

years ago—books with which we are too ill-acquainted.

You may use this method of exploration without fear, without cutting, without any after trouble, and perhaps even without chloroform. What you find is definite, and you have no further misgivings as to the presence of thickened walls, or encysted stones, or encrusted walls, or ulcers, or new growths. There is no electrical apparatus to get out of order.

I must apologize for bringing such a trivial matter before you. Its only merit is that it is a practical point.

[I find that, given a movable uterus and a Goodell's dilator, one can, under chloroform, explore any uterus with the little finger in a few minutes. Much more forcing and pressure and a rougher manipulation is necessary to get the index finger past the internal os, even when the blades of the dilator have been separated one and a half inches.]

THE DOSAGE OF TUBERCULIN.

BY PROF. RAMSAY WRIGHT, M.A., B.SC.

Guttman and Ehrlich report in the last number of the *Deutsche Medicinische Wochenschrift* the results of two months observation of the new scheme of dosage adopted by them in the Moabit Hospital, Berlin, and referred to in my letter on page 277 of THE CANADIAN PRACTITIONER.

Beginning with $\frac{1}{10}$ of a milligramme, daily injections increasing by the same quantity are administered till one milligramme is reached, after which the lymph is given only every two days, the dose being increased, however, on each occasion by $\frac{2}{10}$ of a milligramme until 2-3 milligrammes are arrived at, when it is considered safe to advance by increments of $\frac{5}{10}$ milligramme. By this method a dose of one centigramme is reached in about six weeks, and may be persisted in for some time, to be followed, according to Koch's advice, by a gradual descent to a few milligrammes and by a subsequent gradual rise.

The authors claim that this dosage permits the physician to determine the sensitiveness of any particular case to tuberculin (the limits of variation in this respect are very wide), to avoid the weakening febrile reactions to which many unfavorable results have been attributed (the

temperature rarely exceeds 38° C. = $100, 4^{\circ}$ F.), while it does not diminish the curative effects of the lymph on tubercular tissue, as can be observed, e.g., in the larynx, but rather favors the avoidance of too intense local reactions.

It is advisable to depart from this scheme in those cases (often hectic) which prove so sensitive to the lymph as to react beyond 38° C. with small doses, by returning to the initial dose of $\frac{1}{10}$ milligramme and advancing very cautiously to the higher doses which appear to be most active therapeutically. In the less sensitive cases also, where there is no rise of temperature with the initial doses, and where the condition of the patient indicates that the tuberculous process has not advanced far, doses of one milligramme may be reached much more rapidly than by the first-mentioned scale.

Thirty-six cases, of which eighteen were male and eighteen female, thirteen initial and twenty-three more advanced, have been treated by the above method for two months, with the results that thirty-two have gained in weight, the males an average of 6 lbs., the females an average of 8 (improvement as the result of improved nourishment was eliminated by keeping the cases in hospital 1-3 weeks before beginning the treatment). In eleven cases the physical signs were materially improved (complete clearing up of dullness is not to be expected, for the healing process is one of cicatrization). In many cases the sputum is diminished in amount and improved in character, and in four of these the bacilli have disappeared entirely; finally, in most of the thirty-six cases the subjective improvement is very marked. The majority of the cases are so far improved that they could, in part at least, follow their avocations; some indeed have been discharged to permit of this, while several of the cases may be regarded as having entered upon a phase which must lead to a definitive cure. The dosage recommended removes all danger from the treatment of outdoor cases.

FISSURED NIPPLES.—Dr. Barton C. Hirst (*Univ. Mag.*) suggests the following application:

R Bismuth subnitrat.
Olei ricini, aa 3j.

The nipple and adjacent skin must be carefully cleansed and the ointment then rubbed on liberally.