numerous specimens from all the above-mentioned countries; still I do not fail to notice that certain constant differences exist in the plumage of the Iceland, Greenland, and American birds; but I am not called upon to comment upon them here, since I am not writing a history of the family, but only of that one of its members to which the synonyms above given pertain.

A certain degree of altitude appears to be necessary to the existence of this species; yet it is remarkable that it never departs from the law which limits the Grouse family to certain high degrees of latitude. Why it should not be found on the snow-capped Himalayas, the Mountains of the Moon, or the regions

of the Andes is not for me to explain.

"I have frequently chased it," says Macgillivray, "on Ronaval and other mountains in Harris; and it is said to occur on Eachala in South Uist, on the Park and Uig hills in Lewis, on the Cuillin and Strath mountains in Skye, as well as in Mull and Jura. On all the elevated summits of the north of Scotland it is not uncommon; and on most of those of the Grampians, but especially the great granitic and slaty masses from which issue the sources of the Dee, the Spey, and the Tay, it may be said to be even abundant. Great numbers are annually killed; but as its haunts are not so easily accessible as those of the Red Grouse, it is not at all likely to be exterminated.

"While feeding, these beautiful birds run and walk among the weather-beaten and lichen-crusted fragments of rock, from which it is very difficult to distinguish them when they remain motionless, as they invariably do should a person be in sight. Indeed, unless you are directed to a particular spot by their strange low croaking cry, which seems to me very much like that of a frog, you may pass through a flock of Ptarmigans without observing a single individual, although some of them may not be ten yards distant; when squatted, however, they utter no sound, their object being to conceal themselves; and if you do discover the one from which the cry has proceeded, you generally find him on the top of a stone, ready to spring off the moment you show an indication of hostility. If you throw a stone at him, he rises, utters his call, and is immediately joined by all the individuals around, which you see spring up one by one from the bare ground. They generally fly off in a loose body, with a direct and moderately rapid flight, and settle on a distant part of the mountain, or betake themselves to one of the neighbouring summits, perhaps more than a mile distant.

"It is delightful to wander far away from the haunts and even the solitary huts of men, and, as cending the steep mountain, seat one's self on the ruinous cairn that crowns its summit, where, amid the grey stones, the Ptarmigan gleans its alpine food. There, communing with his own heart in the wilderness, the lover of nature cannot fail to look up to nature's God. I believe it, in fact, impossible in such a situation, on the height of Ben-na-muic-dui or Ben Nevis, for example, not to be sensible, not merely of the existence, but also of the presence of a Divinity. In that sacred temple, of which the everlasting hills are the pillars, and the blue vault of heaven the dome, he must be a fiend indeed who could harbour an unholy thought. But to know himself one must go there alone. Accompanied by his fellows, he may see all of external nature that he could see in solitude, but the hidden things of his own heart will not be brought to light. To me the ascent of a lofty mountain has always induced a frame of mind similar to that inspired by entering a temple; and I cannot but look upon it as a gross profanation to enact amidst the sublimities of creation a convivial scene, such as is usually got up by parties from our large towns, who seem to have no higher aim in climbing to the top of Ben Lomond or Ben Ledi than to feast there upon cold chicken and 'mountain dew,' and toss as many stones as they can find over the precipices.

"Early in spring the Ptarmigans separate and pair. The nest is a slight hollow, scantily strewn with a few twigs and stalks or blades of grass. The eggs are of a regular oval form, about an inch and seven twelfths in length, an inch and from one to two twelfths across, of a white, yellowish-white, or reddish colour, blotched and spotted with dark brown, the markings larger than those of the Red Grouse. The young run about immediately after leaving the shell, and from the commencement are so nimble and expert at concealing themselves that a person who has accidentally fallen in with a flock very seldom succeeds in capturing one. On the summit of one of the Harris mountains I once happened to stroll into the midst of a covey of very young Ptarmigans, which instantly scattered, and in a few seconds disappeared among the stones, while the mother ran about within a few yards of me, manifesting the most intense anxiety, and length began to search for the young, not one of them could be found, although the place was so bare that one might have supposed it impossible for them to escape detection. It seems wonderful, after all, how a thinks it has been observed), should generally elude the most diligent search."

The singular changes to which this bird is subject, and the little that is understood respecting the dress it bears at different seasons, have induced me to give three illustrations of the bird—in winter, summer, and autumn; and I am sure it will be admitted that, with less, the subject could not be rendered intelligible. It will be seen, then, that the birds change their dress almost as frequently as the aspects of nature on the