

etc., as a beautiful example of the reparative processes of nature when uninterfered with by mischievous agents from extrinsic sources. The contrasting course of those cases, in which, in pre-antiseptic days, the discharges escaping from the wound became infected and underwent putrefactive fermentation, is familiar to most of you.

He then emphasized the need for antiseptic rather than aseptic dressings in cases where large discharge is unavoidable, and concluded with a reference to the double-cyanide dressing which he has been using for eighteen months.

This address seemed to me as I listened to it to be another striking example of Lister's remarkable willingness to receive and profit by all new discoveries and all genuine advances bearing upon the antiseptic theory. So far as I know, he has never remained silent in the face of satisfactory demonstration that any portion of his method was unnecessary or illogical. As he gave up the spray when it became evident that it was not accomplishing its work, as he has from time to time discarded various antiseptics in the search for the ideal one combining permanency and certainty of action with absence of irritating qualities, so he now is willing to minimize the dangers of atmospheric contamination and to discard washing, irrigation, and even drainage in appropriate cases, although for years he has been conscientiously emphasizing their importance. Surely this is the true scientific spirit, as rare as it is admirable, and an additional evidence of the single-mindedness and absolute fairness of this great investigator.

On the 27th of last September there appeared in *The British Medical Journal* an article by Mr. Lawson Tait, consisting of an address delivered a short time previously, and entitled "The Present Aspect of Antiseptic Surgery; A Criticism of Sir Joseph Lister's Address at the International Congress."

Of the tone, taste and temper of this essay, I shall have but little to say. It would be difficult to characterize it properly and preserve the dignity and decorum which should belong to scientific discussion, but which are so conspicuously absent in Mr. Tait's paper. So far, how-

ever, as concerns our present purpose, it may be considered from two standpoints: 1st. As it denies the truth of the principles underlying the practice of antiseptis, and advances an alternative theory applicable to the treatment of wounds. 2nd. As it attacks the prevailing antiseptic methods.

1. THE PRINCIPLES INVOLVED. Mr. Tait draws an elaborate comparison between the phlogiston theory of Stahl and the antiseptic theory, asserting, to use his own words, that we have a perfect parallel to the former in "the septic theory of inflammation and fever which is the favorite hobby-horse of our own day." He adds, "everything at present has a septic origin and a septic inception, yet I venture to say that before the present generation has run out the word antiseptic will be all that is left to represent the strange structure, just as anti-phlogistic was the only word left to represent the phlogistic theory in the middle of the present century." He continues by asserting a want of logic in the use of the term "theory" at all, saying that "instead of the septic or antiseptic fact, Lister and his still more illogical disciples talk of the septic or antiseptic theory, whereas there is no theory about it at all, but an absolute and ludicrous logical error." He then opens his argument by denying that the cholera bacillus has been definitely isolated or that it can be cultivated with certainty and precision; and says that even if it has and if it is potent for production or reproduction, the fact that if a thousand people drink the same germ-infected water only a hundred or so will be affected, and that the majority of these will recover, shows that the facts about germs in the human body do not coincide with the facts of the germs in the gelatine flasks, and that, therefore, they cannot stand as the basis of a working hypothesis, far less of a theory.

It is difficult to follow the vagaries of this extraordinary paper; but if all this means anything whatever, it means, taking the cholera bacillus as a type, all deductions based upon bacteriological investigation are denied because the growth and reproduction of micro-organisms in the body are so influenced and altered by physiological and vital processes as to run a course somewhat different from that which they take in flasks or test-tubes. For the same gen-

chial surface." The whole question is, of course, a distinct digression, but is used by Tait in justification of his assertion that Lister "possesses crude notions of logical definition"!!