Bristowe, Hyde Salter, and others; and an interesting case, which we had in one of our hospital wards, is given by my former colleague, the late Dr. Fuller,² in connexion with which there is a careful and elaborate table, by Dr. Peacock, of thirty-one collated cases collected from medical literature, as well French and German as English, in addition to sundry incidental cases, up to the year 1853. In none of the descriptions of these cases do I find any allusion to the use of tar vapour as a remedy. Sir Thomas Watson, in the chapter of his lectures on the “Principles and Practice of Physic,” dealing with “chronic bronchitis,” states that he had only met with two cases (which he describes very graphically) of this so-called plastic bronchitis, the patients, curiously enough, being two brothers. In these cases bloodletting and mercurial salivation, as also the use of acetate of lead and other styptics, were resorted to, but there is no mention of the use of tar water.

I am, Sirs, yours truly,

Cavendish-square, W., Dec. 2nd, 1893.

JOHN W. OGLE.

ODONTOMES.

To the Editors of THE LANCET.

SIRS,—Dr. Alfred Swann was good enough to furnish in THE LANCET of Dec. 9th details of an interesting odontome which he removed from the mandible. There is, however, a curious error in the account, but for that Dr. Swann is not to blame; it is to the effect that only about nine cases are known and these occurred in the lower jaw. I have collected twenty-four cases of similar tumours in man; of these, eight were from the upper jaw, six of which are figured in my recent work on tumours. Odontomes attain far larger proportions, and, indeed, sometimes become more formidable, in the maxilla than in the mandible. It is difficult to determine how the error arose that odontomes are confined to the mandible; for in the classical specimen detected by Hare of Limerick the odontome occupied the maxilla (upper jaw) and is certainly one of the earliest (1863) cases recorded in Great Britain.—I am, Sirs, yours truly,

J. BLAND SUTTON, F.R.C.S. Eng.

Queen Anne-street, W., Dec. 12th, 1893.

“PUERPERAL SEPTICÆMIA.”

To the Editors of THE LANCET.

SIRS,—Being strongly convinced of the great importance of good sanitation as a means of reducing the mortality of puerperal fever I shall be glad if you will permit me to reply to the letter of Drs. Herman and Cullingworth in THE LANCET of Dec. 2nd. The general experience of most hospital and army surgeons and obstetricians, before the introduction of antiseptics, and since then where for various reasons antiseptics have not been employed, has surely shown how indispensable hygienic surroundings have been for the reduction of mortality from the various septic diseases. The late Netten Radcliffe, in one of his reports, said: “Few facts are perhaps more clearly established in medicine than the mischievous influence of an atmosphere pervaded with sewer air in surgical wards.” The composition of sewage and the movements of sewer air being so variable under such very different circumstances one cannot expect that there should be but *one definite* disease that could be called sewer-air poisoning. But that sewer air is capable of producing disease—e.g., typhoid fever—is shown by the investigations of Sir G. Buchanan, Dr. Thorne Thorne, and others. Professor Notter also gives the instance of Eastney Barracks. That sewer air can also contaminate water, milk, and other food, and thus produce typhoid fever, is shown by the reports of these and other observers—for example, T. Wardle.³ Sewage is well known to contain an immense number of bacteria. Davaine, Pasteur, Koch, Klein and others have shown how many different micro-organisms can produce septicæmia in animals and men. Also typhoid fever and some other cultivations by *inoculation* (that is, not in the media in which they usually produce the specific disease, typhoid fever &c.) have been shown to give rise to *septicæmia* in animals, and therefore possibly in men also (Klein). This may perhaps account for the large amount of clinical evidence that surgical evers, scarlet fever &c. may produce puerperal fever.

Specific septicæmic germs may, however, often accompany the specific germs of the diseases just mentioned. For these several reasons it is most probable that sewer air often contains some of the germs that will produce septicæmia and other surgical diseases. There are also many other cases recorded in which there has been the strongest evidence that surgical and puerperal fevers have resulted from sewer-air pollution (Professor Corfield and others). When one considers the enormous number of puerperal women who, on account of damaged tissues and lochia, are such good media for many germs, I think it is not surprising that one should hear sometimes of sewer air producing septicæmia in them. My experience (I have carefully attended more than 1000 midwifery cases and watched many more abroad), and I think that of most obstetricians, is that one may have various forms of puerperal fever, varying from septic intoxication (*sapræmia*) to pyæmia—omitting, of course, other well known causes of febrile temperature. The form depends upon the amount of the poison and the kinds of germs attacking the patient; and septicæmia and pyæmia can in most cases be prevented by promptly attending to the patient on the earliest signs of *sapræmia*. This, I think, too, is in accordance with the latest theories of infection.⁴ I hope that I have said enough to prove that the maxim of obstetric teachers ought to be—cleanliness *plus* sanitation.—I am, Sirs, yours truly,

W. A. BOND,

M.D., B.C., D.P.H.Camb., M.R.C.P.Lond., Deputy Medical Officer of Health, City of London.

Duke-street, St. James's, S.W., Dec. 5th, 1893.

To the Editors of THE LANCET.

SIRS,—Two statements made by Drs. Herman and Cullingworth in THE LANCET of Dec. 2nd are not likely to meet with universal acceptance amongst surgeons. They say that “the phenomena of septicæmia are uniform and well marked, whether it occurs after a delivery or after a surgical operation,” and that “one never hears of septicæmia being produced by sewer-gas poisoning except in the case of puerperal women.” May I point out that a committee of the Pathological Society came to the conclusion that “the term septicæmia, as at present used, cannot be said to have any definite meaning.”⁵ Again, Mr. Victor Horsley writes that “the form in which the disease appears is variable,”⁶ and he carefully makes it clear that he does not include *sapræmia* or *pyæmia* under the term “septicæmia.” Clinically, after delivery there may be death from septicæmia in two or three days, or after weeks of exhausting fever; there may be low forms of temporary or fatal inflammation of the lungs; the patient may be ill for weeks or months, or may acquire permanent disease—suppurating salpingitis, for example—as a result of her confinement. If these are, as they are generally considered, so many manifestations of septicæmia, it can scarcely be scientifically accurate that the phenomena of this disease are “uniform and well marked.”

I have recently endeavoured to show that any poison which causes a wide-spread or universal irritation of the tissues with suppression of urine, if acting during a traumatic fever, must produce symptoms closely resembling, perhaps clinically inseparable from, those of a true surgical septicæmia,⁷ and I am not aware that it can be said that any differentiated germ or virus is recognised as the cause of this disease. For the development of septicæmia it is not necessary to have a pre-existing case. Decomposing animal matter produces the poison, and the occupants of a house in which the drains are defective are exposed to the influence of the products of decomposition of animal matter, for much more than sewer gases may come from a leaky drain. “These gases are probably the least important ingredients of sewer air. That organic matters are present is evident from the peculiar fetid smell, and in some cases they are present in large amount. Eight thousand cubic feet of the air of a house into which sewer gas had penetrated destroyed more than twenty times as much potassium permanganate as the same quantity of pure air” (Dr. Angus Smith).⁸ In a house with defective drains, therefore, the recognised cause of septicæmia exists. Hence, unless it can be proved that the particular kind of decomposing matters, found in sewers will not produce the poison of septicæmia, it is most undesirable (one-

⁴ Klein, Hygiene, vol. ii., &c.

⁵ Transactions of the Pathological Society, vol. xxx., p. 10.

⁶ Heath's Dictionary of Surgery, art. Septicæmia.

⁷ The Physiology of Death from Traumatic Fever, pp. 113, et seq.

⁸ Parkes' Hygiene, Seventh Edition, p. 147.

² Transactions of the Pathological Society, vol. v., p. 41.

³ On Sewage, 1893.