Correspondence

Sterilization of Apparatus for Anesthesia

To the Editor:—The statement by Dr. A. H. Miller in *THE JOURNAL*, Oct. 24, 1914, p. 1474, that "no apparatus [for administering nitrous oxid-oxygen] previously described can be readily sterilized and in most, sterilization would be impossible without destroying the instrument," is so far from being correct that I cannot allow this sweeping statement to pass unnoted. Many, if not indeed quite all, of the different apparatus that have been described from time to time in *THE JOURNAL*, and in surgical literature in general, may be readily sterilized. In fact, if this were not the case it would be a sad comment on anesthetic technic. A distinction should be made between advertisements and literature.

R. C. COBURN, M.D., New York.

Absence of Bony Pressure on Nervous Structures in Man

To the Editor:—My book, "The Intervertebral Foramen," was reviewed in *THE JOURNAL*, April 25, 1914, p. 1353. In this work I attempted to give an exhaustive description of the normal histology of an intervertebral foramen and its adjacent parts. The foramen described and photomicrographs shown were from the cat, as was stated in the text.

I have been in receipt of many letters and inquiries asking if these findings could be relied on to be identical with those of man. In order to answer this question scientifically I undertook a microscopic study of several different foramina and adjacent parts in man. These investigations corroborate those described in the original work. While no two intervertebral foramina have been found identical, they all appear to have a general structure very similar to the one described. However, the nervous structures in man, as a rule, occupy a smaller area of the foramina than was the case of the one shown of the cat. Therefore it would appear that they are even *better* protected from bony pressure than was the one from the cat.

HAROLD SWANBERG, Chicago.

[COMMENT.—This scientific study shows on what a slender foundation are built up such cults as chiropractic, etc.—Ed.]

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted on request.

KARELL TREATMENT — BARIUM SULPHID AND BARIUM SULPHYDRATE

To the Editor:—I shall consider it a great favor if you will kindly enlighten me through *THE JOURNAL*, of which I am a recipient, on the following questions:

1. Of what does the Karell course of dieting consist and where can I find any literature on the subject?

2. Barium sulphuratum splendidly removes the hair from the skin, but the odor of this chemical is bad. The after-effects are also terrible in so far that the skin becomes very irritated, inflamed and smarts. How can we improve on the odor and prevent the irritation?

We are on the eve of a great international catastrophe but I do not see why the scientific mind should be influenced thereby. There ought to be more science and less armaments!

D. A. R., St. Petersburg, Russia.

ANSWER.—1. The Karell treatment consists of rest in bed and a light diet of milk and eggs. The fluid is limited to 1½ pints per day. At first this is given, for two or three days, as milk only, 6 to 7 ounces at 8 a. m., and 4 and 8 p. m. This is the most trying part of the method. Then 1 egg is given at 10 a. m. and a biscuit at 6 p. m. for a couple of days. Then 2 eggs with bread, and a little minced meat are allowed. In twelve days the patient returns to a careful ordinary diet, the fluid being still kept down to 1½ pints but not necessarily milk only. This method is said to be indicated for weak hearts for which digitalis is less appro-

priate. About the third day diuresis sets in for a short time, the dyspnea is relieved, the pulse improves, and the edema subsides.

The following may be referred to:

Strauss, H.: The Karell Milk Cure in Obesity, *Med. Klin.*, March 27, 1910; abstr., *THE JOURNAL*, May 7, 1910, p. 1585.

His, W.: The Karell Milk Diet in Heart Disease, *Therap. Monatsh.*, January, 1912; abstr., *THE JOURNAL*, Feb. 17, 1912, p. 524.

Wittich: Karell's Method of Treating Cardiovascular Disturbance, *Deutsch. Arch. f. klin. Med.*, 1913, cx; abstr., *THE JOURNAL*, May 30, 1913, p. 1501.

Armbrust, G.: Karell's Milk Cure in Asystole, *Brazil-med.*, Dec. 8, 1913.

Kimmerle, A.: Treatment of Obesity, *Therap. d. Gegenw.*, October, 1913; abstr., *THE JOURNAL*, Nov. 15, 1913, p. 1854.

2. Barium sulphuratum or barium sulphid may occur in two forms: (a) the barium sulphid which is a powder having only a very slight, not disagreeable odor of sulphur, and (b) barium sulphhydrate containing barium sulphid in combination with hydrogen sulphid which it gives off very readily, and hence has a disagreeable odor. Barium sulphid is an efficient depilatory and if the sulphid and not the sulphhydrate is used, there need be no complaint of the odor.

VACCINE TREATMENT OF ARTHRITIS DEFORMANS—HIGH FREQUENCY CURRENT FROM PORTABLE COILS

To the Editor:—Please inform me: 1. Whether there is a serum or vaccine treatment for arthritis deformans. If so, what is its usefulness? 2. Do the portable coils primarily adapted to Roentgen-ray work also furnish a high-frequency current of value for treatment, as is claimed by every manufacturer of such coils? O. R.

ANSWER.—1. There is no serum treatment for arthritis deformans. The etiology of the disease is only now being worked out. The relation of foci of infection to this disease has been emphasized especially by Billings and cannot easily be overestimated. The changes in the joints are probably not due to the absorption of toxins from the focus alone, but to actual localization of the bacteria themselves. The difficulty in obtaining the causative organism is great, owing to chronicity; but by improved methods Rosenow has succeeded in isolating peculiar streptococci from the excised lymph-glands draining the involved joints, from contracted and diseased adjacent muscles, and from excised portions of the diseased capsule of the joint itself, and recommends the use of the vaccine prepared from organisms thus isolated rather than from the streptococci in the focus. The use of even these vaccines, however, is quite futile unless the focus is removed. The peculiar character of the changes, in which there is a proliferation of endothelial cells in the blood-vessels about the involved joints with a consequent anemic necrosis, makes it clear that no matter what vaccine or other remedial agent is used, cure in advanced cases will be exceedingly difficult. Removal of the focus, the judicious use of autogenous vaccines in small doses prepared not from the focus but from the adjacent lymph-gland or tissue itself, together with rest, good air, passive motion and forced feeding comprise at present the rational procedures and are yielding substantial results. The streptococci isolated are quite different from those obtained in rheumatism; hence the uselessness of employing rheumatism vaccines.

2. Most of the portable coils—which are really step-up transformers—are quite as well adapted to furnish a high-frequency current as to do Roentgen-ray work.

SIGNS OF DEATH FROM INSOLATION

To the Editor:—Please give in detail the usual post-mortem appearances in a person dying from insolation. Is there any essential difference between heat exhaustion and heat stroke? The texts on this subject are exceedingly limited. I should especially like to know the changes likely to occur in the kidneys after death from heat exhaustion.

F. L. CARSON, M.D., Shawnee, Okla.

ANSWER.—Without going into minutiae, the following are the principal changes found in the bodies of persons recently dead from sunstroke: marked congestion of the internal organs, including the brain and its membranes; the blood largely fluid on account of diminished coagulability; cloudy swelling of the liver and kidneys. There is usually marked and early rigor, decomposition sets in early, and in some cases the swelling and congestion of the spleen are extreme. Leukocytosis and alterations in the red corpuscles are also described. The condition described as heat exhaustion and typical sunstroke may occur under the same conditions, but exhaustion is stated generally to follow prolonged exposure to high temperature combined with physical exertion in con-