Another phenomenon and one which renders the case unusually interesting, is, that when the patient has fairly gotten started he can walk with very little interruption.

I think it was Sidney Smith who remarked about walking, that if a pedestrian sets out to accomplish a given distance, say five miles, he can do it with ease and with little or no weariness; but if one sets out over an unknown road for a place whose exact distance is unknown but supposed to be a couple of miles, if it turn out to be five miles the traveller will be weary. In other words, the traveller in the first case is "wound up" to run five miles and that being done the rest of the walk becomes automatic, while in the latter case there is required a constant exercise of volition. So, in the case of our patient, the first setting out requires the control of the cerebral cortical centres, but when he has fairly got a-going and walking becomes automatic, the lower co-ordinating centres taking control, the patient does well enough. Not only is this the case with walking simply, but the patient will stagger out from his home to his fields and taking his hoe will do a steady forenoon's hoeing with only an occasional interruption. Hoeing, to a market gardener, has become automatic. The patient finds that the choreic movements are worse when making any voluntary movement after having been at rest, as, for instance, on first rising in the morning or when about to resume work after meals. He is, so to speak, being wound up. These movements however, while affecting only the voluntary muscular apparatus, are not confined to such times as the patient is making voluntary movements, but occur when he is at rest and quite frequently during sleep, so that at times the patient will be wakened by the violence of the movements which are not connected with conscious dreaming. The movements, too, are worse on the approach of and during storms, probably during the time of low barometer. They also become worse when the patient has been exhausted by much work. Further negative points as regards present condition are, that the patient is a ruddy hale old man, whose nutrition and general functions are carried on very well. Muscular strength good; mental faculties seem sound; heart sounds normal; sensation and reflexes normal; no paralysis, paresis, contractions or atrophy.

As regards past history, it may be noted that

there is no history of defined rheumatism, nor of syphilis, nor has he ever had any paralysis. There have been in the past certain sensory symptoms, which have not been constant; these were, a sensation of painful cramp coincidently with the jerking, and a feeling "as if many worms, two inches long, were wriggling in the flesh," which preceded the jerking. Some ten years ago, had quite severe pains in the dorsal vertebræ, which lasted about six months; during part of that time the movements affected the muscles, causing constant alternating rotation of the head. At no time has he been delirious, but at various times during these forty years has been very dizzy, more in former years than of late. The dizziness, when it occurred, was not a passing sensation connected with the stagger, but a continuous sensation lasting many hours.

The case illustrates several points. 1st. The occurrence of chorea in the aged. 2nd. The fact that neither the general nutrition nor the mental condition are necessarily seriously impaired. 3rd. The economy of nervous force, by which movements which are habitual become to a certain extent controlled by lower co-ordinating centres.

## CALCULUS OF THE FEMALE BLADDER REMOVED BY LITHOTRITY.

BY J. R. HAMILTON, M.D., ATTWOOD, ONT.

In the early part of January, 1885, I was called to see Mrs. A----, aged 59 years, a resident of the township of Elma. I found her complaining of violent pain in her back and sides, which was aggravated by every movement that she made. Inasmuch as I had attended her for one or two attacks of nephritic colic during 1884, I made some enquiries as to the state of the bladder, when she told me that she had on that day passed some blood in the urine, which alarmed her, and was one of the reasons why I was called in. I suspected stone but as I did not have a proper sound along with me I waited until the next day to determine the fact, giving her an opiate in the meantime. On introducing the sound next day I discovered a pretty solid stone without any difficulty. It was situated on the right side of the bladder, and apparently fixed, as I found it there at several subsequent soundings. As the patient was very sen-