

tries. Nevertheless, I believe it can be done. The number of inhabitants per acre of arable soil is only a fraction of that in Java. The science of economic botany has certainly not reached the limits of its fruitful research, much less of its application to the soils and climates of southern and eastern Asia. That science is not yet bankrupt either in Cambridge, Calcutta or Chungking.

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### ON "RACIAL" DIFFERENCES

PROFESSOR GARRETT'S comments on the psychological differences between races<sup>1</sup> affords an almost classic example of the confusion which marks the use of the word "race," and underscores a plea entered some months ago<sup>2</sup> for the utmost clarity in terminology where problems of human endowment and its transmission are to be studied. Reference is especially pertinent to his statement that "investigations of race differences in this country have regularly and consistently found differences as between the Negro and white."

In making such a statement, the fact is quite overlooked that one of the groups referred to is not biological, but "racial" only by definition. The Negro in the United States is a mixed type; research carried on almost two decades ago showed that, at that time, of a series of 1,551 adult males, only 22 per cent. did not know of white or Indian ancestry.<sup>3</sup> Admitting the smallness of the sample, it would be hazardous to place the proportion of those among the American "Negro" population of unmixed African descent—that is, biological Negroes—at more than 30 per cent., with the large probability of a much smaller percentage of unmixed Negroes to-day. A "Negro," in the United States, is thus a person of any degree of African ancestry. Biologically, he may be a white person with one Negro great-great-grandparent. It is only in this country that we find "Negroes" with blond hair and blue eyes.

What, then, does it mean that tests "regularly and consistently" find differences between the Negroes and whites? Quite aside from the fact that, as Dr. Garrett says, students "have not always known what their tests were measuring," it would seem that the ultimate significance of these differences is that the sociological group known in this country as Negroes, for historical reasons, in vast majority comprise members of the economic underprivileged group, and as such, have neither the incentives nor the educational background to make the showing in tests attained by

whites. Nor should it be overlooked that certain white groups of underprivileged status test about the same as the Negroes.

Whether there are racial differences in innate traits or not, it would seem to be essential to any scientific approach to the problem that the student at least work with groups belonging to different races, and not make a case for racial differences where the distinction is one of degree rather than kind, and which is social rather than biological. One can thus agree wholeheartedly with Professor Garrett's remark that the "distinction between fact and interpretation should be clearly made."

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### SCIENTIFIC INTERCHANGE BETWEEN THE UNITED STATES AND SOVIET RUSSIA

DURING the first two years of the present war and the period just preceding it, scientific communication between the United States and Soviet Russia was greatly reduced. Because of difficulties of language, distance and the absence for many years of normal diplomatic relations, scientific interchange between these two countries was never as active as it should have been, considering the similarity and importance of their scientific development.

Among the steps which are being taken to improve and facilitate scientific interchange between American and Soviet scientists is the program of the Science Committee concerning the exchange of scientific publications. We are regularly receiving through VOKS, the Society for Cultural Relations with Foreign Countries, and through the Soviet Embassy copies of Russian scientific journals, new books and manuscripts intended for publication in the United States. Arrangements are being made to put these promptly into circulation through the usual channels of abstracting and reviewing journals, the manuscripts being submitted to American scientific journals.

In return, this committee is arranging for shipments of recent scientific books, and particularly of journals issued since 1941, to Soviet libraries and institutes. It must be remembered that not only was normal communication interrupted, but many libraries in western Russia have been destroyed, and the scientific collections must be replaced. One shipment of books, reprints and journals has been sent to Kiev, where the university buildings, together with libraries and museums, were destroyed by the Nazis a few days before they retreated. Others will follow as received and as shipping space is available.

Persons who have copies or files of journals which they would like to give to a Russian scientific institute or a Russian colleague are urged to communicate

<sup>1</sup> SCIENCE, n. s., 101: 16-17, 1945.

<sup>2</sup> SCIENCE, n. s., 100: 50-51, 1944.

<sup>3</sup> M. J. Herskovits, "Anthropometry of the American Negro," p. 15, pp. 177 ff. 1930.

with this committee which will furnish lists of journals needed. Reprints of recent work will be especially welcome to scientists in the U.S.S.R. They may be mailed directly or sent through the Smithsonian Institution, which has resumed its service of forwarding reprints to the Soviet Union.

American scientific journals which have suspended exchange arrangements with Russian journals are urged to resume these wherever practicable. American publishers may serve both their own interests and Soviet-American exchange by forwarding single copies of new scientific books to this committee for transmission to an appropriate center in the U.S.S.R. One publisher has sent an inscribed copy of each of his scientific books published since 1939 to the Academy of Sciences at Kiev, where they will serve in the scientific reconstruction and rehabilitation which is already under way.

This committee will be glad to aid wherever possible in matters of American-Soviet scientific exchange.

The officers and executive committee are as follows:

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## SCIENTIFIC BOOKS

### AMERICAN BOTANY

*American Botany 1873-1892.* By ANDREW DENNY RODGERS III. 6½ by 9¼ in. vii + 340 pp. Bound in olive green cloth. Princeton: Princeton University Press. London: Humphrey Milford, Oxford University Press. 1944. \$3.75.

THE United States is still in its swaddling clothes when viewed against the faded background of the bedimmed history of nations. Nevertheless, the publication of this book is a forceful contribution to the evidence that our country has lately reached the age of maturity. It is a thrilling thought to cultured Americans that the lives of men who are still active among us span the years from primitive frontiers to this amazing present. The action that is so vividly portrayed in this book took place while several of our great western states, wherein much of the interest centers, were still poorly known territories. The intriguing old and the bewildering new are still close neighbors in this great land of ours.

Mr. Rodgers has presented an attractive summary of an outstanding intermediate period of botanical exploration and progress in America. The two decades involved constitute the years of transition from the haphazard, fragmentary and widely scattered efforts of the early American explorers and systematic botanists to the introduction of regional floras and refined taxonomic monographs of superior workmanship. This time also includes the most influential, fruitful and dominant years of the life of the internationally beloved nestor of American botany, Dr. Asa Gray. The book is an important contribution to the biography of this revered leader of American thought. Much work of great significance to the de-

velopment of botany in America was contributed during that period by Gray's own students and other close associates who drew their chief counsel and inspiration from the master in Cambridge.

The skilful organization and analysis of the stirring events that Rodgers records are enlivened and documented by numerous (often extensive) quotations from the "Letters of Asa Gray," by Jane Loring Gray. Copious selections from unpublished correspondence between Gray and his influential contemporaries also add much intense human interest to the account. Fully one half (possibly more) of the book is graced by these well-chosen extracts. The keen insight that the reader gains of the social conditions of the time, the uncertainties and discomforts of travel and the deep personal longings and reactions that were the common experiences of the founders of our science in America is alone worth the time required to read the book. The quotations and the commentaries thereon are so skilfully woven into the narrative that one can hardly wait to find out what is revealed on the next page or in the following chapter.

The perfection of the foundations of botanical taxonomy in America was the major accomplishment of Gray and the classic years, 1873-1892. The consideration of this fact and how it came about is the central theme of this timely book. Such significant contributions are always accompanied by personal conflicts and clashes among the men who are most active in shaping the trends of thought. A restrained and unbiased reference to these inherently human attributes is given us in the brief chapter entitled "The Controversy of Greene with Gray."

The book also serves to recall how the far-sighted