that this is unlikely to counterbalance the handicap in other directions. Dr. Hyslop provides a scholarly and philosophical foreword.

The campaign to eat more eggs has found a capable exponent in Mr. JAMES GATECLIFF, who has written a pamphlet entitled *Eggs: A Treatise on their Food Value*,¹² "dedicated to the housewives of England." Dr. G. Clark Trotter, who contributes a preface, points out that under the Sale of Food Order (1921) it is no offence to label foreign eggs with the word "English" so long as the words "fresh" or "new-laid" are omitted. He suggests that some cases of egg idiosyncrasy may perhaps be explained by the fact that the subjects have seldom or never had a really new-laid egg. The pamphlet contains sections on the food value of eggs, on the differences between British and imported eggs, and on methods of testing eggs for age. Mr. Gatecliff is anxious to free England from the "foreign yolk," and believes that an egg (English new-laid) a day will keep the doctor away.

¹² *Eggs: A Treatise on their Food Value.* By James Gatecliff, B.B.C. Lecturer. Birchington, Kent: James Gatecliff. Price 6d.

PREPARATIONS AND APPLIANCES.

BACILLUS ACIDOPHILUS THERAPY.

MULFORD acidophilus bacillus blocks are designed to provide a palatable and portable method for carrying out *B. acidophilus* therapy.

The object of this therapy is to suppress the growth of undesirable and toxic micro-organisms in the colon by encouraging the growth of the harmless *B. acidophilus*. Metchnikoff first drew general attention to the virtues of sour milk therapy, and subsequent research has shown that the beneficial effects of this treatment depend on the establishment of *B. acidophilus* as the dominant organism in the colonic flora.

Each block contains 150 billion living acidophilus bacilli of the Y type: at the time of preparation, and it is estimated that at the expiration date marked on the packages 10 billion will still be viable. The blocks are made up with agar, and contain a certain quantity of milk sugar. They are coated with chocolate to prevent desiccation and to render them palatable. The dose recommended is 2 to 4 blocks a day for an adult. This treatment should be supplemented with lactose, which can be taken pure, or can be obtained from milk or fruits.

The makers (H. K. Mulford Company Ltd.) claim that their preparation constitutes the most convenient, attractive, palatable, and economical way of taking the acidophilus treatment.

A LAVAGE APPLIANCE.

Mr. Hugh E. Jones (Liverpool) writes: Unless a gravity douche-can is used, lavage of the accessory

sinuses requires the patient, the nurse, and the surgeon between them to hold a syringe, and two more or less clumsy vessels—namely, the lotion vessel and the receiver.

The apparatus here illustrated is an attempt to overcome these difficulties by combining the lotion holder and the receiver in one appliance. The can is held by the patient, and the surgeon or nurse has both hands free to control the cannula and the syringe, which is securely held to the can by its detachable fastener. An assistant is not required, and, if necessary, the patient, by placing the can on the table, is able to perform the lavage unaided and in comparative comfort. If preferred the

Higginson syringe may be used without the clip, which is detachable. The apparatus, which in the illustration is shown proportionately too large, can be used equally well for lavage of the eyes, ears, or any other part of the body. It has been made for me by Messrs. Mayer and Phelps.

ACETYL CHOLINE.

Acécoline is a French preparation of acetyl-choline hydrochloride which is marketed in this country by the Anglo-French Drug Co., Ltd. Acetyl choline is an extremely powerful stimulant of the parasympathetic system. A dose of one-thousandth of a milligram given intravenously in cats produces a measurable fall of blood pressure. The drug produces little or no action when given by the mouth, and the action when given intravenously is far too violent to be safe; therefore it is recommended for subcutaneous or intramuscular administration. The dose recommended is 20 to 200 mg. The effect of the drug in animals is to produce a very powerful but transient stimulation of the parasympathetic system. The reason for the transient action is that the drug is destroyed after contact with the blood for a few seconds. The vendors recommend acécoline for use in a large variety of conditions, including hypertension and a condition they term hypovagotonia.

THE ORGANIZATION OF A MATERNITY SERVICE.*

BY

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THE problems of maternity provide the greatest possible scope for organized preventive medicine. By means of an adequate maternity service many of the deaths and much invalidism resulting from the so-called "physiological process" of childbirth could be avoided.

The main criticism of the present system is that essential services are not available for many patients of the industrial class. The service rendered by a maternity hospital to such patients may be taken as an index of the essential requirements. It provides the following: (1) ante-natal supervision; (2) during the confinement, which takes place under the supervision of a midwife, clean surroundings, and an abundance of surgical dressings and lotions; (3) a doctor, who is on call to assist delivery, to repair lacerations, or to deal with complications; (4) good nursing; (5) post-natal supervision; (6) consultant services. Patients who have neither hospital facilities nor the means of obtaining the necessary assistance must be provided for, and it is for them that a maternity service should be organized.

Good nursing, the first essential of an efficient service, will never be obtained so long as handywomen are tolerated. Many patients cannot afford to pay for the services of a midwife as well as a doctor. In some districts the midwives are idle while handywomen flourish, and in others there are no midwives. For this state of affairs the profession is not to blame. The majority of patients would prefer to be under the care of a doctor, and we believe, and impress on our students, that medical supervision is necessary. As it is, many doctors working with handywomen are having a demand made on their time and energy for a most inadequate reward. Some doctors, indeed, refuse to attend a case unless a midwife is engaged as well, but it must be difficult to make this an inflexible rule. There are disadvantages to the patient both when the doctor works with a handywoman and when the midwife works on her own. In the former case the patient is denied trained nursing, and in the latter proper supervision. Midwives—either individually or as a team—should work in co-operation with a doctor; it is absurd to regard their book of rules as a substitute for medical supervision.

A maternity nursing service should be organized under direct medical supervision, and trained nursing should be placed at the disposal of a doctor whose patient is unable to make the necessary provision herself; the present almost independent position of midwives is not to the public welfare. As a temporary measure in teaching centres the pupil midwives, who are under the supervision of a trained midwife, might be brought into the service. By this means doctors would have nursing assistance and pupil midwives would gain experience, part of which the Central Midwives Board might very well allow to count for their qualification.

The Essentials of Maternity Care.

The following help would be given to the profession: (1) Urine specimens would be tested and visits paid to the patients to ensure that they were carrying out the rules of hygiene during the ante-natal period. (2) During the course of labour intelligent messages would be sent when a doctor's services were required, whether to assist the delivery, to deal with complications, or, should delivery have taken place during his absence, to repair lacerations. (3) Efficient nursing during the puerperium. (4) Additional service in cases of emergency, or for the relief of a nurse who has been without sleep for an unreasonable period, or for providing special nursing—as, for example, may be required in the after-care of lacerations which were threatening to become septic.

Such a nursing service would be a boon to the patients, to the profession, and to the midwives themselves. It would

* A paper read before the Edinburgh Obstetrical Society, March 13th, 1929.

guarantee to the latter constant employment, and almost certainly a better remuneration than they have at present. Under the supervision of a sister midwife it would ensure the maintenance of accurate temperature charts, and thus lead to the earlier recognition of the onset of inflammatory processes. The nurses would report the presence of a temperature to the sister midwife, who would at once inform the doctor. The present system of allowing a midwife full charge (subject to her rules) is fundamentally wrong, and it will never be righted until there is properly organized medical supervision of this branch of nursing.

Surgical dressings and lotions, available in good-class practice and in maternity hospitals, are often scant or absent in industrial practice. Such dressings should be supplied to the poorest patients free of charge; to others, according to their means, for part or the whole of the cost. The appropriate dressings would be accouchement sheets, wool, binder, diapers, and towels. A special package consisting of a pair of sheets might be available for use during the puerperium. The dressings would be sterilized, and the nurse would be responsible for any that should be returned.

Ante-natal Supervision.

The value of this ante-natal care cannot be over-estimated. It is one of the blots on the present system that a number of women with the most flagrant pelvic contractions and obvious malpresentations are often well advanced in labour before the abnormalities are recognized, or that renal complications, readily detectable in the course of routine ante-natal examination, should be allowed to develop until the patient is admitted to a maternity hospital in a moribund condition. Ante-natal care, the very essence of intelligent midwifery, must be available for every pregnant woman, and clinics at which such care can be given are required above all by the doctor in industrial practice. Ante-natal examinations take more time than the busy doctor can spare during his ordinary consulting hours, and, in any case, prospective mothers would prefer not to take their place in a waiting room filled with patients of both sexes. The alternative of conducting the examination in a working-class dwelling is hardly better. The existing ante-natal centres provide examination rooms, with nurses in attendance, for a type of investigation about which women are very sensitive; the examination in the vast majority of cases is abdominal, but women know that a vaginal examination may be made. There is privacy, and only one sex is present.

The Function of the General Practitioner.

The staffing of the centres is so far variable. Specialists and whole-time officers figure prominently, and both have done invaluable work. Ante-natal care is, however, the business of the general practitioner. Child-bearing is responsible for much ill health, and it is well known how pre-existing constitutional disease may influence the pregnant state. Those who are responsible for the medical care of potential mothers and are engaged in obstetric practice should also be responsible for their welfare during all the phases of maternity. Doctors who practise in the area and are called in by the midwives should, as soon as it can be arranged, be on the staff of the ante-natal centres. If valuable clinical experience provided by the centres is absorbed by specialists and whole-time officers it will be seriously detrimental to the efficiency of those engaged in general practice. Doctors, moreover, have hitherto been denied supervision of cases attended by midwives unless the midwife has called them in. Now that ante-natal centres are being established there is a tendency for whole-time officers and specialists to deal directly with the midwives, this again excluding the doctors from their proper place in maternity work.

In every area, however, there are many doctors who are keen and competent to do the work of the centres. Their appointment might be made contingent on the possession of some agreed qualification—for example, a diploma in obstetrics, or evidence of post-graduate study, or of a period of residence in a maternity hospital. There is no valid reason why the clinics should not be conducted by several doctors working on a time-table of attendance and a

suitable system of reliefs. Whole-time officers may very properly be in charge when, for geographical reasons, it is not possible to obtain the necessary medical supervision locally, or during periods of epidemic when doctors are overwhelmed with urgent work.

Details of Organization.

An organized maternity service for the industrial class would work somewhat as follows: (1) Each woman would select one of the doctors on the obstetric panel and would enter her name at the nursing centre. (2) The doctor selected would interview the patient in his consulting room, investigate any complaint, and instruct her in the ante-natal routine; (3) the nursing service would arrange for the routine urine testing and health visits. (4) The ante-natal examination would be made either at the patient's house or at a centre; in the former instance the nursing service would co-operate. (5) Patients would have indicated before the onset of labour if they wished the doctor to be present at the confinement or merely be on call if required; in the former instance the doctor would receive accurate reports from the midwife, and in the latter he might not be required at all. (6) Certain routine visits would be paid during the puerperium. (7) The total demand made on a doctor would in many cases consist merely of a few routine visits, and if more active assistance were required, especially at night, his expenditure of time and energy would be reduced to a minimum.

The practical side of midwifery must be as highly organized as possible. Handywomen are responsible for many false calls, hurried labours, and much bad nursing. They must be abolished and the maximum of trained nursing assistance placed at the disposal of the profession. Consultant services should be available during the whole of pregnancy and the puerperium for patients who cannot afford a private consultation. It has been arranged that women who have midwives to attend them can have the services of a medical practitioner at all stages; there is no reason why consultant services should not be available also. Expert opinions in puerperal pyrexia can be obtained in many areas and on ante-natal conditions in others, but so far no provision has been made to give doctors expert assistance during labour. In large industrial areas an emergency service should be organized. This would provide at short notice a nurse, blankets, hot-water bottles, transfusion apparatus, solutions, and, if necessary, a specialist. There are many conditions in which, instead of rushing a shocked and collapsed patient to hospital for nursing and specialist aid, the specialist and nurse should be rushed to the patient. The failure of many of the smaller hospitals to provide beds for maternity cases often forces doctors to deal with major surgical problems in unsuitable surroundings, or to lose much valuable time by sending their patients on a long journey to a maternity hospital.

General Conclusions.

The cost of many of these suggestions can be met without making any, or, at most, only reasonable, demands on the State or the approved societies. The majority of patients under discussion try to meet the expenses incurred by means of a maternity benefit. This benefit is paid with equal readiness in successful cases, in cases in which the child is stillborn, or in which the mother dies of puerperal sepsis. Such a reward may be called a maternity benefit, but it certainly does not benefit maternity. A benefit to be of any real value should stipulate and make provision for medical supervision and nursing.

Criticism is always rife when suggestions are made that all is not well with the present system. Women have been delivered, and have made excellent recoveries, in the most squalid surroundings and without any medical attention. This is a commonplace, otherwise the nation would have disappeared long ago. The profession cannot allow the continued high mortality and morbidity rate to become a commonplace; it is a dread reality. If, as a profession, we allow the public to believe that a handywoman can provide adequate nursing service, or that we approve of the independent action of midwives, any efforts to improve the maternity service will be futile.