

Habit Circles due to exaggerated reflex irritability of the nervous system form a subsection of this Group. As examples may be mentioned some forms of cough, blushing, epilepsy and stammering.

Other neurotic Circles are associated with the use of morphia, tobacco and various drugs, and will be described in the Chapter devoted to Artificial Circles.

GROUP V.—CHEMICAL CIRCLES

Chemical correlations are met with in such disorders as asphyxia, hyperchlorydria, hyperthyroidism, anaemia and toxæmia.

GROUP VI.—CIRCLES DUE TO IMPERFECT REPAIR

Mitchell Bruce has drawn attention to Circles that are met with in various diseases in which recovery is incomplete, in which there is no *restitutio ad integrum*:

"The patient does not die, but he remains permanently damaged, disabled, delicate, and possibly in distress. Such is the termination of a proportion of cases of cerebral haemorrhage (hemiplegia), and acute endocarditis (valvular disease of the heart). A part of the brain, a valve of the heart, is permanently damaged; the man is healthy but not sound. . . . The incompleteness of recovery is shown by a disposition to relapse, as in perityphlitis and gastric ulcer, by diminished resistance to the cause of fresh disease. . . . In this way, amongst others, a Vicious Circle forms and widens."¹

¹ Principles of Treatment, p. 158.