

nothing—to less than 15% per year. But pure lead is too soft for automobile batteries and it is customary to use lead containing 6% to 12% antimony. It is

this antimony, he indicated, which is responsible for the discharge on standing.

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## PSYCHIATRY

## Nerves Must "Take It"

British sailors who have case of "nerves" get no sympathy. Odd treatment prescribed. Other problems of Navy medicine are discussed.

➤ SAILORS in the British Navy who develop "nerves" from the strain of living and carrying out their duties in constant danger get no sympathy. Medical officers are told instead to be "hard but understanding" in treating such cases, Real Admiral Wilfred R. Patterson, chief of staff of the British Admiralty Delegation, told members of the Medical Society of the District of Columbia at their annual meeting.

Too much coddling has been found bad for such cases. Frequently the treatment consists in putting the man into conditions even more intolerable than those he complained about. A man might, for example, be told to stay in his hammock without smoking or drinking anything but water. A short time of such treatment proves so boring that the man is usually ready to return to the duties formerly considered intolerable.

The strain of sea duty under present conditions of warfare, in which the danger from submarines, bombers and torpedo planes lasts from dawn to after dusk every day and does not stop even when the ship is in harbor, is so great, however, that one year at a time is enough for those in responsible positions, in the opinion of Admiral Sir Andrew Cunningham whom Admiral Patterson represented at the meeting.

In recognition of this, the British Navy has houseboats on the Nile and hospitals on the sands at Alexandria for the men of the Mediterranean fleet to rest and recuperate from the psychological strain.

Men of good character and sober habits, contrary perhaps to general expectation, make better fighters and stand the strain of service on fighting ships better than the "tough guys who are always breaking up the pubs," Admiral Patterson said. Even the steadiest and best of the men, however, suffer reactions to the strain and overfatigue after

a time. This shows up in inability to sleep, among other symptoms.

Barnacles that grow on the sides of ships in tropical waters are a serious danger against which Admiral Patterson warned the American doctors who might have to handle patients from ships that go down. The sides of the ships are likely to be very slippery with oil so that men escaping from a sinking or overturned ship slide down very fast and are often badly injured by the barnacles.

In supplying life boats, water should predominate over food, he cautioned. Man can live 30 days without food but only five days without water, he pointed out. Biscuits and chocolates, frequently the chief food supplies for life boats, are both "well known thirst producers."

Men who are shipwrecked and must spend days in a life boat or raft should know in advance such practical matters as the advisability of cutting a piece off the bottom of a trouser leg to wrap around their heads for protection against the sun. They should also be prepared to overcome at once any aversion to using dead men's clothing for their own protection.

Experience with flash burns in this war has taught the need for wearing at all times overalls, helmets and even gloves, in spite of the discomfort in tropical weather.

Night blindness was at one time a problem on submarines, Admiral Patterson reported. Officers found that when they came up at night it took as long as nine minutes for them to be able to adapt their eyes to seeing in the dark—"a chancy business," he commented dryly. This problem has been overcome chiefly by improved diet for submarine officers and crew. The daily food for each man on a submarine now costs about 75 cents, while that for an ordinary sailor costs only 25 cents.

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**CUTE EYE TEST**—This little girl is having her vision tested on a new chart for children just announced by the American Optical Company. Mary was asked to recognize the animals and tell which way the E prongs point.

## INVENTION

## Simultaneous Neutron and X-Ray Pictures Now Made

➤ SIMULTANEOUS examination of an object by neutrons and by X-rays is provided by the invention of Hartmut Israel Kallmann, formerly known as Hartmut Kallmann, of Berlin-Charlottenburg, and Ernst Kuhn of Berlin, Germany. They have received U. S. patent 2,297,416, which is vested in the Alien Property Custodian.

These inventors have taken out two previous patents on neutron pictures.

Since the information given by neutrons, uncharged atomic particles, is different from that given by X-rays, the inventors say that it is desirable to examine an object in both ways, and that the radiation come in each case from the same direction. Their device makes it possible to use the two methods in quick succession or simultaneously. In the latter case, the X-ray image is received on photographic material sensitive to these rays but not to neutrons. This is backed by a layer that stops the X-rays but not the neutrons, which latter are photographed on a second film.

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