

3. There is an exceedingly common fossil in the Selkirk limestone which bears such a resemblance to the disc of a sunflower that it is not a matter of surprise that quarrymen should have called them "petrified sunflowers." Many excellent specimens of these can be seen in the stone brought to the city for building purposes. Some of them are ten inches in diameter and about one inch thick, perfectly round with a slight depression in the centre on one side, and slightly convex on the other. The whole surface presents a checked appearance, like the seeds in a sunflower. When a vertical section is examined it appears composed of innumerable rods about the thickness of ordinary wire. This peculiar fossil also occupies a very doubtful position in the scale of life. It has been referred to the sponges, corals and even plants.

Owing to it being found in the vicinity of some lead bearing rocks, it has been called "lead coral."

CORALS.

4. By far the most common fossils in this locality are representatives of the coral family, embracing several species. One very beautiful form is the "chain coral." It appears like a mass of small chains thrown together. Some very fine specimens of this kind have been found which show very distinctly the structure of a vertical section. One specimen weighed over twenty pounds. Another common coral presents a star-like appearance on the surface, and in some respects resembles the "honeycomb coral" of other formations.

This species occurs in comparatively large masses, and in some cases interferes with the successful "dressing" of the stone. Another variety of coral, not so common as the preceding, bears some resemblance to a horn, varying from two to six inches in length, two inches thick, and tapering to a point, and having a slight curve. These are the "petrified horns" of the quarry. Together with the preceding some two or three other forms of coral life are found in Selkirk quarry, a place where there seems to have been a sort of coral reef at one time on which these tiny organisms toiled in the waters of a warm sea, forming rock to be quarried by man when the genial climate was replaced by the cold northern blizzards which now sweep over the same place with a temperature forty to fifty degrees below zero.

CUTTLE-FISH.

5. Almost as common as the corals are the innumerable fossil remains of representatives of the cuttle-fish family. Several species are found, some of which are large—three to four feet in length. Most of these are readily recognized by a series of rings. These are the fossil segments of the animals' body. In some the rings are not more than one quarter inch in thickness, in others much thicker. The animals lived in shells consisting of many chambers, the last being occupied by the animal. They likely sported in the water near the shore, and thus became embedded in the coral reef. On examination of one of these fossils you will frequently find a rod-like structure passing through the centre of the segments. This is often the only remains you find of the animal, and must not be considered as the whole. Some of these structures are two inches in diameter, with a more or less beaded appearance, bearing a close resemblance to a piece of turned wood.

ANIMALS ALLIED TO CRABS.

6. As yet only the fragments of trilobites have been found in this quarry. But there is no doubt further investigation will be rewarded by more complete forms. The trilobite is one of the most complete fossils found. Some look very much like the "king-crab," exceedingly common in the vicinity of Portland, Maine. The shell-like covering is usually trilobed, hence the name applied to the class. The eyes were compound, like those of insects, and are most excellently preserved in one of the specimens found at Selkirk. The body of the trilobite is composed of a series of separate rings or segments varying in number in different genera. Sometimes these fossils are found in a rolled up condition, a form which the animal was able to assume, likely to enable it to sink with greater rapidity into deeper water during moments of danger. The well developed nature of the eyes in these crab-like creatures indicates that at this early period in the earth's history there was light. Some fossils of this class have been found which measured a foot in length. The largest I have found in Selkirk rock seems to have been the fragment of one five inches in length.

Besides these fossils grouped in the six divisions above, there have been found a few others of a more or less doubtful form, chiefly fragments which I am not in a position to describe but which after a more thorough examination of these