London, where the enumerated populations in 1891 differed only as 501,558 to 454,077 at the respective ages, more than three times as many deaths from diphtheria occurred at the earlier age—namely, 1388, as against 447. 4. Without going minutely into the death-rates at the several ages it is abundantly evident that the deaths from diphtheria are comparatively few during the early months of infancy, but become portentous as soon as the children are out of arms. In London the deaths in 1892 were most numerous between one and two; in England as a whole between four and five. Thus, for London the deaths from diphtheria in the five first years of life were 129, 325, 315, 322, 297; and for England as a whole 360, 806, 859, 982, 929. 5. Now, on consideration of these facts I would throw out a suggestion—namely, that the infantile love of exploration when a child is first on its own legs, combined with its diminutive height and the consequent nearness of its fauces, even without stooping, to many a source of contagion (say, gullies and open gratings to sewers) may have as much to do with the terrible fatality of diphtheria during the particular years of life referred to as school attendance. We may take it for granted that, *ceteris paribus*, the effect produced by a given source of diphtheritic virus will follow the same law as the effect of any other like cause (say, the heat of the sun)—namely, be about inversely as the square of the distance from the source. When a child is in arms or otherwise confined to some cot it is, comparatively speaking, far removed from harm (except possibly through personal contagion); but as soon as it takes to its own legs its risk of infection from a prime source is enormously increased. Throwing out the suggestion for what it is worth,

I am, Sirs, yours faithfully,

Kingston-on-Thames, July 21st, 1894.

D. BIDDLE.

DEFECTIVE HUMANITY UNAIDED BY STATE MEASURES.

To the Editors of THE LANCET.

SIRS,—The lapse of time has shown that the teaching of lunacy in lunatic asylums, strengthened by its enormous literature and aided by well-known established organisations, elegant writers, social reformers, and scholastic methods, has given no proof that these factors have diminished insanity, crime, and discontent. Thus a demand is made on State medicine to seek for methods which will tend to advance a basis for the making of mankind more physiological.

In dealing with the problem for investigation and looking at it from the *locus standi* of a family doctor, the question arises, Have the practitioners of medicine, in their many-sided work, saved many from crime, gaols, and lunatic asylums? If they have, the importance of their work could not be over-rated. It is accepted by the best authorities, such as Sir J. Crichton Browne and Dr. Clifford Allbutt, that they are possessed of keen insight, quick to sift, catch, and check, and from their surroundings are afforded opportunities for detecting arrests of development and abnormalities in the initial stage of life, when prophylactic measures are attended with successful efforts and long before the top dressing of the scholastic. This is why we ask the State to look upon us as the earliest and best detectives. As a control over the production of insanity largely concerns the public in general, so the public ought to be taught by the State that under fixed principles insanity and instability can not only be held in check, but greatly diminished, and that the future destiny of the infant can be regulated by a healthy equilibrium of guiding principles for arresting early indications of feeble-mindedness, insanity, and crime. In dealing with the whole question the field of public medicine is not sufficiently in touch with the well-timed changes for teaching and enlightening the public mind that mental abnormalities can, as well as physical, be successfully dealt with. But the practitioner's psychical work is too limited; all do not take time and trouble to note, digest, and think out their cases. Consequently the work should be made more perfect by State measures. An applied system of jurisprudence, a timetable invested with the stamp of State aid and placed in the hands of practitioners officially bound to keep records of cases as is done in hospitals and dispensaries. In dealing with the interaction of cause and effect during the growth and culture of early life our "green tree" records are pos-

sessed of a useful amount of information, and, when practicable, ought to be brought before medical societies for discussion. And the practitioners of medicine as practical psychologists ought to be affiliated through our branches to the Medico-Psychological Association, whose members only number less than 500, and have chiefly to do battle with the "dry tree" cases only.—I am, Sirs, yours truly,

Londonderry, July 23rd, 1894.

WALTER BERNARD.

THE SANITARY CONDITION OF WORTHING.

To the Editors of THE LANCET.

SIRS,—Will you kindly allow me to place before the profession as briefly as possible a statement as to the sanitary condition of Worthing at the present time? It will probably be remembered that I have before now publicly stated that the epidemic of last year was caused by running a new heading into an area polluted by long-continued escape of sewage matter from defective drains in the neighbourhood of the waterworks yards, thus contaminating the water of the drinking well. The report (now lying before me) of the medical inspector sent by the Local Government Board entirely confirms this view. I mention this because enteric fever can never again arise in Worthing from this cause. Ever since last September the old water-supply has been cut off for ever for all purposes, and we now have an ample supply of good and pure water from a well to the north of the village of Broadwater. The effect of this change of water was most marked. The epidemic abated immediately and rapidly until the beginning of January, when it was completely stamped out, and there has not been one single case of enteric fever since. The health of the town has been exceptionally good this year, the death-rate for the first six months being only 12.5 per 1000. The deaths registered in the borough this month (July) up to the 15th are only three; one of these was a child aged seventeen days from marasmus, the second a child aged twenty months from tabes mesenterica, and the third a person aged seventy-two years from gangrene and cerebral softening. I have been in practice here upwards of twenty-seven years, and can truthfully say that I have never known the town to be more healthy than it has been this year. It seems to me that there is every prospect of a permanent improvement, because Worthing now has a better and safer water-supply than it has had for many years. A splendidly constructed new main sewer has been laid from one end of the town to the other, under the supervision of the eminent engineer Mr. Mansergh. I should like to enter into a thorough description of the drainage scheme, but it would take up much more space than I have the conscience to ask for. At any rate, I can emphatically affirm that it is much safer to send patients to Worthing now than it ever has been in my recollection.

I remain, Sirs, yours faithfully,

Highworth, Worthing, July 16th, 1894.

JOHN GOLDSMITH.

THE PATHOLOGY OF VARIOLA AND VACCINIA.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of May 19th, in the report of the last meeting of the Pathological Society, allusion is made to my remarks on the above-named subject, but there is omission of an important reference—namely, to Dr. Ludwig Pfeiffer's "Behandlung und Prophylaxe der Blattern," Jena, 1893, a work indispensable to those who wish to follow the newest developments of the subject. I beg, therefore, you will kindly publish this note.—I am, Sirs, yours truly,

Old Cavendish-street, W., July 21st, 1894. J. JACKSON CLARKE.

"HALLUX RIGIDUS."

To the Editors of THE LANCET.

SIRS,—In a contribution to THE LANCET of July 21st on hallux rigidus a very great compliment has been paid me by a very distinguished man—Professor Cotterel, Lecturer on Clinical Surgery at the University of Edinburgh—in so far as he is good enough to state "that a recent article by Mr. Mayo Collier confirms in many respects the views"