

MOURITZ' INOCULATION EXPERIMENTS

TO THE EDITOR:

Your "extended abstract" of the report by Porritt and Olsen of two cases of accidental infection of man by tattooing leads me to say that the leprosy world generally is probably not aware of any inoculation experiments carried out in Hawaii except the famous one of Dr. Edward Arning, in September 1884, in which he apparently infected successfully the murderer Keanu. The

subject's previous residence with leprous relatives vitiated the experiment somewhat, and there have been those who ascribed the disease which developed in him to ordinary means of infection.

Not generally realized is the fact that for over two years, from December 1884 to January 1887, a series of human inoculation experiments was carried out by Dr. Arthur A. St. M. Mouritz, then resident physician at what is now called the Kalaupapa Settlement. These experiments were made on 15 volunteers who, with one exception were nonleprous relatives of patients, or *kokua*; and all 15 were eager to get leprosy in order to become wards of the government and be allowed to go on living at the Settlement. They were all between 24 and 35 years of age; 10 were men and 5 were women; two were Chinese-Hawaiian, one was East Indian-Hawaiian and the others were Hawaiian. Nine had been living for several years with a leprous spouse, two with a leprous sister, one with a leprous mother.

In 13 of these people bacillus-laden serum from blisters caused by burns or cantharides was rubbed repeatedly into vigorously scarified areas of skin on several occasions; and the sites of inoculation were watched afterward and sometimes examined for bacilli. In one case saliva was also rubbed into the wounds, and in three of them blood was used in addition to the serum. In two persons the blister serum was injected intramuscularly, twice in one and four times in the other. In one case, large ulcers were dressed with blister serum for several weeks.

Most of the inoculated persons were followed at short intervals for a few months, and all were eventually examined for evidence of leprosy at intervals ranging from 11 to 30 years following the inoculation (13 months only in one case; average interval, 16 years). No evidence of leprosy was found in any of them; the experiments all failed.

Mouritz describes this work in a book entitled *The Path of the Destroyer* (Honolulu, Honolulu Star-Bulletin, Ltd., 1916). In the same book he says that he made only 100 attempts to produce fresh foci of leprosy by inoculation of early lepromatous cases, without a single successful result. No details of these experiments are given.

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