

Open Mail

To the Editor: *The Public Health Journal*:
Plasma de Quinton.

Sir,—A few words about the "Plasma de Quinton" injection treatment may be of interest to those of my fellow readers of *THE PUBLIC HEALTH JOURNAL* who have not had an opportunity, personally, to investigate the matter. The test in London of this method of treatment (chiefly of infantile diseases so far), is particularly welcomed by those interested in checking infantile mortality, and very remarkable results are claimed for its use in France. "Le Plasma de Quinton" is nothing more nor less than pure sea water, sufficiently diluted with distilled fresh water as to make it isotonic with the human blood. The sea water is taken from the ocean at a point far away from land and at some feet below the surface. These precautions are necessary for safeguarding purity, for, according to the originators of the treatment, there must be none of the ordinary precautions to secure freedom from noxious germ life. The sea water, for example, must not be boiled, as that would destroy its value altogether. The fresh water used to dilute the sea water so as to make it of the same specific gravity as the human blood must be distilled, then frozen, then distilled through a Pasteur filter. The mixture must afterwards be used in a fresh state, as it loses its value when stale.

Science has come so close to the miraculous in some recent discoveries that the theory of "Plasma," though it reads like romance or the dream of an alchemist, may not for that reason be condemned as scientifically untrue. It is this: that biologically all life originated in the sea water; that pure sea water is almost absolutely identical with the organic plasmas. The water of the sea is, in short, the culture liquid for organic cells. It suggests the *elixir vitae* of our forefathers, and it is claimed for it that it will be a great remedial agent of the future. Inject this sea water, properly diluted, into the human organism and the result is to give an access of the vital principle. The human cells are bathed in a liquid which is their original food, and re-

spond accordingly. That is the case in theory for treatment by "Le Plasma de Quinton." It surpasses in its appeal to the imagination any of the work of Koch, Pasteur, or Metchnikoff.

I was allowed recently to hear M. Quinton explain the treatment with Plasma as carried on in the Paris dispensaries. He dealt almost solely with the treatment of young children suffering from marasmus or "wasting disease," known also in this country under the name of infantile cholera. Cases were cited not only of the treatment of average children, some brought to the dispensaries in a moribund state, but also of children in whom the condition of disease was aggravated by a "bad heredity," i.e., they had tuberculous or otherwise diseased parents, or were prematurely born. Medical details are necessarily indicated rather than fully set out in a translation of M. Quinton's statement.

The most important point, he stated, in the treatment was to determine the proper dose. In 60 per cent. of cases this was easy. In 40 per cent. of cases the proper dose had to be methodically sought for. Once the veritable dose was found success followed, if success were possible. In the experience of the Paris dispensaries in 1908-9 many cases died. In 1910, with bolder dosage, almost all were saved. In some cases 300 cubic centimetres were injected every day. That represented a weight of about 10 oz. English of the fluid.

In the serious marasmus cases such as those brought to the dispensary the ordinary mortality without the Plasma treatment was 98 per cent. In 1908-9 the system at the dispensary was to inject 30 cubic centimetres of Plasma every second day. A large proportion of cases were saved. Still the bad cases very often died. In 1909 a very violent case of infant cholera was brought to the dispensary. The injection (30 c.c.) was tried. The child died. Five following cases, all very serious cases were secured. But the conclusion seemed to be obvious that the treatment was a failure, or, at any rate, not reliable, in very bad cases. It was finally resolved to attempt larger