

connection similar to that on any water tank, as to make the apparatus fool-proof and avoid handling. The outer lid should be constructed in two halves, so that ice could be added through one half. (See fig. No. 2.)

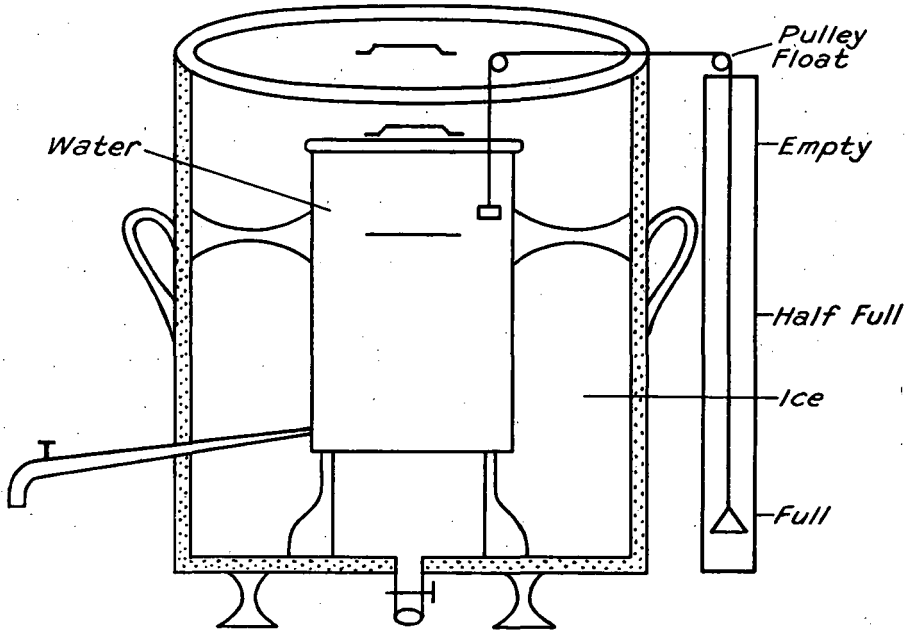


FIG. 2.

With regard to the other type of cooler used by Major Griffin for cooling draught beer, a modification could be adopted. The box might be made of non-conducting material, so as to conserve the ice, and should be drained. The coil might be of some cheaper tubing than glass.

A type of water cooler could be made with the ice container in the centre of the water. This type of water cooler would probably prove more economical in the use of ice. It would probably also prove more economical even without the sides of the outer container being non-conducting.

I am indebted to Colonel C. D. Myles, O.B.E., A.D.M.S., China Command, for his help and suggestions, and for permission to forward this article for publication.

ACHLORHYDRIC (MICROCYTIC) ANÆMIA IN A MALE.

By CAPTAIN F. J. O'MEARA,
Royal Army Medical Corps.

THE clinical notes of this case are submitted for publication as, though the disease has been described in the female, its occurrence in the male sex is not generally recognized.

In January, 1933, a recruit in the Royal Corps of Signals, with nine

weeks' service, was admitted to the Military Hospital, Catterick, suffering from influenza. He was a Cornishman, but he had not been in a tin mine. On physical examination he was found to be anæmic: his skin was a greenish-yellow colour, his mucous membranes were pale, and his scleræ were clear. Examination of his eyes did not reveal any clinical abnormality. The optic discs and fundi oculi were normal. His teeth were in good condition. His heart was not enlarged. On auscultation a bruit, systolic in time, was heard loudest over the pulmonary area. In the abdomen the spleen was enlarged one inch below the left costal margin. It was easily palpated and was of firm consistency. His nervous system did not show any abnormality, and the abdominal reflexes and knee-jerks gave normal responses. When he had recovered from the attack of influenza, which was complicated by pneumonic consolidation at the base of the right lung, his condition was further investigated.

There was no fever and his pulse varied from 60 to 74 beats per minute during the remainder of his time in hospital.

The urine was acid; specific gravity 1028; albumin nil; sugar nil. There was a deposit of amorphous urates.

The fæces gave a negative reaction to the benzidine test for occult blood on three occasions. No ova of *Ancylostoma duodenale* were seen.

The total red cell count was 4,850,000 per cubic millimetre. The average diameter of the red cells was 6.5μ ; no nucleated red cells were seen.

The total white cell count was 16,600 per cubic millimetre.

A differential white cell count showed polymorphonuclears, 61 per cent; lymphocytes, 32 per cent; large mononuclears, 4 per cent; eosinophils, 3 per cent.

A fractional test meal showed the volume of resting juice to be eighteen cubic centimetres. There was bile regurgitation at two hours. The stomach was empty at two and three-quarter hours. There was no free hydrochloric acid in any specimen (histamine hydrochloride was not injected). Total acidity was not above twenty per cent in any specimen on titration against $\frac{N}{10}$ NaOH.

During the period he remained in hospital, awaiting his discharge from the Army, he was given two drachms of dilute hydrochloric acid in ten ounces of water, three times a day with his meals. After meals he received ferri. et ammon. cit. in thirty grain doses three times a day.

My thanks are due to Major W. A. Frost, O.B.E., R.A.M.C., for the details of laboratory investigation and to Lieutenant-Colonel R. P. Lewis, D.S.O., R.A.M.C., Officer Commanding, Military Hospital, Catterick Camp, for permission to forward these notes for publication.