

We detect no such narrowness of view in the few German medical and scientific publications that have reached this office since the attack on Pearl Harbor, nor in the pages of *Nature*, which is apparently permitted to exercise its discretion, and which prints communications of the very type that have been expunged from SCIENCE. The censor was certainly on slippery ground when he deleted references to indium because that metal can provide a satisfactory lining for shaving-cream and toothpaste tubes. The Germans know as much about indium as we. So with the suppression of an item on a method of spraying walls of mines to prevent mercury poisoning. Some of the material to which the censor objected in the case of SCIENCE had been published in newspapers from Maine to California, so that nothing whatever was

gained by deletion. To make matters worse, there is no appeal from his decision.

Probably Dr. Cattell is right in holding that the editors of scientific periodicals are better judges of what may or may not be of value to the enemy than technically incompetent postal authorities. If the policy to which he objects is carried out consistently, new scientific books and periodicals must be suppressed. Astrophysicists, biologists, plant and animal breeders, organic chemists who are trying to isolate vitamins and hormones, designers of new electron microscopes, inventors of materials that will resist fire, mathematicians who devise techniques that can be applied in solving the problems of designing engineers—all make discoveries that have some application in totalitarian war.—*The New York Times*.

SCIENTIFIC BOOKS

AN ENTOMOLOGICAL JOURNEY IN ARABIA

In the High Yemen. By HUGH SCOTT. 260 pp. Illustrated. London: John Murray, 1942.

HUGH SCOTT, formerly of the University Museum at Cambridge, now on the staff of the British Museum (Natural History), has long been known as an explorer and a keen student of problems concerning the evolution and distribution of insects. He made great collections of the insect fauna of the Seychelles Islands, in the Indian Ocean, and in the course of years got nearly everything worked up, with the assistance of numerous specialists. More recently, he explored Abyssinia and brought home very extensive collections. The work in Abyssinia naturally brought up questions concerning the life on the opposite or Asiatic side of the Red Sea. The botanist, Schweinfurth, had (1891) published a comparison of the plants of southwest Arabia with those of northern Abyssinia, and noted that while the two floras had much in common, there were some striking differences. The insects, with so many diverse genera and species, might be expected to throw much light on the various problems, but they were little known, so far as Arabia was concerned. It therefore seemed an excellent project to explore the mountainous region of southwest Arabia, and make collections as adequate as the available time permitted. This plan was approved by the British Museum (Natural History), and Dr. Scott, with his companion, E. B. Britton, set out in 1937, going first to Aden. They soon found out that it would be very difficult to do the work proposed, owing to restrictions imposed by the native rulers of Al Yemen and Asir. The latter country could not be entered at all, and although entry into the Yemen had been promised, the permission was withdrawn. It was only after prolonged negotiations

that Yemen was opened to the expedition, and then it was only with limitations. Thus permission to climb the highest mountain was denied. In spite of all difficulties, the expedition was very successful and the technical results will occupy Scott and his associates for many years. The scientific reports will all be published by the British Museum, and the first part has already appeared.

The book is very well printed, with very numerous excellent illustrations from photographs, although there is a note to the effect that "The paper and binding of this book conform to the authorized economy standard." It may surprise some to see such a book appearing in the midst of the war, but it is the policy of the British to keep scientific and cultural interests alive, and moreover, as the only really modern account of social, political and economic conditions in the little-known region explored, the narrative may have considerable value in relation to the war. The general conclusion seems to be that while the rule of these Asiatic provinces is arbitrary and in many respects medieval, there is progress in certain directions. Thus, although in general it is so difficult to enter the Yemen, there is an excellent medical missionary, Dr. Petrie, stationed at the capital, and his aid is sought to the limits of his capacity, patients coming in from all over the country. Although Scott and Britton were disappointed in the attitude of the ruler, who found it a little difficult to believe that their interests were purely entomological, they could not deny that in the present state of the world there was every reason to regard the European powers with suspicion. However, in the Aden Protectorate to the south, controlled by the British, there is what might be called home-rule and it does not appear that the British influence is other than beneficial.

It is not possible to modernize these backward countries in a short time, and the process, though justified on economic and commercial grounds, may be far from beneficial. One feels that the "infiltration" of Europeans that is really needed is not that of the commercial or military types, but that of scientific men and Christian missionaries, who are committed to the international point of view and have no reason for seeking profit at the expense of the people. In particular, the medical missionaries, as I have observed them in many parts of the world, represent genuine progress and enlightenment, whatever we may think of their theological dogmas. Scott, commenting on the work of Petrie and his associates, says: "I would

emphasize the immense value of their work from every point of view, for the direct alleviation of suffering, for the betterment of understanding between the nations represented on either side, and on the highest spiritual grounds."

Scott records that he left the country with real regret, having received much kindness at the hands of the people, coming to regard many of them with affection. Also, although his collections were very extensive, the insects numbering about 27,000 specimens, it was obvious that there was very much more to be done, awaiting new collectors and new opportunities.

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REPORTS

THE ROYAL OBSERVATORY, GREENWICH¹

THIS year's report of the Astronomer Royal refers to the work of the Royal Observatory during the period May 1, 1941–April 30, 1942. London suffered few air attacks during this time, and no further damage to the observatory has occurred. Daylight observing is still carried on at Greenwich, but the larger instruments will, of course, remain dismantled for the duration of the war.

The public time service continues to function from two out-stations, each maintaining, in case of breakdown at the other, a complete time service involving transit observations, clock maintenance and transmission of time signals to the Post Office of the B.B.C. The Rugby vernier signals, which are the precision British time signals, have up to the present normally been transmitted from Station B, since the clocks at station A are mounted in temporary fashion and suffer from serious mutual interference. During the year, however, the three free-pendulum clocks and a quartz clock at station A have been remounted in a specially constructed building, and it is hoped that their behavior will now be sufficiently improved to allow this station to share regularly in the transmission of the rhythmic signals. The published corrections to the Rugby signals and to foreign signals are now based on some or all of nine clocks—seven Shortt clocks and two quartz oscillators—mounted in various parts of the country. By working on a "mean clock" and by making certain changes in the routine of signal transmission, a distinct advance has been made in the precision of the Rugby signals, the value of which as a day-to-day frequency standard has thereby been increased. Accurate allowance for land-line lag is now made before each signal is transmitted. Comparison of the signals against the clocks, or of one

clock against another, is now facilitated by the use of thermionic panel units which eliminate the variation of lag inevitable with mechanical relays. Intercomparison of the clocks has shown that in the matter of small erratic changes of rate even the best free-pendulum clocks are inferior to quartz clocks.

The Chronometer Depot has settled down into its new quarters, and repair, rating and issue of chronometers and watches to the Royal Navy have continued without interruption. A vibration machine constructed in the observatory workshop has been brought into use for testing aircraft watches under service conditions. Tests of the effect of magnetic fields of strengths up to 8.5 gauss on the rates of chronometers and watches have been instituted, no doubt with war conditions in mind, and are now nearing completion.

The last report of the observatory stated that work with the Airy transit circle had been terminated after ninety years continuous observation. Since then, news has been received of the destruction of Pulkovo Observatory during the bombardment of Leningrad. This will be such a serious loss to fundamental positional astronomy that observations are to be resumed with the old Greenwich instrument on a restricted program, including particularly transits of the sun. Minor damage to the housing of the instrument has been therefore been made good, the instrument has been overhauled, and work will be resumed shortly. Analysis of previous observations with this instrument arranged according to wind direction shows that declinations south of the zenith are measured larger by about 0.10" when the wind is northeast than when it is southwest. The observations of latitude variation had already given a similar result. This agreement shows the advisability in positional astronomy of applying locally determined latitude variations so as to eliminate spurious annual terms due to systematic sea-

¹ From *Nature*.