

posals indicates that a saline vaccine containing pneumococci is at least as effective as an oil suspension of the organisms.

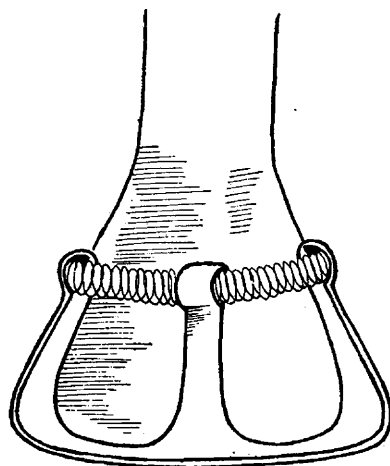
The U. S. Public Health Service has always made it a rule to license only such biologic products as are safe for general use, and within recent years has added the restriction that for original license satisfactory evidence of efficiency must be presented as well, if it is possible to secure such evidence.

Constructive and reasonable criticism is welcomed, but such an insinuation of failure of the service to perform its duties as is carried in the article referred to is unwarranted and unjust.

RUPERT BLUE, M.D., Washington, D. C.
Surgeon-General, U. S. Public Health Service.

A STETHOSCOPE OF INCREASED SENSITIVENESS

To the Editor:—Recently I thought of a means of making a more sensitive instrument out of a Ford or similar bell stethoscope by fitting a rubber diaphragm (such as the rubber cap from a packing strip test tube) over the bell of the stethoscope. These are inexpensive and serve the pur-



Diaphragm on bell of stethoscope, with retaining coiled spring.

pose very well. A more durable diaphragm might be made of vulcanized rubber, celluloid or metal with a retaining coiled spring of wire situated above the diaphragm on the bell, holding the diaphragm firmly in place against the bell.

JOHN B. DONALDSON, M.D., Lorain, Ohio.

"SELF-SACRIFICE IN THE WARFARE AGAINST DISEASE"

To the Editor:—I have read with interest, pleasure and pride the editorial in your issue of Oct. 11, 1919, entitled "Self-Sacrifice in the Warfare Against Disease." It is impossible to honor too highly the nobility of the men who voluntarily, calmly, cheerfully jeopardize their lives in the conduct of an experiment undertaken to elucidate the obscurities of diagnosis and treatment: who do this with none of the inspiring features of battle and no prospect of being welcomed home as heroes if they survive, yet have had fully explained to them the risk they incur.

These men are heroes in the fullest and most beautiful meaning of the word, and we should know about them and publish to the world the story of their deeds. When such experiments are conducted on enlisted men ignorant of the exact nature of what is being done, and perhaps not appreciating the safeguards that it may be possible to throw around them, they show a sublimity of faith in science, a sublimity of love for their fellow men unequalled in any field of service and endeavor.

The annual report of the Surgeon-General of the Navy for 1919, now in press, contains the names of 138 enlisted

men of the Navy who should be remembered along with those to whom your editorial refers. When the influenza epidemic of 1918-1919 was at its height, certain experiments were carried out under the auspices of the Navy by Lieut.-Commander M. J. Rosenau, M. C., U. S. N. R. F., and Lieut. W. J. Keegan, M. C., U. S. N. R. F., and by Surg. Joseph Goldberger and Asst. Surg. G. C. Lake, both of the U. S. Public Health Service, to determine the mode of transmission of the disease. Of eighty-three enlisted men of the Navy experimented on at Boston, forty-seven gave no history of attack during the existing epidemic, and thirty-nine had never had any illness of this type in their lives. These men were inoculated with the blood of patients in the active stage of influenza, and with pure cultures of various organisms derived from influenza cases. Furthermore, both filtered and unfiltered secretions from the respiratory tract of typical *influenzal pneumonia* cases were used by spraying and swabbing to inoculate the noses and throats of the subjects. These subjects were also exposed for forty-five minutes each to infection by direct contact with influenza patients who talked, breathed and coughed into their faces. Somewhat analogous experiments, but on men who, though not previously exposed to influenza, had received inoculation with certain bacterial vaccines against the disease, were carried out simultaneously with the Boston experiments by Surg. G. W. McCoy, U. S. Public Health Service, and Lieut. DeW. G. Richey, M. C., U. S. N. R. F., on fifty members of the Navy personnel in San Francisco.

As has been stated, the experiments were performed when influenza was at its height, and the men who volunteered for them not only knew of its awful fatality but also had been witnesses of the demoralization and terror that beset communities and individuals as this public calamity garnered its thousands and tens of thousands of victims.

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Surgeon-General, U. S. Navy.

PREVENTION OF INJURY TO PATIENTS BY FALLING FROM WINDOWS

To the Editor:—The article entitled "Fatalities in Hospitals Caused by Patients Falling from Windows" (*THE JOURNAL*, Aug. 23, 1919, p. 604), tempts me to describe a scheme we have used in the More Hospital for a number of years to lessen the opportunities for delirious patients to escape from the hospital.

We installed a special enunciator in the main hall near the general service one. This special enunciator has a loud bell, differing in tone from the other. From this enunciator, concealed wires extend to a small copper plate in the baseboard near a corner in each room and ward. If a patient becomes delirious, his bed is rolled into the corner of the room or ward, and an electric mat about 3 by 5 feet in size is placed in front of the bed and connected by wires to the copper plate in the baseboard. Over this is placed a common rug. Any pressure, as a nurse or patient stepping on the rug, causes the bell attached to the special enunciator to ring, and is a warning to the nurses.

In a small hospital, especially, all nurses can be readily informed that there is a delirious patient in a certain room, and at the sound of the bell it is seldom necessary to go first to the enunciator to see where the call comes from. Our experience has been that the nurses are alert and respond promptly to this emergency call. I, myself, have been on the floor when the bell sounded, and have seen two or three nurses meet at the patient's bedside before he had time to leave the room. No delirious patients have escaped from the hospital or been injured.

C. W. MORE, M.D., Eveleth, Minn.

Medical Progress.—Hoppe-Seyler (1825-1895), in 1872, established the first laboratory of physiological chemistry. Von Recklinghausen (b. 1833) was studying the white blood cells, Weigert was staining bacteria with carmine, Ehrlich was staining blood. Obermeier had found the organism of relapsing fever.