Reports and Analytical Records

FROM

THE LANCET LABORATORY.

DRIED MILK (AMBROSIA BRAND).

(AMBROSIA LIMITED, BRIGHTON CHAMBERS, DENMAN-STREET,
LONDON BRIDGE, S.E.)

THE importance of dried milk has recently been emphasised in a report of the Local Government Board reviewed in our columns.¹ The consensus of opinion of the authorities quoted in that report is in favour of the use of dried milk in infant-feeding, when, of course, breast-feeding is not available, and it appears that the physical and chemical changes produced by the processes used in the preparation of dried milk so alter its character that it is better assimilated by the infant than is ordinary cow's milk, whether raw, boiled, or sterilised. Further, even if the milk powder is not entirely soluble on reconstitution, its digestibility is not affected except for good. This probably is largely due to the fact that the casein of dried milk separates on the addition of gastric juice as a fine, soft curd, and not in lumps, as is the case with ordinary cow's milk. Such conclusions are of the utmost importance, since they justify the drying of milk and the conservation in this way of our available milk-supplies, well known to be unsatisfactory, because milk in the fluid state is perishable and liable to contamination on its way from its source to the consumer. The specimen submitted to us by the above company presents all the characteristics of a dry milk powder prepared from clean milk by an effective drying process and under strictly hygienic conditions. Our analysis gave the following results: Moisture, 1·60 per cent.; proteins, 28·71 per cent.; fat, 29·29 per cent.; milk sugar, 35·20 per cent.; mineral matter, 5·20 per cent. It will be seen that the proportion of fat is most satisfactory, and in general the results show that in this powder is preserved the complete food value of cow's milk of good quality. We understand that the dairy and works of this company are situated in Devonshire, and that, although primarily the manufacture was installed in order to supply the troops with milk food, a balance is reserved by permission of the War Office for the purpose of infant feeding.

"CLAROCIT."

(ARNOLD AND SONS, GILTSPUR-STREET, LONDON, E.C.)

"Clarocit" consists of a round tablet of a soap-like nature, and has been designed for preventing the condensation of moisture on laryngoscopic mirrors and lenses. The procedure is simple. Some "clarocit" is taken up by the moistened finger or suitable cloth and rubbed on the glass surface. A dry film is obtained when left for a few moments, which is removed by polishing. The method, according to the trials we made, answers admirably, condensation of moisture from, for example, the breath being completely prevented. The price of the tablet seems to us somewhat excessive, but of course the difficulties of all production are to-day abnormal. There are two sizes, 2s. 6d. and 5s. respectively, and the tablet we examined weighed not more than $\frac{1}{4}$ oz. A very small quantity, however, suffices for the purpose.

HAY FEVER OUTFIT.

(DUNCAN, FLOCKHART, AND CO., EDINBURGH. LONDON OFFICE,
155-157, FARRINGDON-ROAD, E.C.)

This outfit comprises (1) the ophthalmic test, and (2) the vaccine prepared from the pollen of Timothy grass. The diagnosis is indicated by the former and treatment by the latter. A drop of the toxin solution is instilled on the eyeball of the patient, and the strength of the solution (supplied in capillary tubes) which first causes the ophthalmic reaction is noted. The dose of the pollen vaccine is based on this indication, and is one-third to one-half of the number of units of ophthalmic solution which first produces a reaction. Thus a patient giving a diagnostic reaction with 25 units would receive 10 to 15 units of the vaccine hypodermically. The vaccine is contained in a graduated series of doses in ampoules, providing a good range for the varying indications of the patient.

¹ THE LANCET, April 6th, 1918, p. 509.

Both ophthalmic reaction solution and the pollen vaccine are prepared in the laboratory of the Royal College of Physicians, Edinburgh, in which has also been prepared for some time a tuberculin described by Professor Beraneck, director of veterinary medicine at Neuchâtel. This tuberculin is a mixture of equal parts of a filtered culture of tubercle bacilli on an albumose-free medium, and a phosphoric acid extract of bacillary bodies. It is claimed that this tuberculin is less toxic than, and equally efficacious to, Koch's tuberculin.

FLY-QUIT PRODUCTS.

(LAWSON AND COMPANY, LIMITED, ST. PHILIP'S, BRISTOL.)

We referred to these preparations in this column in THE LANCET of Sept. 1st, 1917, since when further attention has been given to increasing their efficiency and convenience as muscicides. They are non-poisonous, and "fly-quit" spray has been found useful in rendering meats and uncooked food-stuffs fly-proof without affecting the normal flavour of the food material in any objectionable way. The concentrated preparation forms an emulsion with water which is non-staining and of broad "wetting" power. As a muscicide the toxic action is slow, so that the flies do not as a rule drop dead amongst the food or, indeed, indoors if they are free to escape. Another preparation is "fly-quit" oil, which is used against blow flies out-doors; and, lastly, there is "fly-quit" emulsion, which has been successfully employed for killing both flies and larvæ in manure and refuse heaps. The preparations are free from offensive smell and have the pleasant characteristics of wood-tar.

New Inventions.

A "SCREW STAND" FOR USE IN BONE-PLATING.

IN plating bones according to the principles of Lane I have found much time wasted and much annoyance caused by difficulty in seizing hold of each screw with the screw-holder preparatory to inserting it in the bone. I have therefore

devised a screw stand which does away with all the difficulty (see figure). It

is arranged at an angle to coincide with the neck of the screw-holder, so that the screws can be lifted from it in a second; it is heavy and will not overturn; it is lifted

straight out of the steriliser by the ring and placed on the instrument table, so that all chance of contamination of the screws is avoided. Moreover, in seizing the screws only one hand is required, and in a typical operation several minutes are saved. The stand is made by Messrs. Krohne and Sesemann.

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THE LANCET, VOL. I., 1918: THE INDEX.

OWING to the continued shortage in the paper-supply, the Index and Title-page to the volume of THE LANCET which was completed with the issue of June 29th have been printed separately, and copies have been supplied gratis to those subscribers who have, up to August 14th, intimated to us their wish to receive them. Other subscribers will be similarly supplied, so long as the stock remains unexhausted, on application to the Manager, THE LANCET Office, 423, Strand, London, W.C. Such applications should be sent in at once.

THE LANCET.

LONDON: SATURDAY, AUGUST 17, 1918.

The Small-pox Danger.

IN a report to the Local Government Board on the incidence of small-pox throughout the world in recent years Dr. BRUCE LOW has given a detailed account of the behaviour of this disease which shows its presence in almost every quarter of the globe. He sounds a warning note as to the dangers likely to arise in this country from the continued neglect of vaccination and revaccination by a large section of the public. The accumulation at home of this unprotected material is attended with considerable risks at the present time, and these are likely to become still more serious at the end of the war when large bodies of troops, as well as other persons, will arrive in this country from areas in which small-pox is endemic, or where recent epidemics have been occurring. This is no alarmist pronouncement but a justifiable and probable surmise.

In the present day many of the younger generation of British medical practitioners have had little or no opportunities of becoming acquainted with small-pox. Under normal conditions the occurrence of an imported case in a well-administered district is swiftly and successfully dealt with by immediate isolation of the patient and segregation of the contacts, along with vaccination and revaccination. But it is not so easy to deal with cases in some other countries. There are certain races among whom small-pox is almost always present, and this is the case with the Arabs inhabiting the region from Morocco to the western shores of the Persian Gulf, among whom small-pox as well as exanthematic typhus is always occurring, and who, when coming from the interior to coastal towns or to depôts on the caravan routes, convey small-pox to the susceptible individuals who may come in contact with them. An instance of this is given in a communication which we publish in our columns by Lieutenant G. H. MEAD, R.A.M.C.(T.C.), entitled "Notes on a Recent Epidemic of Small-pox in the Field." Here is given illustration of the danger from the visits to camps of friendly Arabs selling their fruit and vegetables to our soldiers and camp followers. Lieutenant MEAD describes a localised outbreak, comprising about 30 cases, of which he had the supervision, and he gives some interesting clinical facts concerning the patients under his charge. We infer that vaccination and revaccination of men in our expeditionary forces have not been so persistently carried out as in former days. Incidentally, Lieutenant MEAD shows the danger of small-pox to those who have reached middle age, and who, though vaccinated in infancy, have not been revaccinated, and have consequently long lost their previous immunity. He also illustrates the folly of postponing revaccination till after exposure to the infection and therefore too late to arrest the development of the disease; and, further, he shows

the serious nature of a small-pox attack in an unvaccinated person who has been exposed to a virulent strain of the infection. Lieutenant MEAD'S "Notes" are worth study by those who wish to keep themselves posted up in the possible occurrence of small-pox, first in our expeditionary and secondly in our home communities, wherever somewhat analogous conditions occur.

Dr. BRUCE LOW, in his report, refers to the disastrous pandemic of small-pox which began during the Franco-German war, and which spread over the whole of Europe, extending to the western hemisphere, and causing, in Europe alone, about half a million of deaths in three or four years, of which number not far short of 50,000 occurred in England and Wales. He is evidently alive to the possibility of such sinister history repeating itself. The existing conditions of a great European war, with a battle-front from Flanders to Mesopotamia, involve countries in which small-pox is already present; in addition to this we have to reckon with the displacement from their homes of large numbers of the poorer classes, as well as refugees, deported populations, and prisoners of war, many of whom are unvaccinated; and their aggregation takes place under unwholesome conditions of over-crowding, distress of mind, and privation, with consequent lowering of vitality. Now all these things are likely to intensify the type of the disease. Should such virulent strain of infection be introduced into this country, with its accumulations of unvaccinated children and unrevaccinated adults, it is more than probable that a serious epidemic would follow. The situation would be further aggravated at the present time if the epidemic began in the absence on military service of many of our medical officers of health, public vaccinators, inspectors of nuisances, vaccination officers, and other officials, who in ordinary circumstances could be trusted to deal successfully with the early manifestations of a small-pox epidemic. The public who have in a large measure lost their former dread of small-pox in consequence of its comparative disappearance from our land, and have, therefore, neglected vaccination, would almost certainly suffer severely. Dr. BRUCE LOW'S report comes as a timely reminder that with all our boasted progress in sanitation and preventive medicine we cannot afford to ignore the danger of small-pox; nor can we continue as a nation to neglect the only prophylactic against it known to medical science—namely, vaccination and revaccination.

40 D.

THE Regulation under the Defence of the Realm Act commonly known as 40 D having now been in force for some months, it is not too early to begin to inquire into its value as a measure of public health, for evidence is becoming available on which to base a judgment. It must be as a public health measure that the Regulation stands or falls, since it was introduced as such, and was not held out by its promoters either as a device for making promiscuous sexual intercourse safe for men or as a form of duress for women of loose morals.