

when the effect, typhus fever, is present. It is universally absent when typhus fever is absent; and the effect, typhus, varies in degree with the degree of overcrowding. The phenomenon overcrowding is, therefore, the form in question, 'the cause of the given fact or attribute.' Littlejohn's facts and figures prove the law of the appearance and existence of typhus, the law of its variation, and they have established the fact of its extinction. You may as well establish a germ theory for this awful disease as for a leg of cold mutton."

Mr. Tait then takes up the application of the germ theory to the practice of surgery, and says that Lister, from his laboratory experiments, knew that a single spore admitted into a sterilized flask was quite sufficient to produce decomposition in appropriate contents, and permeated by a false analogy, he concluded that a single germ was equally potent in a surgical wound. Mr. Tait says, that being a very clumsy barber, he has no doubt that he has implanted myriads of germs in fresh wounds inflicted on his face while shaving; that no septic results have followed in his own case or in thousands of his fellow sufferers. He ridicules the technique of antiseptic surgery, and uses as illustrations of its absurdity two articles recently published in America. In one, the author says that he divides the umbilical cord about two and one-half inches from the abdomen, wipes the abdomen and the cord with a bichloride solution, firmly secures it with a sterilized ligature, and touches the cut end of the cord with a bichloride tablet.

"Sterilized gauze, sterilized bandages, and a properly sterilized cradle and nurse," says Mr. Tait, "secures the recovery of the germ-endangered baby, and no doubt a formal operation fee is charged after the danger is all over."

The other writer quoted gives minute directions for sterilizing the hands, instruments, ligatures, and dressings for the operation of lacerated perineum. Mr. Tait states that he has done the operation about fifteen hundred times, and has observed none of the directions nor used any of the measures advised by his American friend, and yet the statistics which have been published prove that his mortality is less than that of his antiseptic rival, as one is less than two hundred and fifty. Mr. Tait says that some may say that neither the division of the umbilical cord, nor the repair of a damaged perineum, are sufficiently serious operations to make any mortality at all. If such be the case, there can be no truth in the alleged germ theory; for the logical deduction of that theory is, that the entrance of the germ or germs into any wound whatever is capable of producing systemic septic evils and death.

Mr. Tait says that he has done a great deal of operative work, and has never used anything but absolute cleanliness; yet his published statistics

have not yet been contravened or beaten in their record. He says he has challenged Sir Joseph Lister over and over again to compare statistics with him, but he has ignored him with a lordly indifference. He says that the details of Listerism change with marvellous rapidity, and before they are six months old are pronounced failures, and are replaced by something new. The last of all these numerous phases is the disuse of chemical destroyers of germs and the abandonment of antiseptic surgery, and the adoption of aseptic surgery, which is nothing but perfect cleanliness, which Mr. Tait has been preaching for years, and, forsooth, this is, then, the newest Listerism.

Mr. Tait says that after his early experience in surgery, it is a wonder he ever stuck to it; that, during his pupilage in Edinburgh, he saw thirty abdominal tumors removed without one single recovery, and, when he left the land of his birth, it was with one fully made resolution—that he would never open an abdomen. In Edinburgh, if he saw the amputation of a thigh in the Old Infirmary on Wednesday, there was a strong probability that the following week he would see the bared bone sticking through the anterior flap. If a breast was removed, an erysipelatory reddening of the flaps would very probably occur on the following day, and would be half way around the chest before the week was out, and the wound gaping, and everything going to the bad. He left Edinburgh, and has been engaged continuously for the past twenty-eight years in making wounds, and he has never seen a case of erysipelas in his own practice. This improvement lies in the separation of patients, plenty of cubic space and fresh air, and is in no wise the result of chemical germicides, which he never uses.

Mr. Tait says that it was Simpson who cried out most loudly for better ventilation and cleanliness, and against the use of dirty hands and sponges, and that he has been dead hardly these five and twenty years, and all his splendid work is as much forgotten as if it had never been done, and the glorious progress which has come out of it is given to a theory, which is not theory at all, but a phantasm, a system which has been proved an inconstancy and a broken reed, a thing which yields at every blast, either to scholastic logic or eclectic experiment.

As a surgeon, Mr. Tait stands pre-eminent, but he is amusing as a scientist, confusing as a logician, and abominable as a writer.

The epitome of his article just given has been laboriously dug from confused verbiage, and enucleated from digressions on electricity, dissertations on Baconian logic, enumerations of his personal success as an operator, and abuse of men who oppose his views.

Mr. Tait recognizes the existence of a poison which produces disease, but refuses to admit that