

taking it up, found it to be hollow, and that it had a rat's nest of dry grass underneath. We had no museums in those days, and, as I was living in a tent at the time, and leading the rough life of a pioneer, the bowl was not properly taken care of. It was of oval shape, about 18in. long, by 12in. wide and 8in. deep, roundish at the base, and had at the top edge of one end a slight hollow scooped out, and an extension, or lip, projecting therefrom $\frac{1}{2}$ in. beyond its surroundings, evidently as a convenience to pour from. The wood of the bowl was about $1\frac{1}{2}$ in. thick, and in a fair state of preservation. Here we have good evidence that the bowl in the Cook collection was of New Zealand origin. But I think it should be notified to those who purchased the aforesaid collection that the bulk of the curios were not from New Zealand.

I append an extract from an English paper, which shows the burial-place of one of Captain Cook's crew, who sailed with him during his last voyage. The extract is as follows:—

“GAINSBOROUGH GOSSIP.

“By Gauntlet.

“One of the oldest inhabitants kindly guided me through the parish churchyard recently, and pointed out several items, some of which I jotted down for reference in this column, in the hope that they might prove interesting to my readers. . . . Another monument was sacred to the memory of Richard Rollett, formerly master sailmaker of H.M.S. The Resolution, Captain Jas. Cook, in her second voyage round the world; died the 20th day of January, 1814, aged seventy-four years. The ‘Resolution’ arrived at Sheerness, with her sister-ship the ‘Discovery,’ on the 14th October, 1780, Captain Cook having been killed by the savages at Owyhee in the February of the previous year. My loquacious and erudite guide informed me that Mr. John Nettleship, who formerly kept the Friendship Inn, married one of Mr. Rollett's daughters.”

ART. LII.—*Snow Scenes on the Southern Alps.*

By TAYLOR WHITE.

[Read before the Hawke's Bay Philosophical Institute, 15th Oct., 1888.]

I WILL first give an account of how my brother, John White, and C. C. Garrett were caught in an avalanche, and returned home one day hatless and without their long climbing-sticks. They started at grey dawn, in winter time, to climb one of the big ranges of the Eyre Mountains, situated on the south-west

side of that immense inland lake Wakatipu, their object being the rescue of any sheep which might have been snowed in.

These ranges, along the top, as seen in summer, are mostly run out as narrow as the ridge of a house, the topmost points being more or less perpendicular, and consisting of a yellowish-grey rock, sometimes covered by a minute lichen of a red colour, which will make the rock look a bright red when viewed from a distance; in more accessible places the ranges are rounded, and covered with broken fragments like road-metal, all of corresponding size—in one area large, in another place all much smaller, but always of uniform size. The very steep places seldom hold the snow long, owing to the action of the wind and sun. As a rule it is impossible to travel along the actual ridge, but here and there are places which will allow a passage to the other side of the range.

To return to my story: The two were travelling along, one behind the other, changing places occasionally by the leader falling to the rear, which is requisite in snow-travelling, as the person in advance has the most fatiguing work in breaking down the snow, and so it is advisable to relieve one another in this way. They were near the mountain-top, and moving parallel to the summit, when a crackling noise was heard passing along above them, and almost immediately the surrounding snow, with them on top, commenced to slide downwards, leaving the ground above quite clear from snow. Presently the surface of the moving snow began to undulate and mix up, great newly-made snowballs suddenly consolidating as they rushed down over the surface. They were then knocked down and covered up in darkness, but could feel from painful abrasions that the course was still downward, and lively apprehensions were entertained lest they should be carried over some precipice. Luckily this did not occur. My brother was the first to force a way out from under the snow, and looked about anxiously for his companion. Soon a portion of the snow was seen to be violently agitated, and arms and legs appeared, presently followed by their owner. They were more or less sprained and bruised by rough treatment, and caps and sticks were lost; so they came home with heads tied up in pocket-handkerchiefs, and looked as if they had been engaged in a free fight.

Another avalanche occurred in this manner: I was in chase of some thirty sheep, which were endeavouring to circumvent me by climbing upwards to some steep rocks from which the snow had blown away, and which so looked inviting at a distance, but, of course, were too steep for even a sheep to travel on. I sent my dog after them to head the mob down. He overtook them just below the rocks, turned them, and then I was amazed to see him, with legs stretched out, spinning round and

round in the same place, with the sheep standing below him. Presently the dog ran off upwards, and I then saw the reason of his strange efforts to escape, for the snow had evidently been in the act of parting where the dog had been. Then a great sheet of snow began sliding down, carrying the sheep with it, and shooting into a narrow channel leading down the mountain abreast of the spur on which I stood. On entering the gully the snow began to break up, and at times all the sheep were buried from sight, then several bodies would pop out, disappearing again like porpoises playing at sea, others appearing and disappearing as the whole mass rushed down hill. When the snow came to a stop the sheep commenced to force a way out and shake themselves, and I believe every one came out all right. Of course these sheep were merinos, and so good climbers and very active.

A most wonderful sight was the remains of a very large avalanche at the shady side of Mount Nicholas. I saw it after the bulk of the winter's snow had thawed in the spring on the sunny slopes. Travelling round the back, along the foot of the mountain, which is detached from the main range by small valleys, I came to a large gully which descended the mountain-side. This was at the foot filled up with gigantic snowballs, one on top of another, 30ft. or 40ft. deep, some 6ft. through, others not less than 3ft., all circular, very hard, and distinct one from the other. I went across, stepping from each one as if they had been large boulders, and could hear the water of the creek rushing under them, deep down underneath.

One very severe winter, which was commenced by the most terrible thunderstorm with heavy rain, the thunder being almost continuous, aided by the echoes and vibrations along the mountain-sides, it seemed during the darkness of the night as if half the mountain-sides were coming down in landslips. All this confusion of sound and fierce lightning caused the merino sheep to make upwards through the melting snow left from a previous storm, it being the natural instinct of the mountain-bred sheep to hurry upward when in danger or fear. Consequently, when the heavy rain was succeeded by an unusually heavy fall of snow, several large mobs of sheep which were collected together on the upper parts of the range became completely blocked in by the snow. They by trampling consolidated the snow under foot to a thin sheet of ice, and so made an enclosure with solid walls of snow some 8ft. high. One large mob of about fifteen hundred were trapped in this way at the head-waters of the Afton Creek, on the south-west side of Lake Wakatipu. The snow, being in the form of dry crystal cubes, had no adhesion on the surface, so the cold dry winds which succeeded the storm blew

it in cutting drifts against the outermost sheep, causing them to crush and trample underfoot some five hundred of their number. The dead became frozen and hermetically sealed up in the icy floor. On the accident becoming known an attempt was made to drive the survivors over the top of the range to the sunny side; but the summit rocks proved to be perpendicular, and, the snow giving way on their steep face, about ninety of the leading sheep were precipitated over the cliffs on the opposite side, and killed. After this it was found necessary for all hands—five of us—to climb up the mountain through the snow for five successive days, and, it being useless to attempt shovelling the loose snow, all were employed treading it hard to a width of 18 in., forming a solid track along the mountain-side for fully a mile and a half, towards the termination of the range. Here it was almost free from snow owing to its facing the sun. On the sixth day the sheep were coaxed along this line in single file, and so taken out to the clear grass. Here and there one would leave the track and become buried in the snow, requiring to be searched for, pulled out, and the snow adhering to its head scraped away from over the eyes, and started again on the track. A few suffered from snow-blindness.

A man undertook to skin the dead sheep during the ensuing summer, and used to dig the bodies out with a pick, then roll them down the hill and allow a few days for them to thaw out. They remained fresh quite into the autumn.

Two or three sheep snowed in are found by seeing a small round hole in the snow, about 3 in. in diameter, and having the edges discoloured. On breaking down the snow the sheep are seen in a small circular dome-shaped hollow. If the frost has hardened the snow-surface, on lifting them out they scamper off, having been shut up without food for possibly a fortnight. I never noticed instances of their eating each other's wool, as is said in books to be the case, but have seen the wool thick on the ground, having been frozen tight when the sheep were lying down, and so pulled out in locks on the sheep rising. This might give the impression that the sheep had pulled it to eat, to persons who did not observe closely.

Sheep are difficult to see on the snow at a distance, owing to their carrying a coating of snow or frost on the tips of the wool, and sometimes having long icicles attached to their sides. The discoloured tracks made for short distances back and across the limit of their snow-yard is what mostly leads to their discovery from any distance.
