

of the higher nervous centres. If in certain cases the children are found specially liable to be drunkards, or, as would seem not infrequently to be the case, are affected by amounts of alcohol which are without effect upon those of sound parentage and constitution, this, I would point out, is not direct proof of a direct alcoholic inheritance, of inheritance of a craving for strong drink—it is explicable as an indirect result of parental alcoholism—as due to deterioration of the germ cell—to imperfect development of the higher nervous system—as a result of mental instability, in consequence of which the offspring has inadequate self-control, succumbs to alcoholism just as he is liable to succumb to other vicious habits, and from the unstable condition of his nerve cells those are more easily thrown out of gear by alcohol as by other toxic substances. For the time being, that is, in the absence of positive proof, I am willing to concede the non-inheritance of specific alcoholic tendencies.

Continuing this train of thought, we recognise that, while tuberculosis and syphilis as such are not inherited, even where not congenitally acquired by the offspring, the parental disease may have definite effects upon that offspring. If the study of bacteriology has accomplished nothing else, it has shown us this, that the symptoms of infectious disease are not due to the mere presence of microbes in the system, but to the action of the toxins or toxic substances developed by the bacteria in the course of their growth within the organism, and, that so, infection is but one form of intoxication.

If, therefore, one or other parent, at the time of conception and preceding this, suffers from an infectious disease in active progress, the circulating toxins are liable to influence deleteriously the offspring. Thus, while denying the direct inheritance of infectious disease, we have to recognise what may be termed “indirect inheritance,” where, for example, the father suffers from syphilis and the mother is free from the disease, the frequent abortions and miscarriages are not necessarily an indication that the foetus is directly infected, but, judging from the absence in many cases of clear indications of syphilitic lesions, either in the placenta or the dead foetus, death has been due to the deleterious effects of the syphilitic virus upon the spermatozoon.

This leads us to another series of considerations. We seem to see—I put it guardedly—that the offspring of syphilitic parentage has a tendency to show a series of disturbances and imperfect developments differing from those of the offspring of tuberculous parentage, and we refer to these as “parasyphilitic” and “paratubercular” lesions respectively. The syphilitic progeny is mentally dull and of delayed development, the teeth tend to be notched, and so on; the