

snow formed a sudden rush of water down the mountain side and into the openings, which made it not only inaccessible for the time being, but proved it to be dangerous to enter for any extended explorations until the snow had practically disappeared.

"On the afternoon of May 31 and the forenoon of June 1, a raft and additional ladders were constructed to cross over the large pool that impeded progress on May 30 in 'Entrance No. 1'. While we were eating our noon meal on the 31st, Cougar creek overflowed into the entrance. We made the attempt to descend, but were drenched with water and our lights were put out. We constructed a dam to prevent this as far as possible, and at 6 a.m. on June 2 we again descended into the cave at this entrance, and found at a distance of 331 ft. from the surface a large chamber 50 ft. wide by 60 ft. in length. A large portion of the length was inaccessible owing to Cougar creek, which flows across it and had accumulated ice. We named this chamber 'The Auditorium'.

"At a point in the entrance just as we emerged from 'The Auditorium' a branch passage was found, which again joins the main entrance about 100 ft. from the surface. This branch passage is shown in photograph No. 2 by the dark spot in the extreme upper left hand corner of the picture. The curved path at the extreme lower right corner is the main entrance. Another branch passage was found to connect this entrance with the surface. A diligent search of this part of the cave disclosed no other accessible opening.

"'The Auditorium' is the only place thus far discovered where any lime deposit is found on the walls. This beautiful curve sweeps around to the right and behind the overhanging light coloured rock at the upper right corner of the picture. Its lace-like drapery makes it wonderfully beautiful.

"Photograph No. 4 is a typical illustration of this entrance, showing how fantastically the walls have been carved by the torrents of snow water that have rushed through it for centuries. At the bottom and near the centre of the picture is shown one of the poles of a ladder that leads down this passage, which is made up of a succession of rounded cistern-like cavities formed by the swirl and plunge of water. This passage is from 4 to 10 ft. wide, by from 10 to 30 ft. high.

"The falls, designated on the map as 'Lower Goat Falls,' were visited, with the hope than an entrance might be effected to the large cavern by the same passage through which the water from the falls enters, but it was practically filled with water and ice. The falls consist of two vertical drops; the upper one is about 30 ft. and the lower one 50 ft. A large amount of water is delivered into the cave from these falls, the place of entry being immediately at its foot. It is called 'Entrance No. 4.'

"No other openings were discovered by which access might be had to the large cavern, and we were barred entering it by those openings already described, and, for the reasons given, until such time as the spring floods shall have fully subsided.

"The rocks in which the cave occurs are of very

hard crystalline limestone dipping about 30 degrees to the east. In 'Entrance No. 1' these beds are very thick, and are made up of alternate bands of white mottled and grey marble. Some of the bands are very highly impregnated with fine sharp sand, so much so, in fact, that excellent whetstones can be made from them.

"The cave has undoubtedly been formed from water erosion. The stream which formed it, Cougar creek, which is entirely made up of glacier and snow water, was found above the cave to be free from any lime-salts. Its capacity, therefore, to dissolve lime rock when brought in contact with it is at its maximum. The fine grains of sharp sand loosened from the lime rock and caught in the swift current of the small stream that at first found its way through a shrinkage crack of some particular bed of limestone, have undoubtedly given the water an uncommon erosive power, which through the countless years of the cave's history has enabled that mountain torrent to carve out a mammoth channel in solid marble.

"The absence of all stalactites and stalagmites, such as are usually found in caves, and the presence of curiously carved marble walls, wonderfully varied in fantastic shapes and sombre colouring, suddenly makes one realise that he is far removed from all things familiar.

"As to the extent of the cave, the probable outlet from the cave is about one half mile south of 'Entrance No. 4' and 'Upper Goat' and 'Douglas Falls,' and the section is most probably a labyrinth of underground waterways.

"The one half mile between 'Lower Goat Falls' and the supposed outlet should be the largest part of the cave by reason of accumulated waters.

"There may exist many lesser caves farther north on the strike of this formation..

"No evidence whatever was discovered that any portion of the cave had ever been used as a habitation by any human beings, such as Indians, or by any wild animals, such as bears or wolves.

"This cave is situated on the west slope of the Selkirks in British Columbia, at the headwaters of Cougar creek, north about two miles from Ross Peak water tank on the C. P. R., and west two and one half miles from the Glacier station. It was discovered October 22, 1904, by Charles H. Deutschman, whose name it bears.

"Mount Sir Donald and the great Glacier are in plain view looking east from the cave, as is shown by photograph No. 5. In fact they can be seen from here to a far better advantage than from the Glacier House.

"Looking in the opposite direction, due west, the glacier forming Cougar creek is in plain view. We named it 'Grizzly Glacier,' because a grizzly bear only a few weeks ago came down over it on his way westward and disputed with Mr. Deutschman his right to invade the territory.

"Following up the Cougar creek towards this glacier for a mile and a half from the cave through a narrow valley with high mountains on either side, we came upon two little lakes, twins, covered with a spot-