western gull is not found in the Hawaiian area (*3*), the natural definitive host for the marine schistosome here remains unknown at present.

Although *L. picta* Philippi breeds in the same areas on Manana Island as does *L. pintado,* so far in thousands of snail examinations *L. picta* has not been found to be an intermediate host for this marine schistosome.

That this schistosome cercaria is capable of producing dermatitis in man is confirmed by experimental infection of human volunteers. Patch tests (made by placing in a piece of double-layer cotton gauze $2 \times 1\frac{1}{2}$ cms in size about 80–100 schistosome cercariae suspended in sea water) on the forearms of five volunteers showed that all individuals experienced the sensation of itching as a result of exposure. Two were observed to have typical schistosome dermatitis macules, with one person having as many as 17 lesions (Fig. 3); two developed erythema around the macules, lasting only a comparatively short time (6 and 12 hrs); and one individual did not develop a visible reaction. Controlled patch tests (made with sea water without schistosome cercariae) were all negative in these individuals.

"Swimmers' itch" in Hawaii was reported recently by Arnold and Bonnet (*4*). These cases of swimmers' itch, known locally as "Pearl Harbor itch," were most frequently observed in sea bathers in two areas—the West Loch of Pearl Harbor and certain sections of the Ala Wai drainage canal in Honolulu. Recent inquiries indicate that other widely separated areas on Oahu might be places where the Hawaiian swimmers' itch can be contracted. Sea bathers' eruptions, as reported by Sams (*5*) in Florida, appear to be similar to the Hawaiian swimmers' itch, although in both cases the cause has been attributed to an unknown agent. Investigations are proceeding to determine whether the Hawaiian marine schistosome is the causative agent of these dermatitis cases in man in Hawaii.

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Comments and Communications

Conditioning of the Palmaris brevis Muscle

IN THE spring of 1924 a fellow-student showed me how one could induce wrinkling of the skin of the ulnar side of the palm by direct pressure upon the ulnar nerve near the wrist just above and slightly lateral to the styloid process of the ulna. Such pressure causes contraction of the palmaris brevis muscle, with resulting wrinkling of the skin on the ulnar side of the palm.

As a teacher of anatomy I demonstrated this phenomenon to students and others over a period of some twenty years—I should say about 100 times—until in 1944 I noticed that, as I approached my thumb to press on the ulnar nerve, the wrinkling phenomenon occurred without my even touching the skin. Apparently I had conditioned the response to the subjective idea of pressure upon the nerve. Repeated experiments confirmed this, for even when I could not see my hand and did nothing more than think of producing the wrinkling, the response occurred.

The interesting thing about this conditioning is that I cannot produce it when my wrist is covered by the sleeve of a coat. The original stimuli were always given with the forearm bare. Another fact of interest is that the conditioning is entirely limited to the palmaris brevis of my left hand. Pressure was always applied to the ulnar nerve of the left forearm by the thumb of my right hand. Indeed, pressure upon the ulnar of my right forearm has elicited very poor responses and sometimes of the weakest kind. I have, in fact, rarely attempted such pressure, largely, I suppose, because I am right-handed and it is more convenient to use the right thumb in exerting such pressure.

The palmaris brevis response is easily elicited, and I have had difficulty in elicting it in very few persons. Those who may be interested in experimenting with this muscle will, perhaps, be assisted by the knowledge that even the gentlest stroking of the little finger may elicit the palmaris brevis response, and that in many cases even very slight movements of the little finger may produce it or a reasonable facsimile thereof.

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Indoxyl Acetate

IN SCIENCE, November 30, 1951 (p. 579), Barrnett and Seligman mention the Pharmaceutical Laboratories of the National Aniline Division, Allied Chemical and Dye Corporation, as the source of chemicals used in the investigation. James J. McMahon calls attention to the fact that indoxyl acetate can be supplied, but sodium indoxyl alkali flux cannot, because of the hazards involved in shipment.—EDITORS.