

one which it ought to have, and rendering it next to impossible to distinguish by feeling, between the suspensory ligament and tendons, and this deposit becomes at length, unless absorbed, so hardened and consolidated, that the enlargement is permanent. This is the result of the severe form of injury, or of "broken down," as it is termed, though there is really nothing "broken" or ruptured, albeit the epithet is an acknowledged one in the stable. It is no uncommon thing to see a horse when galloping at a rapid pace, suddenly stop, hold up one of his legs, or just rest the toe of it on the ground, and afterwards be hardly able to hobble a short distance to his stable. This is severe sprain, a "broken down," as farmers and grooms have it. But as YOUATT justly observes, "the tendon can never be sprained, because it is inelastic and incapable of extension; and the tendon or its sheath is scarcely ever ruptured, even in breaking down." In man the tendon does actually sometimes break through, as in rupture of the *tendo achillis*, but experience and repeated dissection have failed hitherto to detect such an accident to the horse; besides the tendon oftenest ruptured in man proceeds from much more powerful muscles than do the *perforans* and *perforatus* in the horse. BLAINE conceived "broken down" to be sprain or rupture of the great *suspensory ligament* of the leg, thinking rupture of the tendons "very rare." SPOONER in his commentary on WHITE says, that it is supposed to be rupture of the suspensory ligament or of the ligaments of the pastern, and mentions two cases in his own practice, which happened to horses on which the operation of neurotomy had been performed, in both of which the ligaments of the pastern gave way and the horses "came down on

the fetlock joints," and unless there is this "coming down," we should hesitate to pronounce the injury of such a character as to constitute *broken down*, of which we have no instances with regard to the *tendons*, and few only, authenticated, as respects the ligaments.

In practise it makes little difference whether the sheath of the tendons, or of the ligaments, be the seat of injury, since the treatment would be the same in both cases.

Thus though we have no actual rupture, there is no question but that in all cases of sprain there is lesion of the cellular and fibrous sheaths, and their attachments, to a greater or less degree, and probably some few fibres, either of tendon or ligament occasionally give way. We know, however, that such an accident is followed by violent inflammation with great lameness, swelling, heat and pain; the animal cannot endure to have the limb handled, nor can he put it to the ground, so as to bear the least weight on it. In four or five days after the accident, or sooner, the limb is found to be swollen from the fetlock to the knee, which swelling, if we cannot, by the remedial means known to us, reduce, becomes hard, running on to callus and permanent thickening of the parts, the leg becoming round and stiff, and the horse lame for life.

Such an appearance of the legs is seen also in old horses, who have done much hard and fast work, and experienced therein a series as it were of slight injuries, induced by constant battering on hard roads, with want of care in their stables, the consequent excessive and increased vascularity—action bringing on precisely the same condition of the parts. Such horses, in stable language, are said to have *gummy legs*.

*Treatment.*—This must be regulated