cells, the intercellular spaces being filled with a more compact substance, called the *hyaline matter*. Figure 4 represents a slip of cartilage from the horse, under a magnifying power of one hundred and twenty diameters.

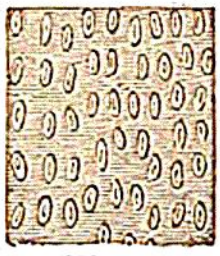

Fig. 4.

43. The *osseous* or *bony tissue* differs from the cartilaginous tissue, in having its meshes filled with salts of lime, instead of hyaline substance, whence its compact and solid appearance. It contains, besides, minute, rounded, or star-like points, improperly called bone-corpuscles, which are found to be cavities or canals, sometimes radiated and branched, as is seen in figure 5, representing a section of a bone of a horse, magnified four hundred times.

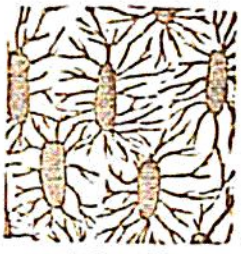

Fig. 5.

44. The *muscular tissue*, which forms the flesh of animals, is composed of bundles of parallel fibres, which possess the peculiar property of contracting or shortening themselves, under the influence of the nerves. In the muscles under the control of the will, the fibres are commonly crossed by very fine lines or wrinkles; but not so in the involuntary muscles. Every one is sufficiently familiar with this tissue, in the form of lean meat.

45. The *nervous tissue* is of different kinds. In the nerves proper, it is composed of very delicate fibres, which return back at their extremities, and form loops, as shown in figure 6, representing nervous threads as they terminate in the skin of a frog. The same fibrous structure is found in the white portion of the brain. But the gray substance of the brain is composed of very minute granulations, interspersed with clusters of larger cells, as seen in figure 7.

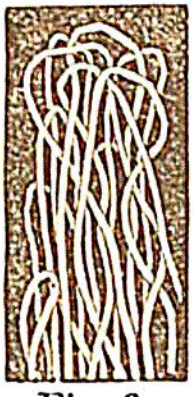

Fig. 6.

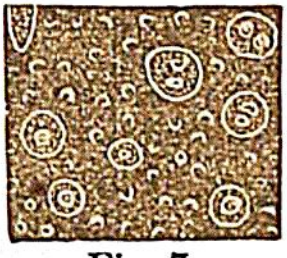

Fig. 7.