

city. Hence, they are adapted to form external tunics for the investment of such organs as are not intended to vary in their size. Occasionally, these *fibrous capsules*, as they are called, send down processes into the interior of those organs, for the purpose of giving them mechanical support. This is the case, for instance, with the membranes surrounding the brain of quadrupeds, and which form two partitions, the one vertical, the other horizontal; both being firmly stretched in their respective positions, and serving to divide the pressure. In other cases these sheets of fibrous membrane are employed as bandages, tightly bracing the muscles, and retaining them in their relative situations. The joints are surrounded by similar bandages, known by the name of *Capsular Ligaments*.

In following the series of animal structures in the order of their increasing density, we find the proportion of albumen which enters into their composition becoming greater, while that of the gelatin and mucilage diminishes. When the product is more uniform in its composition, it is in general less elastic than when it consists of a more complex combination of ingredients. A great preponderance of albumen tends also to diminish the elasticity. Thus the densest kinds of fibrous texture present, instead of thin and broad expansions of elastic membrane, the thick and elongated form of inextensible cords, constituting the ordinary *Ligaments*, and the *Tendons*. These structures resist with great power any force calculated to extend them: a property which of course excludes elasticity, but, when united with flexibility, implies great toughness. In a word, they possess all the qualities that can be desired in a rope. It will hardly be credited how great a force is required to stretch, or rather rend asunder a ligament; for it will not yield in any sensible degree until the force is increased so enormously as at once to dis sever the whole contexture of its fibres. Nothing can be more artificially contrived than the interweaving of the fibres of ligaments; for they are not only disposed, as in a rope, in bundles placed side by side, and apparently parallel to each other: but, on careful exami-