

convulsive movements; irritate the second, and the animal shows by his cries the pain he suffers; but if the student tries this experiment, some *centimetres* only further from the conjunction of the two roots, both of these effects will be produced together, for he will at the same time be operating on both species of fibres.

This admirable discovery of Sir Charles Bell has engaged physiologists to endeavor to ascertain whether the marrow itself is not formed of motive and sensitive parts. Their conclusions clash. It appears indeed the motive power belongs to the anterior chords, and sensibility to the posterior chords; but these characteristics are not so distinctly defined as in the pairs of nerves which emanate from these same chords; for the two opposite regions of the marrow are far from being anatomically isolated (as the two species of roots are); besides, the whole organ is subject to reflex actions, which, while they do not equal those of the brain, make the marrow something more than a nerve, and exhibit an intimate union between the parts; lastly, there exists in the centre of the marrow a grayish substance, whose functions had not heretofore been defined, and which might lead to difficulties in the experiments which could not readily be understood. This is the leading object of M. Schill's memoir. After having been persuaded that the posterior chord, raised and detached from the rest of the marrow, for a certain distance, felt and transmitted sensitive impressions, he made on the grayish substance a series of experiments, which demonstrate that like the whitish substance, it transmits the impression of pain; but when he irritated the substance itself he ascertained that it remained completely insensible.

"This was the most conclusive experiment he exhibited before the Academy of Sciences. On the table of vivisection there was a rabbit, on which he had made the ablation of the posterior chords of the marrow for a certain distance; below the section the marrow remained intact, and it was so sensible the animal cried when any thing was placed in the least contact; it was evident the impression passed by means of the gray substance which had been reserved; and yet this greyish substance might be pricked, cut, cauterized or galvanized, without exciting the least sensation; consequently, M. Schill affirms as demonstrated, that the grey substance, in itself, may serve as a conductor to impressions brought by the posterior chords."

At the same *sance* of the Academy of Science, M. Schill exhibited the phenomenon of the rapping spirits. He acquainted the Academy of Sciences that having been called to visit a young German girl, who pretended to be possessed of a rapping spirit, he really heard "raps" in the body of the girl; but a close examination convinced him that the "raps" were analagous to the noise made by cracking the fingers, and that they were produced on a level with the ankle bone, by the tendon of one of the muscles of the leg: the young girl had practiced herself to displace the tendon at will, and to make it fall with noise to the bottom of the socket, while at the same time, no exterior motion betrayed what was going on; it was only when he pressed his finger behind the external malleolus at the moment of the "rap," as skilful as the Foxes—as skilful as if he had been one of those fortunate mortals whom a benignant fate blessed with birth in the favored town of Rochester.

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ERGOTINE.

[Read before the Medico-Chirurgical College, July 1, 1854, and ordered to be published.]

According to Bonjean, Ergot contains two active principles, essentially distinct and constant in their effects, to wit: an active poison and a powerful and useful remedy; the first is an oil, very soluble in cold ether, and insoluble in boiling alcohol, and in which exists the toxicological properties of Ergot; the second he denominates Ergotine, which is a dark red extract, very soluble in cold water, and possessing in the highest degree