time with the tail, which goes rhythmically up and down. Several more of the Longbills come into sight but only one of the little Shortbills has the courage to show its streaked head above the sheltering flags.

Since we advanced through the high marsh-grass, many small birds have jumped out, not exactly from under our feet, but within two or three yards, and after a short, nervous flight, in which they alternately spread and fold the pointed tail-feathers, sink down and out of sight among the wavy yellow blades. Although the flight is short, a quick and practised eve can catch the yellow hue of neck and head and, together with its diminutive size, we know him well,—it is our friend the Leconte Sparrow. But presently we shall be treated to a novel sight. Five of the beautiful creatures adorn the leafless branches of a little hawthorn tree, eight feet in height and raising its head only a few feet above the tips of the surrounding grasses. sixth one comes up to take a seat; it is now their time to take an airing and a sunning, the only hour of the day when they remain thus exposed to view for any length of time. We pass a few more of these isolated thorn-trees, standing in line like sentinels along the slough, as if to keep the flags from marching upon the domain of the grasses. Each one has at this hour a small contingent of Lecontes, who after paying a visit to the watery region of the flags return to dry and preen upon the branches. But our hour is over.

## NOTES AND EXTRACTS FROM A LETTER OF EDWARD HARRIS.

BY GEORGE SPENCER MORRIS.1

INCIDENTS connected with the lives of the great naturalists of a past generation must always be of interest to those who seek to follow in their footsteps in after years.

<sup>&</sup>lt;sup>1</sup>Read before the Delaware Ornithological Club.

It is with much pleasure that I have from time to time observed in the pages of 'The Auk' brief anecdotes, extracts from letters, prints of old portraits, etc., which furnish us with additional information concerning the lives of Audubon and other noted ornithologists who have died.

The name of Edward Harris is one which deserves to be more widely known in ornithological circles than it is. Harris's Sparrow, Harris's Woodpecker, etc., bring it before us in the Check-List, but there are comparatively few who know aught of the man for whom these species were named.

It is perhaps true that Mr. Harris should not be ranked as a great naturalist, but it cannot be denied that he played a very important part in the advancement of scientific knowledge in the past generation by the encouragement and practical assistance which he frequently rendered to his fellow workers, and especially to Mr. Audubon.

Between these two men there was a bond of strongest friendship. In the writings of Audubon we find frequent references to Mr. Harris; and the great naturalist rarely mentions his name without coupling it with some expression of affection or admiration.

They were companions on several of Mr. Audubon's important ornithological expeditions, notably that of the year 1843 into the far northwest by way of the Missouri River with the Yellowstone region as a point of final destination.

During the journey Mr. Harris wrote long letters, as opportunity occurred, to his brother-in-law, Dr. John J. Spencer of Moorestown, N. J.

Dr. Spencer was a great-uncle of the writer. Through the kindness of his daughter, Mrs. Samuel Stokes, I came into temporary possession of one of these letters. It is written in an almost minute but very firm hand; it is yellow with age, and in some places is hardly legible. It is simply a diary of each day's doings extending over a period of almost two weeks. The letter is long and much of it is not of sufficient ornithological importance to warrant its complete publication in these pages. There are, however, certain paragraphs which I think cannot fail to interest the readers of 'The Auk,'—as for instance the description of the discovery of Harris's Sparrow, and the impressions received

on first hearing the song of the Western Meadowlark. The letter gains an added charm through its frequent references to Mr. Audubon and Mr. Bell—the latter being one of the party.

I have quoted verbatim such passages as I thought might be of special interest to ornithologists, and have briefly summarized the remaining portions so that a fair idea of the whole may be gained.

The letter opens as follows: -

"Missouri River May 19th 1843.

"My dear Doctor -

"I wrote you a few hasty lines yesterday by Mr. Laidlaw — the Company's superintendent at Fort Pierre, who was on his way to St. Louis with four Mackinaw boats loaded with buffalo hides. I now commence a letter to be sent by the trapper from Fort Pierre which we hope to reach in six or eight days. Since I wrote from Indipendence the most important event that has occurred has been my discovering a new Finch - a larger bird than the white-crowned sparrow which it very much resembles in the general markings of the body - but the head & throat are black with an ash-colored patch on each side of the head. On looking at my diary I see I wrote to you from Bellevue --- when I must have mentioned this new bird, but we feared that it might have proved the male of Townsend's Finch, with which it agrees in measurements exactly - a female only has been procured of that bird (Townsend's) but very fortunately only three days ago I succeeded in shooting a female which corresponds exactly in markings with the male excepting that the tints are rather lighter & the black not quite so widely diffused.

"Bell has also found a Vireo which is undoubtedly new. The rare birds which we have shot are the Clay-colored bunting—(F. Pallida), Yellow-headed trupial (Icterus Xanthocephalus), Lincolns' Finch—Chestnut-Collared Lark Bunting—(Emberiza Ornata),—Lark Bunting—(E. Grammaca).

"Our opportunities for shooting now that we have left that part of the river where wood could be found ready cut for sale, are not at all equal to our expectations; instead of stopping two hours before sunset to cut for the next day, as we had been

led to believe would be the case, we stop wherever we can find good wood and never less than twice a day, more frequently three times, and then only from thirty minutes to an hour at a time, and frequently in a bottom that has been overflowed and all the game driven out of it; the walking too so bad that it is scarcely worth wetting our feet for the poor chance before us. It is only when we are detained by a high wind or an accident to the boat that we can get a regular hunt.

"We have procured very few quadrupeds, a red squirrel that is rather rare and a black squirrel that may be new are the only ones. Mr. Audubon shot a wild turkey a few days ago,—the only one we have procured, and that would have been lost had it not been for 'Brag.' The bird was only wing broke and soon ran out of sight and hid in a thicket, but 'Brag' made a beautiful point at it and I shot it with number 10 shot; it was a female; it made us a good dinner and a fine skin.

"Our last accident, —the burning out of two plates in one of our boilers, which I mentioned in yesterday's letter, —detained us three days, we only got off this morning.

"In a few days more we shall almost entirely lose the timber, a few straggling trees on the bluffs of the prairies will be all we shall see and we must depend principally on the drift wood we find on the sand bars which is of very inferior quality. We now use green ash whenever we can get it; when it is not to be had dead cottonwood is the best we can procure.

"Elks are abundant here and have been for the past week— & hares also, but we have seen neither, the elks and deer are driven before us by the noise of the steamboat, & where the shores are wooded we never see them. The hares are in the high prairies which we have seldom time to get to when we stop. Only one deer has been killed since we started.

"20th. It rains this morning and our prospect for the day is rather dull. Our mode of life is rather tiresome to us who are impatient for something to do, and you may see by the tremor of my hand that it is difficult to write while the boat is in motion," etc.

Mr. Harris here dwells somewhat upon the monotony of their daily life, enlivened only by the occasional sight of game along the shore. He speaks also at some length of the Indians to be found in the neighboring regions. Mr. Harris was apparently no great admirer of the Red Man and refers with a slight touch of sarcasm to Mr. Catlin, who in his enthusiastic admiration of the Indian had spoken of him as "Nature's Nobleman."

The letter, continued on the 21st inst., tells of the first appearance of buffalo and gives interesting descriptions of their habits and movements. From this time on they were comparatively abundant. The letter then continues:

"Another rare bird — Say's Flycatcher has been added to our list, also Pipilo Arcticus, — the new Towhee Bunting, which you will find figured in Mr. Audubon's small work. For the last few days we have seen immense quantities of the nests of the cliff swallow in the lime stone rocks which compose the base of the high prairie hills, and where they jut upon the river are perpendicular cliffs, but there are no birds to be seen and we fear they have all been killed by a severe gale we had on the 14th when the thermometer fell from 76° to 43°. Since that gale we have seen very few swallows of any kind."

Under date the 22d Mr. Harris tells of the increasing difficulty in securing wood for the engine. Buffalo are spoken of as becoming more abundant, while a war party of Indians was seen on the east bank of the river. Then comes the following short paragraph which is of interest to ornithologists as being the first mention of the Western Meadowlark. "We have seen today the Arkansaw Flycatcher and a Meadow Lark which must prove to be a new one, its note is so entirely different from ours, though as far as we have been able to observe it the markings and habits are very similar."

Mr. Harris then discourses at some length upon the habits of the buffalo, and especially upon the wanton destruction of them by Indians and Whites. Upon the 24th the letter continues as follows: "The wind blew hard this morning, and it was evident the boat could not be got off for some hours. Bell and I went ashore. We procured some excellent birds—Red-shafted Woodpecker,—Say's Flycatcher,—Arkansaw Flycatcher,—Lark Finch & several of the new Meadow Larks. I still insist upon its being new, although it is so much like our own birds that we cannot

from the books establish any specific difference, — though I have no doubt when we can place a number of them alongside of the common one there will be something to distinguish them. It is impossible that the same bird in different parts of the country can have notes so decidedly different as to strike all of us as new notes. But as we cannot set these notes down on paper and as no bird has yet received its specific character from its note alone we must wait patiently for some stronger development before it can be published. We saw the Lazuli Finch, a very rare bird, for the first time. It is worthy of remark that all the rare birds we have found have a range much farther east than has been heretofore assigned to them. Some of them have not been found before on this side of the mountains. This gives us great hopes of doing more than we expected in the bird line - as for the quadrupeds the chance of securing them while ascending the river does not equal Mr. Audubon's expectations. We hope to make it up when we reach the Yellow Stone and on our way down the river."

The remaining notes for the 24th inst. describe the movements of the neighboring herds of buffalo and tell of the habits and characteristics of the Townsend's hare, Mr. Harris and Mr. Bell having observed one of these animals while on shore. The 25th was a cold and rainy day, the time being spent almost entirely in the cabin of the steamboat. The journal for the 26th is given over mostly to a description of the geological formations of the county together with interesting remarks on the habits and characteristics of the black-tailed deer, prairie dog, etc. At five P.M. they left the boat for the purpose of going across an isthmus which separated two bends in the river, their plan being to meet the steamer on the farther bend the following day. After tramping some distance and having killed a fine buck blacktail, they camped for the night and had a supper of venison.

The 27th and 28th are descriptive chiefly of the Indians, who seemed to be none too friendly in their demonstrations, having several times fired at the boat. A short stop was made at a place called Fort George. They here met a Mr. Cutting, the brother of a gentlemen with whom Mr. Harris had previously travelled in Europe.

Under date the 29th he writes: "Major Hamilton and Mr. Audubon walked down to the Fort after breakfast and I followed in about an hour. I very fortunately took my cane gun with me and shot by the way two Black-headed Grosbeaks, a bird which has not before been found this side of the table lands of the Rocky Mountains, which is the case with a number of the birds we have found. Mr. Audubon,—Bell,—Squires and I walked two or three miles across the prairie in the afternoon to a village of prairie dogs which Bell had discovered in the morning." Mr. Harris then speaks entertainingly of the movements of the interesting little animals and refers to the great difficulty in shooting them.

On the 31st they reached Fort Pierre, a point on the river which they had long been striving to gain. No further points of ornithological interest are referred to in the letter. The plant life of the region is, however, described at considerable length for the benefit of Dr. Spencer, to whom the letter was addressed, he being a botanist of some note. The letter was left at Fort Pierre to be taken down the river by the next trappers who were going in the direction of civilization. The last entry is made on June 1, just before the boat starts on up the river towards the Yellowstone, that being the final destination of the party.

## BIRD MIGRATION AT GRINNELL, IOWA.

BY LYNDS JONES.

II.

## FALL MIGRATION.

THE fall migrations differ from those of spring in certain particulars. It is not so simple a matter to study the southward movement of the birds, but rather one requiring a great deal of time, unlimited patience, and a speaking acquaintance with the