In every case of so-called muscular atrophy which I have seen or read of, in which disease either of the spinal cord or of the medulla oblongata has been detected, some symptoms of nervous disturbance have manifested themselves during life, either in pain, or in tremor, or quivering of the diseased muscles; but in every case which I have described as of *granular degeneration of the voluntary muscles*, there has been an absolute absence of any indication of nervous disturbance, as there is in my present patient. I am therefore induced to continue in the belief which I have heretofore expressed, of an idiopathic disease of the muscles, which is probably dependent on a defective nutrition of the sarcous elements. Every case, also, has begun in the lower extremities, and has appeared to extend in a centrifugal direction, regardless of the course and distribution of nerves. In the case in question, the sacro-lumbalis, the longissimus dorsi, the spinalis dorsi, the quadratus lumborum, and, I believe, the psoas and iliacus muscles are affected, so that the spinal column has nearly lost its sigmoid curves; and if the arsenic fail to arrest the morbid action, the muscles of the thigh will be next diseased, and then those of the legs. When the legs are disabled, I doubt not that the serrati and splenii muscles, the spinati, the deltoid, the biceps and triceps, and eventually the muscles of the forearm, will become successively implicated, in the order in which I have named them.

SINGULAR CASE OF ATTEMPTED POISONING BY LAUDANUM.

By JAMES DOBBIE, M.D., Glasgow.

A SHORT time ago, I was called to see a lady who, I was informed, had swallowed laudanum. On arriving at the house, I found the lady, apparently about forty years of age, unmarried, sitting up in bed, in a considerable state of excitement, and vomiting a dark fluid with a strong smell of laudanum. I encouraged the vomiting by administering mustard and water, and afterwards gave her coffee; and kept her awake most of the night. On calling early next morning, I found the patient well, and none the worse for the dose.

The peculiarities of the case are, that this patient, who at one time had been insane, and who, at the time when I saw her, was labouring under an attack of the same disease, so that it was necessary to send her to an asylum, had, on the day on which I saw her, called on two respectable chemists, and purchased from each one ounce of laudanum; she went home, mixed the two ounces together, swallowed the dose, and retained it for two hours and a half, when she became sick and vomited; she then told her friends what she had done, and I was sent for. I ascertained from the druggists that she had purchased the laudanum; and the ejected matter had all the colour, smell, and appearance of it. Moreover, the laudanum had been taken on an empty stomach; for the patient had partaken very sparingly of potatoes and milk, at 2 o'clock, and she had taken the laudanum at 6; and it was at 8.30 p.m. that I was sent for and saw her. It is singular that two ounces of laudanum should have been swallowed by a person not accustomed to it, taken on an empty stomach, and retained for two hours and a half, without producing any deleterious effect—not even the slightest inclination to sleep.

CLINICAL NOTES.

(Reported from the Practice of Dr. WILKS, at Guy's Hospital.)

VI.—TIC DOULOUREUX CURED BY GALVANISM WHEN ALL MEDICINES HAD FAILED.

THE following case is reported by Mr. Blenkarne.

Sophia C., aged 60, was admitted January 7th, 1870, under Dr. Wilks. In August 1869, the patient first began to suffer from neuralgic pains in the left side of the head, referred to the upper part of the left frontal region, and extending down the left side of the nose. At first, the pains were slight and transient, but they gradually became worse and more frequent, until now they were most excruciating in character, and brought on by slight causes, such as blowing the nose, talking much, or eating. The nerve involved appeared to be the first division of the fifth. She had lost all her teeth on that side; and in consequence of that and of the pain which attempts at mastication caused her, she was obliged to chop her food very small. She never had rheumatic fever nor ague; and, excepting for the present complaint, was in good health. She was ordered three minims of tincture of aconite three times a day; this was gradually increased until it reached seven minims on the 27th. During this time she was upon the whole

no better; the paroxysms which came on at times were of the most violent kind. On February 1st, she was ordered a drachm of chloride of ammonium every six hours. On February 7th, being no better, she was ordered half a drachm of hydrated peroxide of iron and three grains of sulphate of quinine every four hours. On February 11th, she was no better, and was ordered 15 grains of bromide of potassium every four hours. On February 17th, she was no better. All medicine was ordered to be omitted, and a continuous current of galvanism from 25 batteries to be applied. After this she gradually improved. On the 28th, she expressed herself as much better. On March 7th, she had hardly any attacks of pain. On March 15th, she was steadily improving, and had scarcely any pain in the face. On March 18th, she went out, saying that she was quite well.

PROFESSOR FLOWER'S HUNTERIAN LECTURES ON THE COMPARATIVE ANATOMY OF THE MAMMALIA.

Delivered at the Royal College of Surgeons of England.

LECTURE XVII.—Wednesday, March 23rd.

IN Carnivora, the number of digits is never less than five, except in the Hyæna. As a general rule, the thumb is comparatively small, and does not readily reach the ground in the Dog and other digitigrades; but in the plantigrades, such as the Bear, it is more developed. There is generally a kind of symmetry in the length of the digits; the third and fourth being the largest, and the second and fifth smaller and nearly equal. The first is the shortest. The number of bones in the carpus appears reduced; there is a fusion of the intermediate and radial bones (the scaphoid and lunar), forming what has been called the scapho-lunar bone. This is found in the Seals, as well as in the terrestrial Carnivora. The pisiform bone is well developed; and nearly all the Carnivora have a sesamoid bone on the radial side. There is no os centrale. Most Carnivora have a peculiar modification of the last phalanges for the support of large claws. In the Lion, for instance, the ungual phalanx forms a flat compressed plate, from the base of which grows a kind of sheath enveloping it, and leaving a space in which the nail or claw is attached. In the Dog, the outer sheath is shorter, and the claw is straighter and less powerful. In the Bear, the outer sheath is more extended than in the Dog. In order to provide for keeping the claws in an effective condition, there is in some Carnivora a peculiar arrangement for retracting them; the last phalanx is capable of being bent back on the next, which is specially hollowed to receive it. A strong elastic ligament holds the retracted phalanx in position; and the claw, when protruded, is drawn down by the tendon of the flexor muscle. In the Seals, the hand is broad and somewhat flattened, but the ulnar side of the carpus is much aborted, as in many swimming animals; so that the fifth digit is not only articulated to the unciform bone, but is drawn up to the cuneiform bone in the first row.

In Insectivora, as the Hedgehog, there are almost always five non-retractile claws. The scaphoid and lunar bones are generally connate, and the os centrale is often present. In the Mole, the hand is very large and broad; the number of phalanges is normal, and the os centrale is present. The ungual phalanges are disproportionately developed. At the outer or radial side of the hand there is a bone at first sight resembling a sixth finger, but in reality only an extra developed sesamoid bone; it has been called the os calciforme, and is apparently intended to give breadth to the hand.

In Chiroptera, the carpus is small, and presents great tendency to union of bones in various combinations. The fingers are much elongated, to support the membrane used in flying; the thumb is always free, and has a large hooked claw at the end. The third digit is especially lengthened; the other digits are sometimes reduced to two phalanges, as in the Pteropus.

Rodentia nearly always have five well developed fingers; but sometimes the first is abortive, as in the Capibara. The digits generally have the same relative length as in the Carnivora. In the Beaver, the scaphoid and lunar bones are united, and there are a well marked os centrale and a distinct sesamoid on each side. The Capromys and Capibara also have the scaphoid and lunar bones joined, and an os centrale.

Cetacea alone among Mammalia have more than three phalanges; sometimes there are as many as twelve or fourteen. There are mostly