

vegetable organisms. There is no physical proof that such would be the true definition of the atmospheric *materies morbis*.

Is it the phenomenon, or force, or function, of this floating atmospheric matter, to whose morbid effects we attribute the results we consider to be due to an atmospheric *materies morbis*? It is impossible, for if such were the case no living organism, be it animal or vegetable, could exist surrounded with such destructive forces. I cannot conceive, nor do I see any proof, that there is any such thing as an atmospheric *materies morbis* till one is generated.

That great physical scientist, Professor Tyndall demonstrated by the most conclusive experiments that the atmosphere was filled with floating matter, which, under favorable circumstances, when it came in contact with other matter, generated or produced a very low living animal organism. He also proved that another of its phenomenon was to transmit or conduct rays of sunlight to illuminate our planet; and, again, that this atmospheric matter could be burned by flame,—all these facts Tyndall established by experiments. But he did not demonstrate the physical characteristics of this matter as to whether it was mineral, vegetable or animal matter, or a combination of all three.

Now, as I have already said, it is an established physical fact, that under certain circumstances in the natural order, mineral matter furnishes the material for vegetable matter, and vegetable matter furnishes the material for animal matter,—it therefore follows, from Tyndall's experiments, that this matter in the atmosphere must be vegetable matter, which, under favorable circumstances, causes decomposition of matter, of generates or produces living animal organisms, which may, or may not be, according to circumstances, a *materies morbis*, a germ of disease, and afterwards become an *atmospheric materies morbis*.

This is in accord with the well-established physical law of latent forces in matter, the existence of which we are frequently ignorant of till two forces come in contact with each other, and we have an explosion; it may be dynamite, it may be a fit of epilepsy, it may be an attack of mania, it may be a chick from an egg, or it may be a germ, a *materies morbis*, that, before its forces were exhausted, would slay its tens of thousands. but, fortunately, in time these forces are exhausted. If I am logically correct in my physics, it follows

that the atmosphere, of itself, is innocent of generating a *materies morbis*, but that it contains matter which, when coming in contact with suitable soil,—the two forces meeting—result in a low living organism, which may or may not be a *materies morbis*, a germ of disease. What the characteristics of this germ will be must depend upon the nidus, which is the recipient of the atmospheric matter. It is only thus can we account for the different forms of germs, those of phthisis, of typhoid fever, of cholera, of yellow fever, pneumonia and septicaemia.

Now, I do not deny the fact that any germ once formed may not be carried from one locality to the other by means of atmospheric air, as well as by any other mechanical means, such as the hands, water, or clothing; but I do maintain that there is no physical evidence that atmospheric matter, or any other matter, can of itself generate a living organism—in other words, that there is no spontaneous generation.

It may be asked, why, then, use the spray or any other antiseptic treatment in surgical operations? I reply that an open wound, caused by a surgical operation on animal structure, appears to be a most suitable nidus for the atmospheric matter to come in contact with, to produce the germ of septicaemia, and the carbolic spray or other antiseptic, which has proved so successful in operative surgery, probably so changes the phenomena or function of the atmospheric matter, as to prevent the generation of the septic germ; moreover, no surgeon can be sure that there may not be septic germs in the locality in which he is operating. Under any circumstances antiseptic precautions can do no harm.

Here it appears to me that the question naturally suggest itself, how so many persons fall victims to these germanic diseases, typhoid fever, cholera, and while so many living in the same surroundings escape from these maladies.

It certainly must be due to the fact that the organs or tissues, with their functions, of the victims, must be in an abnormal state before being the recipient of the atmospheric matter, and in which a nidus is prepared, that evolves the germ and that those that escape do so because they possess normal organs, tissues, and consequently normal functions, whose forces will destroy a living germ coming in contact with them, and under no circumstances will such organs of tissues form a nidus for atmospheric matter or