

matter escaped. A couple of inches higher up a similar collection of pus took place; was opened in like manner; and a quantity of pus of like quality escaped. The abscesses filled very slowly and when the skin had healed the space occupied by the Coraco-Brachialis and Biceps was found to have softened away during the suppurative process. No areolar tissue was discharged at any time.

CASE 3rd.—Mr. M——, Oct. 24. A large, muscular farmer amused himself with other athletes one afternoon in the January of '58, lifting heavy weights in a *stooped* position. A day or two afterwards the back became so painful that all exertion was discontinued and I was sent for. I had never before seen the patient but his appearance was remarkable. His suffering seemed to be that of excessive *crampi* or fatigue. A dull heavy expression of countenance, flabbiness of the muscular tissue, and a feeling of lassitude when at rest, and of pain, especially in the back, when in motion. He rested in a semi-stooped position. My attention having been directed to the back, a red painful track was discernible along the right side of the vertebræ, extending from the ninth dorsal to the second lumbar. Careful manipulation led to a suspicion of the presence of deep seated matter, and on the introduction deeply of a trocar, a quantity of matter escaped, similar to that observed in the previous case. The matter continued to pour for several weeks. Pain was now experienced in the mesial line and to the left of it but whatever may have been the morbid action going on, no pus appeared in either of these situations. During the continuance of the discharge the patient was reduced very much; his appetite failed; and even with the aid of tonics, codliver oil, &c., his pulse, feeble and irritable, was constantly above 130, and he was with difficulty kept from sinking. But the discharge diminished and eventually disappeared altogether. His appetite returned, and with it, health and strength. I examined the spine carefully at my last visit, and the spinous processes in the region implicated could no longer be felt; they had in fact melted away.

The cases are here cited in the order of their severity and not of their sequence; the last mentioned having occurred first; and the first mentioned, last. In the order of severity we have occurring from violent exertion: 1stly. Inflammation with its usual signs, pain, heat, redness, swelling, and impaired function. 2ndly. Inflammation followed by suppuration of the over wrought muscle and, 3rdly. Inflammation and suppuration of muscles extending to, and causing the destruction of, a portion of the osseous framework to which they were attached.

Other cases present themselves to my mind, but the three already mentioned were so well marked, so unmistakably due to excessive muscular action, and illustrate and support as well as I could wish the propositions I have to make, that I willingly confine myself to them.

The discharge in both the cases which reached the suppurative stage was unmixed with dead areolar tissue. The muscular fibre alone seemed to have suffered, and in neither instance was it replaced; the cavities in Mr. B's arm and in Mr. M's back still remain, and though completely covered up with skin, the sudden sinking of the finger indicates clearly the site of former disease.

It might *a priori* be questioned whether the muscles of the voluntary system could continue to obey the mandates of the will beyond a certain limit,—beyond