probable that Africa has always been on one side of the equation. But one would expect that, had the continent been "predominantly in a state of tension," evidence of the fact would not be difficult to find in Uganda.

True, there is no reason why "a change of conditions may not convert a true rift valley formed in a period of tension into one bounded by reversed faults." But it may also be observed that it is certain that tension operating on a rift formed by a thrust action would accentuate the features, provided that the bottom of the valley was not prevented by subterranean support from sinking. Compression would do the same without the last proviso; while some such factor as cooling at depth would achieve a similar result without the assistance of either tension or compression if the faults were reversed.

There can be no shadow of a doubt that the bottoms of the Uganda rift valleys have sunk, and that, too, very considerably. What has happened beyond this it is impossible for any living soul to say with absolute certainty at present; but no theory of the rift will pass muster if it leaves Ruwenzori hanging in the air, and if it fails to explain why planes of weakness to tension have not been utilised.

Assuming a rift-block (by which I mean the mass between the rift features) bounded by reversed faults to sink, something must happen to the valley sides; either one or both will subside as a whole, or great lines of normal faulting will appear in the country on one or both sides; or these two things may happen in combination. The first of these alternatives appears, almost to the entire exclusion of the second, by Lake Albert, in Bunyoro; the second, largely to the exclusion of the first, is seen along the eastern side of Lake George. Moreover, normal faulting may appear in the rift-block itself. But all these things may equally be consequent upon settlement of a rift-block bounded by normal faults. Thus it is easily seen that step faulting is not admissible as evidence as to the nature of the fractures that initiated the rift. The solution of the Great Rift Valley problem must be sought, in fact, in places like Bunyoro, where step faulting is almost completely absent.

Dr. Evans, who combines Wegener's general proposition with a tentative theory of the moon's birth, would expect (subject to the truth of the latter) "The chief period of tension in Africa and its surroundings to have existed in Mesozoic and early Kainozoic times"; but this is precisely when, so Prof. J. W. Gregory argues (and I agree with him), Africa was being hunched up by compression.

As to the date of the moon's birth, or the manner of it, I am not qualified to speak with any authority; but I should have thought that had it taken place as late as the Carboniferous period, the parting at least would have been catastrophic. Also I am tempted to ask (not controversially, but as one seeking information) why if "the bulk of the atmosphere" was "attracted towards the protruding mass of the moon," our satellite has now no atmosphere worth mentioning. Did the moon escape without air or water; or may it not be that it once possessed both, self-elaborated very long ago, as those of the earth, in an early stage of its individual career? May not the absence of atmosphere be indicative of completion in the life of a celestial body of a stage the span of which is a function of the sphere's mass?

I fear that I have somehow created the impression that all the major faulting in this part of the world is more or less north and south. This is not so. In Bunyoro certainly, and one has reason to believe elsewhere, a series of very large east to west faults is traceable. This is clearly brought out in a structure

map of part of Bunyoro prepared by Mr. W. C. Simmons a few years ago. Judging by the manner in which they cut off the north to south fractures, the east to west faults are the younger; though both are very ancient.

I believe that the word "rift" was originally applied to the Great East African fracture trough, which is quite a different thing from an ocean-covered area produced by the drifting of continents. Rift valley faults will still remain rift valley faults, whether they turn out to be normal or reversed; otherwise "rift valley" must disappear from our nomenclature should my hypothesis prove true.

I thoroughly agree with Dr. Evans's remarks with regard to the value of speculative hypothesis; and, as he reminds us, "It will only be when we have all the facts before us, that we shall be able to solve with any assurance the problems presented by the present configuration of the surface of the globe."

E. J. WAYLAND.

Mahyuro, Lake George, Uganda,
November 3.

Mrs. Hertha Ayrton.

IN NATURE of December 1 there appears under the above heading an obituary notice of the late Mrs. Ayrton which, I regret to say, is in some matters incorrect and misleading. The article is an unusual one, for in it the writer ventilates his own grievances against his so-called "masters" (The City and Guilds Institute), and disparages and belittles the work and abilities of his lifelong colleagues. To write in this strain about dead friends is in my opinion reprehensible, and it is to be hoped the example will not be followed.

From reading Prof. Armstrong's article one would gather that Mrs. Ayrton had little originality, and that all the scientific work she did was due to her husband's lead. Neither inference would be true, as is proved by the inventions she made before she met Prof. Ayrton and the original work she carried out after his death. In connexion with the latter, Mrs. Ayrton took out eight patents between 1913 and 1918.

The late Prof. Ayrton told me on several occasions that when Mrs. Ayrton took up the study of the electric arc he left the subject entirely alone so that there should be no excuse for any one giving him the credit for her work, and when lecturing to his students on the arc he made similar statements, as many of his pupils can doubtless confirm; it is indeed very probable that Prof. Armstrong heard analogous remarks from Prof. Ayrton's own lips.

T. MATHER.

37 Wyatt Park Rd.,
Streatham Hill, S.W.2,
December 10.

A Waltzing Mouse.

It may perhaps be of interest to record that, in some recent experiments in crossing mice, there appeared in a litter of seven (self-coloured champagne) a female which exhibited all the symptoms associated with the Japanese waltzing mouse of which Yerkes made a fairly exhaustive study. It is dextro-rotatory, if the term be permitted. It is not yet old enough for reproduction. Both parents have, however, since produced litters, the female to a Dutch-marked male, the male on a Dutch-marked female, five and four respectively, but all are normal, nor out of eighty mice recently born to other couples have I had any other that waltzes.

G. W. HARRIS.

The Royal Automobile Club, London, S.W.1,
November 25.