

more complex and co-ordinate movements, similar to those executed in ordinary life, but differing from them in that they are more or less involuntary. Examples of this class are very commonly met with, and many of them could scarcely be considered diseased states; thus the various attitudes unnecessarily assumed by orators, some of which become characteristic of the men, might fairly be placed under this heading.

The following are a few examples given by different authors. Sinkler records the case "of a girl who when walking would stop, rub the toe of one boot against the calf of the other leg, and then go on as if nothing had happened."

Noir gives descriptions of co-ordinate tics in feeble-minded children. "Among the more common movements in such cases are balancing, jumping, rolling the head from side to side, striking the chest with the chin, and hitting the head or chest with the hand. Dr. Osler considers that the disorder described by Dr. Gee as "head banging" comes also within the same category. He also regards as an exaggerated example of co-ordinated tic, Weir Mitchell's case of a man who, "unless completely at rest in the recumbent posture, would strike his side by a pendulum-like action of his left arm. This movement he repeated about 150 or 160 times a minute in regular order."

4. *Psychical Tic*.—Charcot has said "Il y a des Tics dans la pensée comme dans le corps," and the class consists of those cases in which, instead of sudden twitchings and co-ordinate movements of the muscles, there are imperative ideas. These compel the patient to emit certain words or expressions frequently of an obscene nature (*caprolalia*), or to count a certain number before doing something (*arithomania*). As with the other classes, the sufferers here may be so slightly afflicted as to scarcely be called diseased, or these imperative ideas may be so strong and uncontrollable as to make their lives miserable.

If one should venture to suggest any improvement on the classification of the tics into four groups, it would be in the direction of advising that this fourth class, containing the purely psychical cases, be omitted altogether from the tic group—their nature is so far removed from the primitive idea of twitching or jerking that it would seem simpler to only place in the tic category cases presenting motor symptoms.

*Case*.—J. B., aged 57, complains of twitchings of the muscles of the face and neck which have lasted about sixteen months. He is a laborer; has been married seven years, and has had no children. His wife has had no miscarriages. Is a very moderate smoker and drinker.

*Family History*.—Father died of "old age," aged 81. Mother died from the same cause at the age of 78. Three brothers