SIMPLE APPLIANCE FOR TRAINING INFANTS
TO STOOL

CARY EGLESTON, M.D., NEW YORK

It is the common practice for physicians and the "baby books" to recommend the training of infants to have regular movements of the bowels by the insertion into the anus of the end of an ordinary clinical thermometer, or by the use of small glycerin or soap suppositories. The use of suppositories is objectionable, owing to their expense and the possibility of irritating the delicate mucous membrane through their hygroscopic properties, when they have to be employed very frequently. The soap suppository is liable also to prove irritating if used often, and unless a fresh suppository is made for each occasion, the practice is unclean and not hygienic. The clinical thermometer is expensive; it is delicate and very likely to be broken, possibly within the anus; and, being straight, it is clumsy when the infant is made to sit up on a chair or chamber.

These disadvantages of the usual methods led me to seek some other means for stimulating the desire to evacuate the rectum, and after a number of trials I have found a simple glass rod, suitably bent and rounded, to meet every requirement and to be free from the disadvantages of the other methods, as well as more convenient. The appearance of the rod is shown in the accompanying illustration. The dimensions are: diameter, 5 mm.; length of short arm, 3 cm.; length of long arm, or handle, 7 cm.

Preparatory to use, a small amount of plain petrolatum (liquid or solid) is applied to the short arm of the instrument as a lubricant, and this is then inserted into the anus to near the bend. When the infant is in the sitting position, the bend permits the rod to be inserted and held without striking the sides of the vessel.

412 West End Avenue.

Appliance for training
infants to stool.AN ASSISTANCE TO THE STUDY OF TISSUES CON-
TAINING NERVES

SYDNEY M. CONE, M.D., BALTIMORE
Captain, M. R. C., U. S. Army
LIVERPOOL, ENGLAND

In my work at the Alder Hey Military Orthopaedic Hospital, Liverpool, the surgery of injuries to the peripheral nerves proved the most interesting and difficult in the service. Nerves partly torn, scraped or bruised, and some completely severed and lost in old scars have come into our hands for repair. I have had the use of the Thompson-Yates Laboratory, University of Liverpool, for the examinations in surgical pathology which were made of all the specimens from the large base orthopedic hospital controlled by Col. Sir Robert Jones. Prof. Ernest Glynn, Captain, R. A. M. C. T., has been very kind in placing at my disposal every facility for the prosecution of my studies.

It will be three months before my final report will be in Col. Sir Robert Jones' hands; but I should like to make a few statements for the use of others working along these lines. They may also be of assistance to those interested in surgical pathology and neurology.

The finer histologic study of nerves calls for unusually careful and difficult technic, making the examination of tissues en masse a laborious procedure. I found this to be

the case until the special method to be described was determined on after the use of more than twenty-five stains. Nerves were hardened in various ways. They were studied fresh, mounted in glycerin. Bielschowsky's axis cylinder stain, which takes a great deal of time and trouble and then shows only the axis cylinder, had to be depended on as my control.

With my new stain—carbolfuchsin-osmic acid-safranin—all trouble has disappeared. In twenty minutes the specimens may be so prepared that from the point of view of surgical pathology all ordinary questions within the range of the microscope can be satisfactorily answered.

The greatest difficulty in examining material from adherent, bulbous, torn nerves and surrounding tissues is to determine with surety whether or not nerves were present, and if so, in what stage of growth. It is also necessary to study the specimen with regard to progressive tissue changes and the vascular condition. We no longer have to use separate stains to study nerves, connective tissue and circulatory changes.

The nerves stain most prominently, striking the eye at once by their purple (some might call it blue-black) color with a central pink line indicating the axis cylinder. As a rule one is struck more sharply by the purple notched or capped appearance of the more fully grown nerves or the fine purple lines of the early narrow forming fibers. As these fibers increase in age, another striking appearance that meets the eye against a faint pink or unstained connective tissue field is a double purple line, more or less irregular, surrounding a pink, varicose, enlarging axis cylinder. In the bulbous ends, at the point of injury, and in the distal end where there is usually a great proliferation of neurilemma cells, the nuclei are prominently stained pink. In much of our material the infiltration with red blood cells and overgrowth by small blood vessels stands out in distinct relief by the brown color of the corpuscles. These are stained red if not sufficiently decolorized. The muscle appears red, and fat is unstained. The stain lends itself well to photomicrography, a green screen being interposed.

The method is quite simple: The specimen is hardened in 4 per cent. dilution of liquor formaldehydi for six days, carried through alcohols, and embedded in celloidin. Sections may be cut from 10 to 20 microns thick, preferably 10 microns. They are stained in carbolfuchsin fifteen minutes, washed rapidly, placed in 1 per cent. osmic acid five minutes, washed, placed in a 50 per cent. aqueous solution of safranin one minute, 1 per cent. acid alcohol one minute, 95 per cent. alcohol two minutes, absolute alcohol and oil of cloves, alternately until the sections appear deep pink and translucent. They are then placed in xylene two minutes, and mounted in Canada balsam.

Although paraffin sections sometimes stain fairly well, it is not safe, as the xylene used to remove the paraffin before staining interferes with this process. The formaldehyd hardening is essential for the success of the stain.

Alder Hey Military Orthopaedic Hospital.

CHEST ASPIRATIONS BY MEANS OF A SIMPLE
SIPHONAGE DEVICE

JOSEPH FELSEN, M.D., NEW YORK

A is a bottle one-half or two thirds full of water and containing two glass tubes, one reaching beneath the surface of the water, the other short, inserted in a two-holed rubber stopper. To the short tube is attached rubber tubing (with a glass insert) connecting with the aspiration needle through specimen bottle C. To the long glass tube is attached a long piece of rubber tubing.

B is a glass vessel into which extends the long rubber tubing from vessel A.

C is a small specimen bottle interposed between the chest and A by means of glass connecting tubes.

The tube is clamped at 1. Then some fluid from bottle A is aspirated by mouth at 2, so that siphonage can be started