two patients—whose cases have already been put upon record, the first being a tubercular tumor within the vertebral canal but outside the dura, making complete pressure upon the cord for two inches and a half, developing with great rapidity, and including complete paraplegia and exhausting hectic. The man made an absolute recovery after operation for removal of the growth, and is now, at the end of two years, in excellent health.

The second case was that of your townsman, Professor McGregor, whose history in brief was that of strained back two years or more before the onset of his trouble. In July, 1889, he first felt a decided pain in his back, his health began to decline, intestinal action became torpid, urinary retention succeeded, and pain, mostly in his right side, centered in his back. He was at first thought to have muscular rheumatism, and accordingly he endeavored to exercise and work it off. In two weeks he found it difficult to rise and dress; in five weeks he lost his ability to guide his limbs; he walked, pushing a chair. Further efforts to exercise were succeeded by complete paralysis. He pushed a chair before him, but fell upon his side. With indomitable will he made another effort, and fell upon his back then crawled to a sofa, where he lay all night, and subsequently was completely paraplegic and anæsthetic below his waist. His physicians, and Dr. Seguin, of New York, diagnosed pressure-paraplegia either from caries or from tumor. A temporary resort to mechanical support resulted in no gain. As a *dernier resort* he was put under my care for operation. At the time the patient was suffering from albuminuria and fever. Prior to the operation he passed through several attacks of an evidently septic nature, with chills, high temperature, and acute albuminuria. Operation was postponed from time to time from necessity, owing to the condition of the patient. An operation was finally done on April 16th, 1890. It resulted in my finding a sarcoma infiltrating the bone from the base of the spine of the eighth through the arches of the eighth and ninth dorsal, and the body of one vertebra. It also grew between the transverse processes of these vertebræ, and forward between the ribs, beneath the pleura. It occupied the vertebral canal and squeezed the cord flat over the length of an inch. It was entirely curetted away. He improved and bid fair to recover for four days, when obstinate hiccough set in, which grew worse and worse in spite of all measures to check it. It transpired that he had previously been subject to such attacks of vomiting and hiccough. From the fourth to the ninth day, when he died, his stomach was his worst trouble, and from its upset condition his exhaustion resulted.

A letter from Dr. Seguin mentions the ground of his differential diagnosis between myelitis and pressure-paraplegia, "the diagnosis turning upon the presence of fixed pain in one side, and also, with less logical force, upon the comparatively slight anæsthesia at a time when the volitional motor impulses were wholly arrested. A focus of central myelitis in the dorsal region would give rise to a paraplegia with equal sensory and motor symptoms, but with probably greater sensory symptoms, and the side pain would be absent."

We will now speak briefly of an entirely new operation, relieving occasional cases of intractable neuralgia by intradural resection of the posterior roots of the corresponding nerves. It is based upon the fact that this root of each spinal nerve is a purely sensory one. Within the dura it is free for an inch or more, but just outside it enters its ganglion, and unites with the motor root. The possibility of dividing the sensory root on the proximal side of the ganglion was proposed by Dr. Dana, who referred to me for operation the following case:

A middle-aged man, having had exposure to cold two years ago, immediately became the victim of intense neuralgia of his right fore-arm and hand, which subsequently extended to the brachial plexus. He had had his nerve stretched, and finally his arm amputated at the middle of the humerus, by Dr. Bull, of New York. His pain, however, had not abated. He acquired a morphine habit, taking half a grain hourly to subdue his pain. Some months after he came to me for operation. I exposed more than two inches of the cord in the cervical region, the portion corresponding to the roots of origin of the nerves involved. It appeared normal. On the following day, I removed the packing from the wound, and had the man placed in an excellent light with the head lower than the spine. Without anæsthesia I split up the dura mater