the doctrine of spontaneous generation; there was, on the contrary, overwhelming evidence against it; but he warned his hearers not to carry away with them the notion sometimes erroneously ascribed to him, that he deemed spontaneous generation impossible, or that he wished to limit the power of matter in relation to life. His views on that subject ought to be well known. But possibility was one thing, and proof was another; and when in the present day he sought for experimental evidence of the transformation of the non-living unto the living, he was led inexorably to the conclusion that no such evidence existed, and that in the lowest, as well as in the highest, of organised creatures the method of nature was that life should be the issue of antecedents life.

FERMENTATION.—ARE ZYMOTIC DISEASES FERMENTATIOUS?

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The writer of this communication would observe as introductory, that the interest that the practical physician, as distinguished from the mere scientist, will feel in a paper on the subject of fermentation, arises from the light which its study throws on the pathology of a class of diseases second to none in importance, namely the Zymotic diseases.

Typhoid fever, scarlet fever, dysentery and diphtheria are topics of pre-eminent interest to the philanthropic physician, since we have as yet no prophylactic against them as we have against small-pox, and no specific for them as we have for ague.

In the past, the treatment of these diseases has been tentative and empirical, and necessarily so, for the reason that their causes were unknown—in the future, a day will come when their treatment will be specific and rational; but that day cannot arrive till study has made us acquainted with these causes and their conditions.

The present is the transition period. We see clearly the nature of these causes (possibly know one or two) and the search for the rest is pushed forward with industry and zeal.

Most organic bodies are subject to a molecular change, by which they either acquire new properties, or are split up into several new substances, which molecular change we call fermentation.

Fermentation belongs partly to chemistry and partly to biology, the chemical reactions being believed to be the work of living microscopical organisms belong to the natural order of fungi.

There are many fermentations, each organic substance having one peculiar to itself, but the process in every case is essentially the same or similar. To state the case as plainly as possible, we may say, that each organic substance is liable to the attack of a microphyte which finds in it the conditions which constitute an appropriate nidus for its proliferation.

The spores of these fungi are in the atmosphere, and are so