love of teaching alone, and will obtain elsewhere the wherewithal to live.

It is not necessary to cite passages from the lectures and writings of our most distinguished scientific men dealing with the paramount necessity for more, and yet more, training in pure and applied science; the columns of *NATURE* provide, and always have provided, numerous examples. At the same time, any column of educational advertisements will provide numerous examples similar to the following, which are quoted from a recent list of "official advertisements." A well-known Scottish college asks for "an assistant lecturer for physics department; salary 150*l.*" A "chemistry tutor for a large teaching institution in London" is required; he must be "a high honour man, with teaching experience"—so that a youth who has just left college is *not* indicated—and 240*l.* is offered! Thus, either we are satisfied that a large proportion of university and college teaching shall be in the hands of men and women whose market value is only about 200*l.* a year—less than a moderately intelligent manual labourer in a munition factory can earn—or we expect our best-trained and keenest men and women, just because they happen to have the ability to teach or a liking for teaching, to accept a wage which will not allow them to live in a manner fitting to their station, and renders the proper feeding and schooling of their children a constant anxiety, and sometimes almost an impossibility. Certainly there is a third possible explanation: that no one has ever troubled to think about the matter! Is it not time for something definite to be done to remedy this state of affairs—a state which is obvious to anyone who happens to read both the text *and* the advertisements of any scientific journal? Moreover, the outlook for science teaching is serious, because one result of the war will be to open many promising careers to men and women with scientific training, and it is quite safe to say that, unless the position of the university teacher is very much improved, no one who can possibly obtain an appointment elsewhere will undertake the work of teaching unless he or she be a person of independent means. E. R. MARLE.

B.E.F., September 17.

The Arboreal Descent of Man.

PALEONTOLOGICAL evidence for the arboreal habit of the stem Placentals has been adduced by Matthew (1904). In particular, for the Primates the derivation of the order from large-brained arboreal Insectivores resembling in many ways *Tupaia* and *Ptilocercus* is indicated by many considerations (Gregory, 1910). Therefore, there are two possibilities: either the Hominidæ are directly descended from such a stock, and this is what Prof. Wood-Jones holds, or indirectly—that is, through an intermediate anthropoid stage, as is held by American palæontologists; but even in this case, as monkeys are arboreal animals, it is evident that Hominidæ never passed through a quadrupedal stage. V. GIUFFRIDA-RUGGERI.

Istituto di Antropologia, R. Università,
Napoli, September 17.

A Curious Rainbow.

IN North Wales, on August 20, about two hours before sunset, I saw a rainbow-effect which was quite new to me.

The summit of Tryfaen (some four miles north-east from that of Snowdon) has three sharp, rocky peaks running roughly north and south.

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We had climbed up the eastern cliff in a south-westerly gale, which brought up much cloud with some light showers, and were sitting just below the top of the southern peak. The Holyhead road lay north-east and 2000 ft. below us. From it rose the upright portion of a brilliant rainbow. At the centre of its circle was the shadow of our peak with those of the other two peaks to the left of it, all sharply defined. Around the shadow of our peak was a most vivid and persistent bow, the smallest I have ever seen, the radius of the inner edge being about half that of the outer. The central space changed a good deal, being frequently almost filled by a diffused yellow glow, which sometimes appeared to condense towards the centre until it resembled a nebulous sun on a whitish ground, while at intervals little yellow

streamers seemed to radiate from it to the inner edge of the bow. Outside this bow (which had the colours in regular rainbow order, red outside) was part of a third bow of perhaps double the diameter, but dim and intermittent.

We stood up and made gestures, expecting some sort of Brocken effect, but could detect none. However, as we were not on the extreme summit, and the cloud was very distant, our shadows would at best have been extremely minute.

Out of many "Brockens" that I have seen in different parts of the world the most vividly coloured was in Arctic Norway, the most curious and unexpected was on a blazing August day at sea-level in Portugal, and the most realistic on the Mendip Hills in Somerset.

The last was all the more effective for being within an uncoloured and inconspicuous ring.

W. P. H. S.

GERMAN INDUSTRY AND THE WAR.

II.

IN addition to explosives and what are ordinarily comprised under the term munitions, war requires for its prosecution a great variety of other articles, all of them more or less essential. Chief among these are coal, metals, alcohol, petrol, oils and fats, soap, glycerin, textiles, leather, wood, rubber, turpentine, lubricants, food, surgical appliances, and medicaments. It is of interest to learn how Germany has hitherto managed, in