

ANÆSTHETIC APPARATUS FOR USE IN THE FIELD.

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IN any consideration of anæsthetic apparatus for use in the field it is commonly held that rotameters are too fragile to stand up to the work and to the conditions of transport.

In this connection the following experience may be of interest. When my hospital went to France in September 1939, I took with me an Ivor Lewis's apparatus of my own that embodied three rotameters. This was in daily use in a tented theatre for six months (*see Brit. Med. Journ.*, December 7, 1940, vol. II, p. 794). In the course of duty and leave it made, altogether, four crossings of the Channel. In the evacuation of the hospital it was carried by ambulance, not in a case, from Dieppe to Le Mans and then to Rennes. Here a case was improvised for it from a wooden petrol tin case and it finally arrived back in England in perfect working order. Throughout the whole time the rotameters never gave the slightest trouble.

The importance of all this is that rotameters, or some form of flowmeter that is equally accurate, are essential for closed circuit anæsthesia. This form of anæsthesia has many advantages but the most important, from the point of view of an Army in the field, is the very great economy it effects in the use of gases. Gas cylinders are heavy and troublesome things to transport and the saving effected by closed circuit anæsthesia is considerable. I do not know of any large scale investigation that has been made to determine exactly what is the saving in gases but it certainly amounts to more than 60 per cent.

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Current Literature.

Vaginal Discharge. *Lancet*, September 7, 1940.

A distressing complaint and difficult to treat. Discharge due to polypus and submucous myoma is at once recognized. Other causes are gonorrhœa, *Trichomonas vaginalis* and *Monilia*.

The naked-eye characteristics of gonorrhœa in the acute stage are vascular cervicitis and urethritis with a thick yellowish-green discharge. Infection with *Trichomonas vaginalis* betrays itself in strawberry red patches on the vaginal walls with a thin and frothy discharge. A Gram stain may clinch the diagnosis of gonorrhœa and a drop of pus diluted with warm saline placed under a coverslip and viewed with a high power will reveal the motile, flagellate, oval *Trichomonas* parasite. Familiar to American writers there is a third type of vaginitis caused by the *Monilia* or *Oidium albicans*. Matters has drawn attention to the ætiology of this type of

vaginitis as met with in America. Its presence should be sought in all cases where necrotic white patches are found in the vaginal vault and cervix in association with a profuse burning discharge and sometimes with epithelial excoriation on the vulva and thighs. The diagnosis is established by the same technique as for the *Trichomonas* and by the appearance of yeast buds and mycelia on the slide. The organisms are oval and 5μ long.

Matters considers that *Monilia* infections are best treated by swabbing the vaginal walls with hydrogen peroxide or dilute liquor potassæ, drying them, and insufflating powdered silver picrate in kaolin. The powder is used daily for three days. Alternatively the vagina may be swabbed out with Bonney's blue paint. Matters has obtained the best results for *Trichomonas* infections with silver picrate insufflations; a seven-day course is needed.

For *Trichomonas* infections Lloyd and Mascall use Negatol. Of forty-seven cases treated, forty-five were symptom-free at the end of the course of treatment, and when examined seven months later only four were found to have relapsed.

CRUICKSHANK, R. **Air-borne Infection and its Prevention.** *Pub. Health.* 1940, v. 53, 254-5. [13 refs.]

In this paper are summarized recent conceptions regarding the spread of air-borne infection and its prevention. It is emphasized that modern scientific work has rendered Gaiger's distinction between droplet and air-borne infection susceptible of proof and that it is no longer permissible to regard respiratory infections as being spread only by direct contact, fomites, manual transmission and the like, but that we must now take into consideration bacterial pollution of the air by infected dust and droplet nuclei. That pathogenic organisms remain virulent and viable in these has been demonstrated of recent years by both bacteriological and epidemiological studies. The most important preventive measures for air-borne infection are the avoidance of overcrowding, the provision of adequate ventilation, and the suppression of dust. For the last mentioned frequent use of soap and water, damp dusting and sweeping, vacuum cleaning, the use of crude liquid paraffin on floors, and quilts instead of blankets are advocated. The employment of ultra-violet light and aerosols in the prevention of air-borne infection is discussed and after consideration of the present status of these methods the author asks if it is not too much to hope that we may be on the threshold of an attack upon the incidence of respiratory infections similar to that ushered in by the water carriage system of sewage disposal for the intestinal infections.

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