

carbolate of zinc by saying that in every case its use was followed by:—

1. Relief from gastric distress.
2. Disappearance of fetor from the stools.
3. Moderation or stoppage of diarrhœa.
4. Ceasing of hemorrhage.
5. Ceasing of tympanitis.

Reduction of temperature by two to three degrees, with a corresponding improvement in the cerebral symptoms, except in the case detailed above.

There are some cases occurring in this city of doubtful pathogeny, which are sometimes classed as typhoid, sometimes as typho-malarial. They are characterized by fever, which ranges from 102.5° in the morning to 104.5° in the evening, dry tongue, brown in the centre, but coated to the tip and edges; tenderness in the epigastrium, but not in the iliac fossæ; great debility; anorexia and gastric irritability, but no diarrhœa unless a laxative is given, in which case profuse catharsis ensues, with an aggravation of all the symptoms. I have never found the typhoid spots in these cases. Quinine could not be borne by the stomach, but gave great relief when given by suppository in scruple doses.

In these cases the sulpho-carbolate of zinc, in doses of three to five grains every two hours, effects a cure so rapidly that I am constrained to believe that the disease in question is due to a microbic invasion of the stomach.

Permit me, in conclusion, to advert briefly to the diet of typhoid fever. About a year ago a French clinician, Du jardin Beaumetz, referring to the use of milk in typhoid fever, stated that this food could only nourish through its water and salts, as neither the casein nor the fat can be absorbed; and hence these substances are injurious. It struck me as significant that, although this statement was made in the Academy of Medicine, where so many keen-witted men are continually on the look-out for opportunities to distinguish themselves, and where, as in the case of Professor Peter, one man rather enjoys the prospect of being arrayed against the whole body of his fellows, not one was raised in defence of milk.

And yet there is a source of fallacy in the case against it, on which an argument might be hung: in that the typhoid process may not effect all the lacteals—at least not all at the same period, and hence some absorption may take place.

Be this as it may, the researches of Vaughan on tyrotoxin may well raise a doubt as to the propriety of introducing a highly organized and readily decomposed body like milk into such a sink of impurity as the gastro-intestinal system of a typhoid patient.

In all the cases in the series reported, predigested foods were substituted; and I cannot but attribute much of the freedom from tympany, diarrhœa, etc., to this cause. Very little stimulant was needed; in fact, not more than was to be found in

one of the beef preparations in the market, which was given in the weaker stages.

In conclusion, I will say that while my eight undoubted cases are too few to afford more than an indication of the truth, the uniformity of the results obtained leads me to believe that in the sulpho-carbolate of zinc we have probably a remedy for typhoid more nearly specific than any heretofore proposed—in that its use is a legitimate deduction from the pathology of the disease.

The food preparations most used in this series of cases were Carnrick's soluble food, with liquid peptonoids or Rudisch's sarco-peptones; and, when slight stimulation was indicated, Bovine was added to the proceeding. In addition to these, the white of egg was given in the raw state, mixed with cold water and a little pepsin added. In one case Wells and Richardson's lactated food was used.—*Phil. Times.*

LACTIC ACID AND DIET IN INFANTILE DIARRHŒA.

BY FRANK WHITFIELD SHAW, M.D., Physician to the Brooklyn City Dispensary.

Less than two years ago, Hayem, of Paris, presented to the Academy of Medicine in that city a report on the use of lactic acid in the green diarrhœa of children. In the preparation of this work he had been assisted by his interne, Lesage, whose particular share in it had been the development of some pure gelatin cultivations of a germ which Hayem had discovered as being present in the vomited and rectal discharges of this variety of diarrhœa. He said he had established beyond the possibility of a doubt, by clinical experiment, the direct relation of this germ to the green color, and as such he claimed for it the right of discovery.

However, soon after his report was published, this claim was contested by Damaschino, who said that, three years before he had discovered this same microbe, had shown its relation to green diarrhœa, and had presented to the Biological Society some micro-photographs of it.

Hayem admitted his priority to the microscopic discovery, but still claimed as his own the credit for showing the proper relation of the bacillus to the particular form of diarrhœa. He stated that Damaschino had gone no further than merely to recognize the germ, and then cited the experiments which Lesage had made of introducing into the intestinal tract of healthy animals some pure cultivations, and producing by them a characteristic green diarrhœa. He also showed that the discharges were contagious.

The microbes, which are rod-shaped and can exist only in an alkaline medium, show a disposition to bunch themselves into groups, and their number is in direct relation to the severity of the attack.

These are, therefore, the first successful attempts to establish the parasitic origin of at least one