training in a General Hospital at all, they will have just ground of complaint; the advantages of Registration will have been unjustly withheld in the one case, and therefore unjustly granted in the other.

Finally, it is openly said that one of the advantages of the new scheme is that it is expected to produce funds in the shape of registration fees, and that thus the Association will be raised from its present financial quagmire. Such an argument appears to us to be most condemnatory of the scheme.

It is interesting to observe how the policy of the officials in depriving the *ex-officio* Matrons of their rightful position and authority in the Nurses' Association is recoiling upon themselves. The sole result has been that they have, ever since the dishonourable breach of faith with these ladies, plunged from one muddle into another; they have discredited the Association and its work; and now they have suggested a new departure under conditions which, unfortunately for them, were accepted without comment by a Council composed of their own nominees, but which will undoubtedly arouse the greatest professional and public dissatisfaction.

Symptoms and Diagnosis of Puerperal Infection.

BY BARTON COOKE HIRST, M.D. Professor of Obstetrics, University of Pennsylvania.

THE symptoms of puerperal infection are local and general. The latter are an elevated temperature, preceded perhaps by a chill, a rapid pulse and profound physical depression with the development in some cases of metastatic inflammations of any of the organs or tissues in the body. The tongue is coated, the breath is heavy. There is a disinclination to take food. There may be excessive thirst. Nausea and vomiting are not uncommon, and a septic diarrhœa appears in the worst cases. There may be blotches of scarlatiniform eruption upon the skin.

The local symptoms of septic infection are a foul discharge, spots of ulceration and false membrane formation along the lower genital canal, œdema of the vulva, and possibly pelvic peritonitis with an exudate. Or there may be other inflammatory affections of the generative organs, such as superficial catarrhal colpitis, or ulcerative metritis, the symptoms of which will be described in their appropriate places. It is not likely that any case of puerperal sepsis will present all the symptoms just detailed. Elevation of temperature and rapid pulse alone after labour should be regarded as indicative of puerperal infection, if no other cause for them can be demonstrated.

It is possible to have fever only as a symptom of puerperal infection in the early part of the puerperium, during which time the influences that normally reduce the pulse-rate are so active as to counteract the disposition to rapidity of pulse usually shown in septic infection. The slow pulse, however, will not continue long. At the end usually of thirty-six hours, rapid heart action will appear.

It may be impossible to make a differential diagnosis between septic fever and some of the other causes of elevated temperature after labour. In these cases it is wise to treat the patient for puerperal sepsis by a thorough disinfection of the parturient tract, while at the same time the bowels are well evacuated and a full dose of quinine is administered to dispose of a possible intestinal toxemia and to combat a possible malarial infection, which in this part of the country, especially in the spring and fall, is a not improbable event. A microscopic examination of the blood is advisable in a doubtful case, to discover the leucocytosis of sepsis or the protozoa of malaria.

Any elevation of temperature after delivery calls for the most careful investigation. A vaginal examination should be made, both digitally and with the speculum. A combined examina-tion should be made to detect the following conditions: arrested involution and fixation of the womb, bogginess and excessive tenderness of the uterine walls, enlargement of the tubes, enlargement, fixation, and displacement of the ovaries, œdema or exudate in the pelvic connective tissue, and thromboses in the pelvic veins. The abdomen should be carefully palpated for tenderness and exudate; the character and odour of the lochia must be observed ; in short, the woman's condition should be thoroughly studied to eliminate or to discover some other cause for fever than an infection of the birthcanal.

PREVENTIVE TREATMENT OF PUERPERAL SEPSIS.

It is convenient to deal separately with the several sources of puerperal infection in describing the preventive treatment.

Atmosphere.—While the air is not such a frequent source of infection as it was thought to be in the beginning of the antiseptic era, it is undeniable that an atmosphere which is stag-



