

tions (*e.g.*, as in underground cellars), or to emanations from accumulations of domestic filth (*e.g.*, when kept in pantries, etc.), to which such emanations have more or less free access, tends to render it liable to produce diarrhœa, especially where the storing place for food is dark, and is not exposed to currents of air.

17. *Maternal Neglect and Carelessness in Infant Management.*—In estimating (apart from other considerations already mentioned) the influences of this element of causation, I adopt as a criterion the prevalence of fatal diarrhœa among infants who are illegitimate as compared with its prevalence among the legitimate. The collective experience of three places—Salford, Great Yarmouth, and Scarborough—is, for all practical purposes, to this effect, *viz.*: First, that the infants most liable to be neglected, *viz.*, those which are illegitimate, suffer exceptionally from all causes of infant mortality, but from diarrhœal mortality rather more than from other causes of death. Secondly, that in years of high epidemicity this greater tendency on the part of the illegitimate infants to suffer from diarrhœal mortality is lost sight of. Thirdly, that in years of low epidemicity the tendency above mentioned is most obvious, *i.e.*, the presumably less potent or less abundant specific cause (in such years) operates fatally and more easily on the illegitimate than on the better cared for class of infants. Fourthly, in a highly epidemic year this class of infants seems to suffer earlier than the class of infants better cared for.

18. *Occupation of Females from Home.*—This which has often been assigned by medical officers of health and others as a fruitful cause of infantile fatal diarrhœa resolves itself mainly into the question of maternal neglect, with the substitution more or less of artificial feeding for feeding at the breast, matters which have been dealt with in preceding paragraphs.

Having regard to the broad facts already indicated, and to others which have yet to be exhibited by me, a working hypothesis or provisional explanation that would best accord with the totality of the evidence in my possession, bearing on the production of epidemic diarrhœa may be stated as follows:—

That the essential cause of diarrhœa resides ordinarily in the superficial layers of the earth where it is intimately associated with the life processes of some micro-organism not yet detected, captured, or isolated.

That the vital manifestations of such organism are dependent among other things, perhaps principally upon conditions of season, and on the presence of dead organic matter which is its pabulum.

That on occasion such micro-organisms is capable of getting abroad, from its primary habitat

the earth, and having become air-borne, obtains opportunity for fastening on non-living organic material, and of using such organic material both as nidus and as pabulum, in undergoing various phases of its life history.

That in food, inside as well as outside of the human body, such micro-organism finds, especially at certain seasons, nidus and pabulum convenient for its development, multiplication, or evolution.

That from food as also from the contained organic matter of particular soils, such micro-organism can manufacture by the chemical changes wrought therein through certain of its life processes, a substance which is a virulent chemical poison; and that this chemical substance is, in the human body, the material cause of epidemic diarrhœa.

It will be observed that this provisional hypothesis is sufficiently elastic to include as a common cause of diarrhœa chemical products of bacterial life manufactured indifferently within or outside the human body.

Elasticity to this extent of a provisional hypothesis has been necessary for the reason that in the present state of our knowledge certain cases and groups of cases of diarrhœa not distinguishable from epidemic summer diarrhœa, have now and again been found to possess the faculty of being directly communicable from person to person.

It will be obvious that in the stools of such infective cases of diarrhœa the hypothetical organism causative of the malady may be looked for with good hope of success.

REMOVAL BY MAGISTRATE'S ORDER OF PERSONS SUFFERING FROM INFECTIOUS FEVERS TO THE ASYLUMS BOARD HOSPITALS.

AT the Marylebone Police-court, recently, an application was made for an order for the removal to hospital of a child certified to be suffering from scarlet fever. The application was made in the usual way to Mr. Cooke, the stipendiary, under 29 and 30 Vict., cap. 90, s. 26; but the magistrate declined to grant the order, because he had no evidence of the consent of the hospital authorities, and adjourned the case for the purpose of such evidence. The words of the section are: "Any justice may with the consent of the *superintending body* of such hospital or place, by order on a certificate, signed by a legally qualified medical practitioner, direct the removal to such hospital or place, etc." Hence it is advisable in cases of compulsory removal, to obtain, in the first instance, from the clerk of the Asylums Board, some written memorandum, that the Board will receive the patient.