

aged to change his politics as occasion required would be amusing if they had not been so servile. As Napoleon's power increased Laplace abandoned his republican principles (which had themselves gone through numerous changes, since they had faithfully reflected the opinions of the party in power) and begged the First Consul to give him the post of minister of the interior." This quotation appears not only in various editions of this history but also in the French translation thereof and is probably responsible for many of the misleading remarks which appear in the brief biographical sketches. Possibly the articles cited in the first paragraph of this note will receive sufficient publicity not only to remove certain moral blemishes from the biographies of one of the most eminent scientists but also to create greater caution as regards the acceptance of derogatory remarks made by popular historical writers who fail to give references in support thereof.

G. A. MILLER

UNIVERSITY OF ILLINOIS

PROPAGATION OF HYBRID AMARYLLIS (HIPPEASTRUM) BY CUTTAGE

SOME experimental results concerning cuttage in relation to the physiology of reproduction in the Amaryllaceae Genuinae and Pancreatiae are worthy of brief mention, since the subject has apparently received little attention.

The Nehrling-Mead strain of Hybrid Amaryllis (Hippeastrum) was used in the initial experiments. In the breeding of this strain, *H. reginae*, *H. equestre*, *H. aulicum*, *H. psittacinum*, *H. pardinum*, *H. solan-driflorum*, *H. leopoldi* and possibly also *H. reticulatum* were apparently utilized.¹ Blooming size bulbs were cut (1) lengthwise into quarters as far as the middle of the root base, and (2) into quarters. A variation was introduced in each of the two types, consisting of cutting off a little less than half of the top of the bulb before making the lengthwise cuts.

The two "callusing-sprouting" media used were sand and loam. The partially quartered bulbs and the quarters were planted in these media contained in clay pots. Moderate water was applied until growth had definitely started. Any flower buds already formed in the fractions expanded and flow-

ered, and leaf growth appeared above the surface in some cases in less than 30 days. In three months the original ten bulbs had given rise to 15 new bulbs, an increase of 50 per cent. In another month the number of new bulbs had increased to 43, an increase of 330 per cent.

On inspection it was noticed that new bulbs had been formed at the leaf axes. The roots, however, issued from the root base fraction of the mother bulb. Roots were more abundant and longer in case of partial quartering. Complete severing apparently retards root formation. The partially quartered bulbs had entirely or practically broken into quarters by the pressure of the developing new bulbs. Where still slight connections were present, these were broken at transplanting time. The sand "callusing-sprouting" medium gave disease-free plants, as contrasted with some red rust on plants propagated in loam.

The work is being extended to include a study of the maximum number of new bulbs obtainable from one bulb, the time required for new bulbs to reach blooming size, the best season to carry out the operation and also the application of this principle to the propagation of other types of Amaryllaceae such as *Crinum*, *Hymenocallis*, *Vallota*, *Lycoris*, etc. A more detailed report will appear in the 1934 Year-book of the American Amaryllis Society.

HAMILTON P. TRAUB

ORLANDO, FLA.

SUGGESTED NOMENCLATURE FOR HEAVY HYDROGEN AND ITS COMPOUNDS

THERE seems to be some difficulty in securing a suitable term by which to designate heavy hydrogen and its compounds. The selection of "deuterium" seems only to complicate the matter, for it rather suggests a new element instead of an isotope. It seems to me that the situation could be met by *speaking* of heavy hydrogen as bar-hydrogen; writing the word, however, $\bar{\text{H}}$ ydrogen. Compounds made of this substance could be *called* bar-benzol and written $\bar{\text{B}}$ enzol bar-ammonia, written $\bar{\text{A}}$ mmonia, and so on. In formulae for compounds the H atoms of heavy hydrogen could be designated by the dash.

R. W. WOOD

THE JOHNS HOPKINS UNIVERSITY

SPECIAL CORRESPONDENCE

HEALTH PROBLEMS IN THE AMAZON VALLEY

THE letter from Earl Hanson¹ interested me, since

¹ H. Nehrling, "Die Amaryllis oder Rittersterne (Hippeastrum)." Paul Parey, Berlin, 1909.

¹ SCIENCE, 78: 2011; 36-38, July 14, 1933.

I am at present working in health problems in the Amazon Valley. In the Hospital of Cia. Ford Industrial do Brasil, located at Boa Vista, Rio Tapajoz, we are only 140 miles south of the equator and in the heart of Amazonian jungle. Here we have seen many thousand natives of the region. These are not