

ON THE RISING ROAD.

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OUR aim was to visit all the corries and hill-tops that are down in the floras as gardens of the rarer specimens of Alpines. But on the long way to the farther heights, and during breathing-spaces and lunch intervals, other things than plants appealed to us, some of them hard to put on paper and others more easy of record.

The changing skyline and contours and the varying shades of vegetation in mass, cloud scenes and giant shadows, were matters for artistic handling, but the winged-life could be noted through a field-glass and the names written down. Beyond Coillecreich even, we seemed to enter a new faunal region, for there, hopping in the birken shaw below the road, were three magpies in their awkward motions and motley wear, uttering a harsh protest against intruders. In the Ballochbuie, redstarts were in numbers, and wheatears and stone chats appeared now and again. At least as far as the mouth of the Clunie, among the willows by the brooks, the young of the wood wrens (*Phylloscopus sibilatrix*) might now and then be noted, busily turning the leaves in search of aphides and other minute creeping things. We have noted this species for several seasons always in August, when, after the nesting season is over, individuals, or two or threes, frequent copses and gardens in their search for greenflies, spiders, and other minute insects. Ornithologists are somewhat unwilling to concede the point of the presence in the Dee Valley of this interesting bird, and ask for the indubitable proof of the domed nest not lined with feathers; but in reply we ask—"What can this warbler be, larger and yellower than the willow wren?"

From the days of Macgillivray the kingfisher has

been noted along the Dee, while dates of its occurrence and other circumstances point to the possibility of its breeding in the region ; but inquiry brought out the fact that it is now some years since its wonderful colours were noticed in Braemar. The most recent record—about six years ago—refers to the Balmoral stretches of the river. It was not our luck to see the snow-bunting nor the golden eagle, though we picked up two unmistakable tail-feathers of the king of birds in the royal forest. Ptarmigan we encountered on several of the higher ranges, once as low as 2,900 feet—on Little Craigendall. Old birds and young were both in evidence, but the young were much liker in plumage to the red grouse (of which we saw plenty) than their mothers. Black game are also frequent.

That bold outlaw, the hooded-crow—or should we call him the carrion-crow at once?—was in evidence in many a high glen, finding scope and sustenance through every season of the year. The appeal which he makes to our romantic sentiments has in it a flavour of the racial sympathies that admit Rob Roy or Paul Jones into the heart of the most tenderly-nurtured maiden. He is not a king like the eagle, but his qualities of daring, strength, and activity put him well up in the list of robber chiefs.

Of the evidences of glacial action and mountain torrent and flood there was abundance at every turn, and we were forcibly struck by a form of sub-aerial denudation with which geologists are probably entirely familiar. Our journey began in the first week of August, shortly after a "St. Swithin" of markedly moist conditions, when over five inches of rain was recorded in the low grounds in three weeks, but the air had been dry and warm for a week before our arrival and the long bare hog-backs of the higher hills were desiccated to such an extent that the peaty soil was gaping around every boulder. On several mountains, at about 3000 feet above sea level, we were puzzled by the ap-

pearance of the surface, which was marked by fresh scars at every square yard or so, four or five inches across, as if some sharp instrument had been used to pluck up patches of the peaty soil, exposing the subsoil to a depth of several inches.

Examination convinced us that, after an abnormal soaking, the sun-heat and winds had cracked the peat in all directions, and thus offered loose edges to the high winds which succeeded the rains, and which, of course, attain terrific force at such elevation. Patches of peaty substance had thus been detached from the face of the hills and hurled to the void. Such circumstances must frequently occur in Alpine situations, and must contribute in some degree to the wearing away of the mountains themselves. An eminent geologist says on this very point—"The potency of the wind in clearing peat from our higher levels will be noted by any walker across British or Irish uplands. In Wicklow the great glacial boulders, seven or eight feet high sometimes, have a little tufty residue of heather and peat clinging to them, while all round a clean sweep has been made by the wind. There is no doubt that our uplands are now desiccating and therefore losing peat. The days of mountain peat are over."

On the same phenomenon Dr. Alexander Bremner, whose knowledge of the physical geology of North-Eastern Scotland has been made known in two fine monographs, adds the following:—

"On the higher hills and plateaux of the Eastern Highlands hill-peat (as distinct from basin-peat) is no longer forming, but is, on the contrary, undergoing denudation. In dry weather, particularly in spring, its surface becomes intersected by shrinkage cracks. These cracks are lines of weakness, and high winds working along and from them carry away year by year a large amount of peaty debris, coarse and fine, sometimes stripping off the whole layer of peat, sometimes excavating hollows of various forms and sizes. Many of our smaller high level wet weather

lochans and pools—and some of a larger size and more permanent character (dubh-lochans)—rest on a peat bottom in wind-eroded hollows. Occasionally the coarser wind-borne debris has not been carried far and has accumulated, much as blown sand does on the western side of the erosion hollows—a proof that the strong desiccating east winds of spring are the chief agents of denudation.”

When we sat down to lunch, it was in some little dingle by a mountain rill, where the sun warmed us and enticed the hill-loving insects to bask in its rays. There were no noxious things, but the frequent appearance and frolics of lovely silver-washed fritillaries of several kinds and the abundance of gaudy five spot burnet-moths, and other species wholly unknown, made us sorry again that this part of our education had been neglected. We resolved that our next hill-climbing expedition must include in its personnel an entomologist, who could, on the spot, instruct us in the life histories of those lovely airy creatures that are the unsurpassed symbols of symmetry and lustre.