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[No. 10.

SNOW-SHOES.

For travelling in deep snow, the snow-shoe, either as manufactured by the Indian or as made in some foreign countries, has become with its owner almost a necessity, and its use in snow-shoeing sports, even in our own country, is gaining in popularity every year. It may be that some of our readers have never seen so much as the picture of snow-shoes, while others have sported with them many an hour over the drifted fields. In either case, we think

you will be interested in some things about them, gathered from a late number of *Harper's Young* People. The writer says

People. The writer says:

"Three things have the 'red children of the forest' given to the white children of the cities which are so perfect in their way that it is hardly possible there will ever be an invention filed in the pigeon-holes of the Patent-office at Washington that will surpass them. The canoe for shallow water and what might be called cross-country navigation, the toboggan, and the snow-shoe for deep snow, seem to be the very crown of human ingenuity, even though they are only the devices of ignorant Indians. One cannot help a feeling of hearty admiration when looking at them, and noting how perfectly they fulfil the purpose for which they were designed, and are at the same time as light, graceful, and artistic in form and fashion as the most finished work of highly civilized foll-

and are at the same time as light, graceful, and artistic in form and fashion as the most finished work of highly civilized folk.

"To the Indian, the cance, snow-shoe, and tobeggan were quite as important implements as the spade, the plough, and the rake are to the farmer. Without them he could not in wintertime have roamed the snow-buried forests, whose recesses supplied his table, or voyaged in the summer-time upon the broad rivers and swift-running streams, whose bountiful waters furnished him their ready toll of fish. His white brother has in adopting them put them to a different use. He had no particular need for them in his work, but he was quick to see how they would help him in his play, and erelong they had all three become favourite means of sport and recreation.

"In the States and in Canada the shoes are made in many shapes and of many sizes, ranging from two to six feet in length, and from ten to twenty inches

in breadth. This is how they make a shoe of three feet six inches, which is a fair average size: A piece of light ash about half an inch thick, and at least ninety inches in length, is bent to a long oval until the two ends touch, when they are lashed strongly together with catgut. Two strips of tough wood about an inch broad are then fitted across this frame, one being placed about five inches from the curving top, the other some twenty inches from the tapering end. The object of these strips is to give both strength and spring to the shoe. The three sections into which the interior of the frame

has thus been divided are then woven across with catgut, each having a different degree of fineness in the mesh, the top section being very fine, the middle section, upon which almost the whole strain comes, coarse and strong, and the end section a medium grade between the other two. The gut in the middle section is wound right around the frame-work for the sake of greater strength, but in the other two is threaded through holes bored at intervals of an inch or so. Just behind the front

I suppose most boys have enjoyed great in the mesh, the top ine, the middle section, the whole strain comes, and the end section a een the other two. The

in swimming.

It is not about such fish, however, that we are to write. There are many kinds of fish, not only of those caught by the hook, but there are what are called shell-fish.

THE OCTOPUS.

Naturalists divide mollusks into three classes. In the first and lowest are found the oyster, the clam, etc. In the second, snails, periwinkles, conches, and most of the beautiful shells so highly prized for collections. The third and highest class includes two orders called Tetrabranchiata and Dibranchiata (you need not pronounce these words if you do not want to do so). The first means four gills and the other two gills. To the first of these orders belongs the pearly nautilus, which has a most splendid shell or house in which he dwells and which he

most splendid shell or house in which he dwells and which he carries about with him. Now, to the other order belongs the cuttle-fish, of which there are two kinds, or genera, and many species, or varieties differing slightly in appearance.

slightly in appearance.

The octopus represents the first genus, or kind, and the sepia, or true cuttle-fish, the other.

The octopus is so named because it has eight arms, or legs, whichever you choose to call them. The true cuttle-fish has, in addition to these eight, two others which are much longer. These arms are covered with little suckers, by which the animal can seize its food, etc.; and as they are arranged around the head, it walks with the head downward.

downward.

A very remarkable feature of this singular being is the "funnel," which is a tube near the head through which it forces water and thus propels itself along. It has also the power to secrete a black liquid like ink (the word sepia means ink) and to throw this out to darken the water around it. It is believed that this is done to de fend itself from its enemies, of which it finds many in the blue waters of the briny deep.

waters of the briny deep.

The sepia, or true cuttle-fish, has no shell on the outside of its body, but has one inside, which is the "cuttle-bone" we feed to canary-birds. It is not a true bone, but really a shell like that of the overter.

of the oyster.

All of these shell-fish are older inhabitants of the world, so to speak, than the higher forms of animals; that is, their near relatives have been found in the oldest rocks.

A very interesting fact with which we will close this sketch, is that the ink of these cuttlefish has been found so perfectly

preserved that it was used to make drawings of the animal although thousands and perhaps millions of years old.—Our Morning Guide.



SNOW-SHOES.

cross-bar an opening about four inches square is left in the gut netting, in order to allow free play for the toes in lifting the foot at each step. Both wood and gut must be thoroughly seasoned, or else the one will warp, and the other stretch and sag until the shoe is altogether useless.

"Simple as the snow-shoe is, I would not advise any one to try to make a pair for himself. Only the Indians can do this really well, and even in Canada, where snow-shoeing is a national winter sport, the vast majority of shoes are put together by dusky hands."

These include such as clams, snails, oysters, and many other forms of water-animals so unlike the common fish that you could hardly see why they should be called fish at all. One of these odd citizens of the sea is the cuttle-fish, and is called the octopus.

Before describing this singular animal, let us learn where he stands in the great animal kingdom. One of the divisions of this kingdom is called *Mollusca*—a word that means soft—because they all have soft bodies, although they sometime have very

The great mass of idlers, thieves, paupers, vagabonds, and criminals that fill our penitentiaries and alms-houses have come to be what they are from wrong conduct and wrong habits in youth, as, on the other hand, those who make the great and useful men of the community are those who began right courses in their early days.