

VANISHING SNOWS.

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THE following observations regarding the melting of the winter accumulation of snow on Cairngorm and adjoining mountains were taken from one viewpoint, over the period 21st May to 2nd June.

The spring and early summer of 1902 will long be remembered in Strathspey for the severity of the weather. According to universal testimony, no such accumulation of snow has been seen on Cairngorm at so late a date for many years. In a particular instance, recollection travels back as far as 1860 for a parallel, or, strictly speaking, more than a parallel.

The covering of snow, which had in very considerable measure disappeared during February, was resumed in March. Towards the close of the latter month the low ground began to clear, but snow still rested continuously on the hills. Throughout April this remained the case, and the showers of hail and occasionally of snow, which made bitter the existence of dwellers in the strath during that month, had an equivalent on the higher ground in persistent snow. Up to 21st May it could not be said that the snowfall had in any measure been perceptibly impressed by the sun's strengthening beams, and on the mountains over all there lay a mantle of white which contrasted vividly with the russet tint of the birch copses and of the heather-clad knolls on the lower ground. On the date just mentioned, however, the wind, which had for some three weeks blown from the north, shifted round to N.-W. and W., which directions were maintained for the next eight days. Then the melting process on a large scale began.

On the date these observations were commenced the state of matters on the Cairngorms was this:—At an elevation of 2000 feet or thereby, *i.e.*, some distance below the summit of Carn Elrick (a notable landmark from the

point of survey), the lower limit of snow might be drawn in a line of demarcation as clear as on Alpine summits in summer. Above that level the Cairngorm range was one expanse of white, save here and there on precipitous faces. The purple of the under half contrasted most markedly with the white of the upper. The hills on this particular day seemed unduly near, an evidence, it is said, of speedy rainfall.

During the night rain did fall, with an accompaniment of high wind, through the influence of which there was quite a perceptible disappearance of snow on the morning of the 22nd. Naturally, the slopes exposed to the wind were the first parts to be cleared. On the 23rd the disappearance was most marvellous, resulting from a high N.-W. wind that prevailed all night. For the first time dark points appeared on the main ridge (E. to W.), while the lateral ridges were for the most part bare. Fields of snow were now confined to the carries, with accentuation on the side remote from the wind. The only other continuous lines of white were along the water courses, where in the furrowed track snow had gathered or been driven. The diminution of the extent of white continued throughout the day. The lower limit of snow seemed slowly to rise; only here and there a patch remained below the general level. The wider expanses on the mountain side now presented a ribbed aspect, which soon developed into a mottled surface. The white line of the water courses remained, however, as before. A notable atmospheric accompaniment was a pall of cloud sweeping the ridge along the line of wind, and bridging the Larig at intervals by an unsubstantial crossing.

On the 24th the disappearance on the several parts was proportionately continued; the main ridge was in greater part black; the sides of the Larig all but clear. A noticeable feature in the disposition of the snow-patches now came under notice. They were planted immediately under the upper lateral ridges, remote from the direction of the prevailing wind. This seemed to indicate two things:— (1) That the wind which was at the time blowing had been the main factor in clearing the area under snow, the

sunbeams having little to do with the vanishing process; and (2) that the wind which caused the drifts was from the same direction as that now acting. As further showing that the wind had more to do with the matter than the sun, it may be remarked that the Spey showed no increase at all proportioned to the decrease in the snows. The transition from snow to vapour had been rapidly conducted, and so saved the discomfort of flooded plains. Among the snow-patches thus gathered under the ridges, the most marked succession was that on the west side of the Larig, which was at the end of the month still clearly existent.

On this same 24th the eye could not fail to remark the fine combination of colour that prevailed in nature. The faint green of the late-opening birches; the rich green of the corn blades matching the living green of the larches; the sombre mantles of the firs, whose combination was at points relieved by an occasional larch; the brown of the moors and the nearer hills, and the hazy purple of the under portion of the more remote, o'ertopped by the diversified white and black of the upper ridges, made a happy and harmonious whole. The other shades will remain throughout summer, slightly mellowed no doubt, but the white will be in great measure lost, and with it much of the effect will depart.

As though nature were conscious of being behind in her annual working and were in haste to atone for the lost interval as for the unduly prolonged manifestations of winter, there blew for the next four days (25th, 26th, 27th, 28th) a steady N.-W. wind, which latterly veered to W. At times its strength was such as to form a gale. Under this prolonged force the snows on Cairngorm became every day reduced, although the main aspect of the hills seemed to be unchanged. On the 26th the eye could plainly trace a zig-zag path devoid of snow from the base to the summit of Cairngorm. On the 28th the opener expanses were practically without snow. This held good throughout the day, but in the evening there was again quite a perceptible veil of white over the whole hill area, from 2500 feet upwards, and comprising the sides of the Larig.

The 29th was stormy, with local showers all day, and in

the afternoon an exceptionally heavy hailstorm. The hills were enveloped nearly the whole day, so that there was no possibility of accurately noting the effect upon them. But the morning of the 30th was clear, and revealed no additional fall.

The wind now changed from the direction it had held for over a week, and was converted into one from E. and N. by turns. The latter part of the 30th was extremely cold, and the rainfall heavy. The 31st was even worse in both these respects. Up to evening the Cairngorms were quite invisible, but late in the day the cloud screen was to some extent raised, and the effect of the cold north wind became evident. This record was commenced in the confident persuasion that phenomena were being remarked for the last time this season, but on this final day of May the initial phenomenon was, contrary to all expectation, again manifested. That is to say, the mantle of white again rested on the hills over all from an elevation of 2500 feet upwards. In this affected area was included the Larig down to its entrance. On the 1st of June the wind still continued from the north, but carried no snow with it. In so far as the hills were visible, it was seen that the high ridges exposed to the wind were again clear, but that on the lee side drifts had gathered to a small extent. The morning of the 2nd showed these as all but dissipated, save at higher altitudes on Cairngorm itself. With the continuance throughout twenty-four hours of the mild weather presently experienced these will no doubt in turn disappear. There will then remain only the main accumulations, which from the point of survey are arranged thus:—On Cairngorm and adjoining heights west to the Larig, six; on Braeriach, four. These masses are collected in the corries, in parts inaccessible to the influence of wind or of sun, and are of so solid a nature that they are likely to persist in considerable measure throughout the summer.