## THE MIGRATION OF THE EVENING GROSBEAK IN 1890.

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In a chapter on the migration and diffusion of animals in his Principles of Geology, Sir Charles Lyell writes as follows :---" Besides the disposition common to the individuals of every species slowly to extend their range in search of food, in proportion as their numbers augment, a *migratory instinct* often develops itself in an extraordinary manner, when after an unusually prolific season, or upon a sudden scarcity of provisions, great multitudes are threatened with famine."

As instances of these irregular and spasmodic migratory instincts he mentions the Leming (*Mus lemmus*) in Lapland, (countless thousands of these little creatures, once or twice in a quarter of a century, leave their homes in the mountains, and march to the sea-coast;) and the Springbok or Cape Antelope, which used to descend at intervals of three or four years from the interior of South Africa to the cultivated districts around the Cape.

Birds as well as quadrupeds are subject to these irregular migrations.

In April and May, 1888, great numbers of Pallas' Sand Grouse (Sprrhaptes paradexus) migrated from their home in Tartary to Europe, and appeared in England, Scotland and Ireland in great numbers.

They were first seen near Warsaw, in Poland, on April 21st; near Leipzig, in Saxony, on April 27th; but they did not reach England until about the middle of May.

Though they laid eggs in several places, they do not seem to have reared any young that first summer.

With the hope that some of them might be acclimatized to the country, Parliament passed a special Act making it illegal to shoot them until January, 1892.

Great numbers were shot before the Act came into force, but there were several well authenticated instances, of those that survived the winter rearing young ones during the summer of 1889. A somewhat similar migration of the Sand Grouse occurred, twenty-five years before, in  $_{10}63$ .