

these influences may be counted with either factor N or E. In other occupations, for instance tailoring, consumption originates because during the labor a part of the lungs—especially the apices—are not ventilated, and therefore the tissues lose their normal activity and power of resistance, so that the Koch cells, with the toxins drawn from the tissues bring on the disease.

All enfeebling diseases may become developing factors of consumption.

Nervous affections may also be considered favoring the disease, such as the degeneration of the respiratory nerves with paralysis, tabes and myelitis. Also the great loss of flesh in hysterical inappetence and vomiting cause consumption, like the consumption through hunger and destitution. Also in cases which I have designated as "asthma diurnum," at which a persistent incomplete respiration takes place, would cause in an equal way consumption.

We have considered until now the "nature," the "second nature," and other faculties of development of our preceding formula. We must now inquire into the proper accidental causes (O) of the disease.

Here we must again inquire whether such is always necessary. The inherited causes do not compel us to such an assumption. We can perceive that the conditions of life are such, that the healthy process of living conditions and chemical changes at a certain period of life, as well as in inherited paralysis, or tabes, or carcinoma assume a character of sickness. Even if in such a case a definite symptom, namely, the appearance of the Koch cell were under all cases and from the first moment determined, it does not say that logic would demand that these cells present an essential condition of sickness. It might be possible that there are many unavoidable evidences.

The conception of tuberculosis for these cases as a disease of degeneration was the one generally assumed before 1882, and is not, as appears to me, entirely free of objection at this day, though we have entirely relinquished this conception.

I do not wish to make of this an assertion, not even express a personal conviction, only the right to state my doubt. Doubt is the mother of criticism and the guardian of false deductions and errors.

It is beyond a doubt, however, that in inherited and acquired predisposition, the tuberculous virus usually generates the disease.

VI. BACTERIOLOGY AND CONSUMPTION.

Before I pass to the regulations and measures for the cure of consumption, I beg leave to make a trifling excursion into the field of the doctrine of microbes. I have avoided until now the expressions bacillus, bacteria, bacteriology and bacteriologists. The one reason is purely