which the parasites were first observed came under his notice in May, 1901; that he found in the blood "small worm-like, extremely active bodies, which I prematurely pronounced a species of filaria," although this conclusion "became doubtful after repeated observations of the parasite"; and that he showed the case in December, 1901, to Dr. J. Everett Dutton, then upon a mission of the Liverpool School of Tropical Medicine to the Gambia, and that Dr. Dutton "at once recognised" the parasite "as a species of Trypanosoma." Dr. Dutton's two papers corroborate these statements of Dr. Forde. After the recognition of the new organism, Dr. Forde gave the first records of the case to Dr. Dutton. Dr. Dutton it was, as Dr. Forde says, who recognised that the fever was of a peculiar undulant type; Dr. Dutton it was who positively excluded malaria as the cause of the symptoms; it was he who saw that those symptoms roughly resemble those of tsetse-fly disease and surra; it is he who has published accurate and able descriptions, drawings and charts of the parasites and of the case; and it is he who is now, with Dr. Todd, investigating the subject in West Africa for the Liverpool School of Tropical Medicine.

Dr. Forde is undoubtedly deserving of great credit for his part in the matter, and we think his name should be associated with the discovery. But, until Dr. Dutton was called in, he published no account of the case and did not recognise the nature of the parasite, or the peculiarity of the symptoms. In order to make a discovery, it is not sufficient merely to see an object; it is necessary also to recognise the nature of the object seen and to publish accurate and adequate descriptions of it. For example, Virchow and others long ago saw the parasites of malaria without recognising their parasitic nature; but it is to Laveran, who did recognise their nature, that science gives the credit for the discovery of them. It is certain that Dr. Dutton was the first clearly to observe and to signal the existence of trypanosomes in human blood, and the first to give accurate descriptions of the new organism; and it is to him that science will give the principal credit for the new observation.

It seems to us particularly unfortunate that the *Journal of Tropical Medicine* should have so ostentatiously omitted the name of Dr. Dutton at the moment when it was engaged in giving great prominence to a case of Drs. Manson and Daniels, which, after all, would probably have escaped notice but for the previous work of Dutton. We may mention also—and this is another point which the *Journal of Tropical Medicine* appears to have forgotten—that before his departure for Africa, Dr. Dutton gave at this Laboratory a detailed demonstration, both of the parasite and the clinical features of the case, to Drs.

Manson and Daniels, and to one of the editors of the periodical referred to. The omission, then, appears to be due rather to want of memory than to want of knowledge. The journal also states that while the first case (namely, that of Dutton and Forde) was regarded only as a "curiosity," the "discovery of a second case" (namely, that of Daniels and Manson) "opens up a new field for investigation and elucidation," and so on. This view of the relative importance of an original discovery and of a mere confirmation of that discovery is somewhat novel. But the case of Drs. Manson and Daniels is not the second case at all. The second case—also discovered by Dr. Dutton—was that of a child in British Gambia.

It is unnecessary, after what has been said, to deal with the statement made in *The Hospital*. It affords, however, an instance of the curiously rapid manner in which such errors are often propagated in the Press.

We should note that Barron and Nepveu have also claimed to have found flagellates in human blood; but, as will be seen from their writings, their descriptions are so inadequate as to fail to convince us of the accuracy or even the nature of their observations.

RUBERT BOYCE,
RONALD ROSS,
CH. S. SHERRINGTON.

Thompson Yates Laboratories,
University College, Liverpool.

The Secular Bending of a Marble Slab under its own Weight.

JUST east of the old brick church in the Rock Creek Cemetery near the Soldiers' Home in Washington is a phenomenon which, so far as I know, is unique. A marble slab, originally plane and resting on four posts at the corners, in the course of about half a century has gradually bent under its own weight and a section of it assumed the figure of a catenary. Careful measurement shows the slab to be 2 inches thick, 35 inches wide and 70 inches long; the posts supporting the slab are 7.5 by 6.75 inches in horizontal section, and so placed that the inner edges (which now furnish the support) are 52 inches apart. The stone has bent so much that the ends of the slab are tipped up one inch above the outer edges of the posts on which they formerly rested. At a distance of 12 inches from the ends, the bending is 1.25 inches; at a distance of 24 inches, the bending is 2.50 inches; and at the centre (distant 35 inches from either end), the bending is 3.05 inches. The stone is a little rough from the effects of atmospheric decomposition, and, of course, the hundredth of an inch is hardly to be depended upon in these measures.

Inquiry as to the epoch of erecting the stone did not lead to definite information, but the inscription gave a date of 1853, thus indicating that it has probably been in position approximately half a century. The superintendent of the grounds has been there some twenty years, and he assured us that the bending of the stone had become much more decided in recent years.

The slab is composed of white marble, of about the texture of the material used by sculptors, and appears sufficiently crystalline and homogeneous to take a polish. On the under surface, the stretching of the material has given rise to a number of small cracks, such as develop in plaster where it bends. The chief interest in the phenomenon arises from the evidence it furnishes that *marble is in reality a fluid of enormous viscosity*. This has, of course, some bearing on the question of the rigidity of the rocks composing the crust of the earth and the gradual adjustment of the earth's figure under gravity.

T. J. J. SEE.

Washington, D.C., November 3.

November Swallows.

SINCE the end of October I had not seen a single swallow. This afternoon, however, between four and five o'clock, I saw a party of six, or more, leisurely hawking over the trees and house-tops. It was occasional appearances such as this, after the general exodus, which led Gilbert White to believe that swallows did not all migrate. On seeing some on November 4, near Newhaven, he writes:—

"I am more and more induced to believe that many of the

¹ *Journal of Tropical Medicine*, September 1.

² "Thompson Yates Laboratory Reports," vol. iv. part ii., May; and *British Medical Journal*, September 20.