season to the exact spot in the colony where it has once nested is exhibited to a remarkable degree.

NEW YORK STATE MUSEUM, DAYTON STONER ALBANY, N. Y.

ALBANY, N. Y.

LILLIAN C. STONER

# A STING-RAY ATTACK ON A MAN ON THE UPPER AMAZON

I SPENT the years 1921–1931 in geological exploration of the upper Amazon Basin, with headquarters at Iquitos in Peru, during which period I witnessed an attack of a sting-ray on a man and cared for the patient. Dr. E. W. Gudger, who is preparing a paper to answer the question, "Is the sting-ray's sting poisonous?", became much interested when I told him of my observation. He states that authentic personal records of such occurrences are rare and that he has found none for the Amazon, where such attacks may be expected commonly to occur. Urged by him, I have prepared this brief account of what I witnessed.

In January, 1925, in working up stream through shallow stretches of a tributary of the middle Rio Morona in northwestern Peru, Fabriciano Vela, my faithful orderly, while wading barefooted beside my canoe in water about twelve inches deep, on a sandy bottom, was struck in the sole of his right foot by a sting-ray. Upon a bottom of this sort, rays are often extremely common in quiet shallow streams of the Upper Amazon Basin of eastern Peru, and not infrequently wading men are struck after these creatures have become alarmed and confused as many plunging, splashing feet churn and roil the water about them. Fabriciano, appearing to be in great pain almost immediately, cried out in terror and despair as he staggered to a nearby sandy beach to fling himself upon the sand and, holding the wounded foot with both hands, to writhe about in agony, tears trickling down his cheeks despite his resolution not to make a spectacle of himself. I had been told repeatedly that this was the most excruciatingly painful experience which could befall a man in the Amazon jungle and my unfortunate assistant made that contention very convincing indeed.

I had already learned that the Brazilian proprietary medicine known as "Balsamo Divino" was considered the most effective in the treatment of such a case and proceeded with it in the approved manner as soon as possible. This colorless, slightly oily liquid compound of apparently several aromatic ingredients, rather well masked by carbolic acid, suggests the "phenol sodique" of my boyhood days. With a cotton swab saturated with this remedy undiluted, I carefully cleaned and bathed this rather deep stab-wound, and then bandaged the foot lightly so as to hold another similarly saturated swab in place upon the wound while several drops in water were given orally. He had been struck, as I have just said, rather deeply at something of an angle as his foot was raised in stepping forward but the bleeding seemed to me less than one might reasonably have expected. Though he continued for a time in extreme, almost unendurable pain, there was no considerable swelling, nor did he experience nausea, headache nor indeed any systemic symptoms. After several hours, during which the bandage over the wound was kept moist with the medicine, he became quiet and in a short time the wound had healed without sloughing, and indeed without inflammation of any importance, thanks probably to the antiseptic properties of the phenol.

Another boy, Edmundo Araujo, who was with me for a time, was, while on the Rio Ucayali, very grievously wounded by a large ray which drove its terribly venomous spine into the sole of his foot in such a manner that it passed between the metatarsal bones and emerged upon the upper surface. I was not a witness, but he told me later that he had had no idea that one might suffer so fearfully.

HARVEY BASSLER AMERICAN MUSEUM OF NATURAL HISTORY

## **QUOTATIONS**

#### SCIENCE AND THE CENSOR

Scientists in general and physicians in particular will be disturbed by the correspondence which has passed between the postal censor and Dr. J. McKeen Cattell, editor of Science, and which appears in the current issue of that journal. That censorship in war is necessary no one will deny. But was the censor justified in deleting from Science an item on a new sulfa drug which can be used with good effect in such intestinal infections as dysentery, because our enemies in tropical regions might learn how to return the afflicted rapidly to the fighting line? From time im-

memorial military surgeons have made no distinction between friend and foe in dealing with wounds and disease. In 1917 both the Surgeon General of the Army and the Secretary of War decided that for humanitarian reasons publication of information about an antitoxin developed in this country to combat the bacillus of gas-gangrene, then highly destructive on the Western Front, was permissible. Thousands are now dying of typhus in occupied Middle Europe, but if the censor has his way they can not be saved by the dissemination of any new knowledge acquired here.

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.