Letters to the Editor

Blood Group Factors and Racial Relationships

In Fig. 18 of Ashley Montagu's new book *(An introduction to physical anthropology)* is reproduced a modified version of a diagram from the first edition of Prof. A. E. Hooton's *Up from the ape*, in which are represented the relationships among the four principal groups of human populations. In this chart the Australoid group, which includes, among others, the Australian aborigenes and Ainu, is represented as intermediate between the Caucasoid and Negroid groups of peoples, while the Papuans are placed in the Negroid group. In recent studies on the distributions of the various blood-group factors it has been found that Australian aborigenes and Papuans, in common with Chinese, Japanese, Filipinos, Indonesians, and Amerindians, are characterized by the virtual absence of Subgroup A_2 and the Rh-negative type. Among Caucasoid individuals, on the other hand, as many as one-fourth of all Group A individuals belong to Subgroup A_2 and about 15 per cent are Rh negative. Negroes have an even larger proportion of A_2 individuals, and while the incidence of the Rh-negative type is only 7 to 10 per cent, there is an extraordinarily high proportion (about 40 per cent) of individuals of type Rh_0. In view of these findings, the Australian aborigenes and Papuans appear to be more closely related to the Mongoloid group than either the Caucasoid or Negroid groups, and the diagram should therefore be revised accordingly.

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Published Misconceptions Regarding the New Clinically Adequate Curare

In the course of amassing and editing references for a multilingual, scientific and historical bibliography of the drug curare, an incredible number of misconceptions and factual errors regarding the substance have been found. Since the literature in English commences in the late Sixteenth Century (and early Spanish references some decades earlier), certain sciolistic errors and conclusions are to be expected in the archaic literature. With the beginnings of pharmacologic (biotrepic) and clinical interest in the drug, in the early middle decades of the last century, the misconceptions become less numerous in the literature dealing specifically with its physiologic actions. However, despite the pioneering work in the ethnobotany of curare, errors still remain fairly constant in matters pertaining to the origin and nature of the drug itself. Then, with the advent in the beginning of this century of the comprehension of the alkaloidal constituents of the drug—and the fractional determinations carried on in various countries—there is a radical diminution of misconceptions relating to its chemical nature.

There still remain, however, not only an unduly large amount of the earlier errors just mentioned, but also an incredible number of widely published misconceptions regarding the *origin* of those allied substances now known generically as curare. That is to say, both the ethnobotany and the pharmacognosy of the drug are in a state of unnecessary confusion as they are currently published in the majority of pharmacologies, toxicologies, and related manuals. This chaos is further augmented to an unfortunate degree by the increasing number of commercial technical bulletins, announcements to the professions, and, indeed, even popular articles relating to recent discoveries in this field.

These published errors are now of particular moment, due to the fact that, in 1939, a form of the drug was introduced to pharmacology (biotrepy) and medicine and was almost immediately proved to be clinically functional and acceptable. While the drug has been employed somewhat in certain spastic entities, and to a large extent as an adjunct to convulsive shock therapy, its major use during the past three years has been as an anesthetic adjuvant in both civil and military surgery. In the light of its increasingly widespread use, and in order to refute, as far as possible, errors of fact regarding the ethnobotany and pharmacognosy particularly of the current, clinically adequate (and Federally accepted) form of the drug, a detailed account of the occurrence in the literature of various of these misconceptions seems necessary. This is especially so in view of the fact that certain of these misconceptions (scientific and historical) recently have been carried over into some few current medical articles and announcements.

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Mumpsimus!

Despite the fact that Professor H. D. Smyth's splendid Official Report (Princeton University Press, 1945) is entitled "Atomic energy for military purposes," it is *nuclear* energy which is responsible for the effects of the so-called "atomic bomb." In 1919 P. V. Wells (*J. Wash. Acad. Sci.*, 9, 262) defined atomic forces as "those which maintain two or more atoms in equilibrium as a single system." The tremendous difference between atomic forces, as evidenced, for example, by the oxyhydrogen flame, and nuclear forces, as evidenced by the so-called "atomic bomb" (which is estimated to release only about one-half of one per cent of the total mass-energy involved), may be seen from the following:

4 grams H + 32 grams 0 = 36 grams H_2O + 136,000 calories

1 gram H + 7 grams $_3Li^7$ = 8 grams $_2He^4$ + 5,000,000,000 calories

Nuclear energy is of a totally different order of magni-