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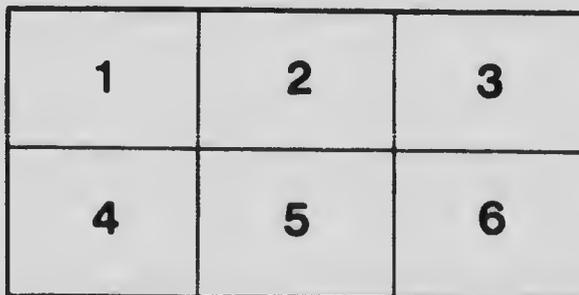
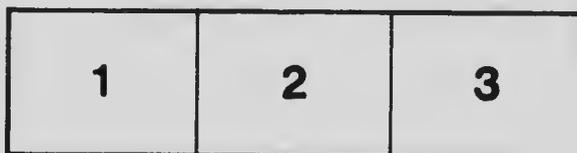
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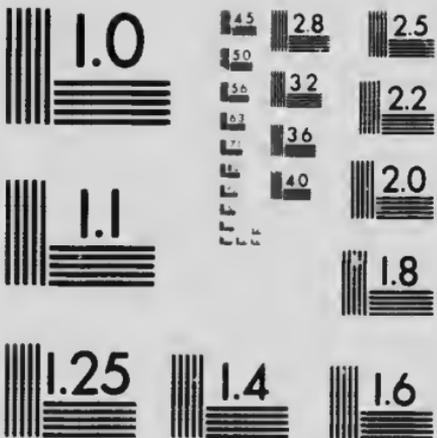
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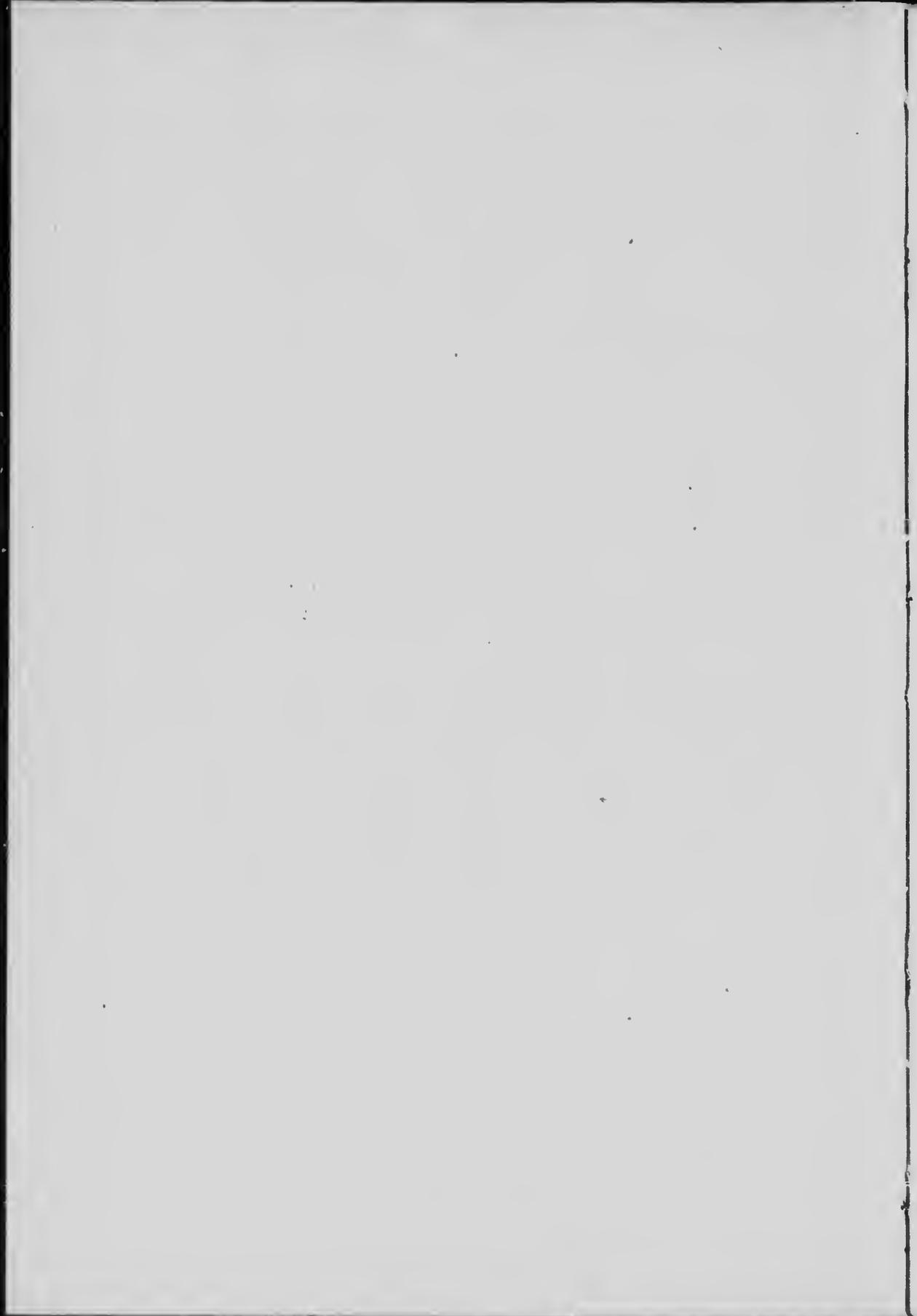
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J. ROSS ROBERTSON
Ornithological Collection

Water Color Drawings

BY

WILLIAM POPE

A native of Maidstone, Kent, England, who spent
the greater part of his life in Western Ontario,
residing in Port Ryerse for forty years.

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INTRODUCTION TO THE J. ROSS ROBERTSON ORNITHOLOGICAL COLLECTION.

After years of prosperity and wastefulness our country became aroused—and even then only partially—to the necessity for conservation of its resources. Then Conservation Commissions were appointed and the country settled back to the customary attitude of complacency that the subject had been recognized and settled. They were material needs that moved our people to this consideration, and these seem to be the only impelling forces which can move governments. It is left to private individuals to conserve and make available and useful the resources of our country which make for enjoyment, happiness and larger education. In Toronto this is especially true, and perhaps one of the most noteworthy illustrations is the Collection of Historical Pictures (now 3,500 in number) which show the evolution of our Dominion. These, presented by Mr. J. Ross Robertson to the people of Canada through the Public Library Board of Toronto, have awakened interest in the early history of our country and given genuine pleasure to thousands of people. It is now nearly five years since this Historical Collection was opened, and during that time it has been visited by over 50,000 people.

The interest shown by the boys and girls in this historical work was so pleasing to Mr. Robertson that when he had the opportunity of purchasing a wonderful Collection of Illustrations of Early Bird Life of our Province he undertook it, partly on account of its historical interest, which is ever present in his mind, and partly because he believed that a sympathetic acquaintance with birds and their habits would interest boys and girls and lead to the preservation of this interesting and beautiful part of our life, which has been too often injured and sometimes entirely destroyed by a thoughtless and even cruel mankind. We cannot do much with adults, but we can develop in boys and girls a sympathetic attitude towards the birds, and in no way better than with an historical background.

This is, therefore, a decided step towards the Conservation of the Bird Life of our Province, and it is intended to be a nucleus of a Provincial Ornithological Collection housed in the great public building which is the community centre, as far as there can be such a thing in a large city.

GEORGE H. LOCKE.

OPINIONS OF DISTINGUISHED ORNITHOLOGISTS.

Mr. C. W. Nash, the well-informed Biologist of the Provincial Museum of Ontario, who kindly prepared the inscriptions for these pictures, in giving his opinion of the collection, writes:

"The drawings of Canadian birds, made by Mr. Pope, and presented by Mr. J. Ross Robertson to the Public Library, of the City of Toronto, will rank among the best work of this class ever done. The coloration of the plumage in most of them is remarkable for its accuracy and the attitude of the subject is in all cases natural and characteristic of the species delineated.

"Lovers of art and naturalists will find pleasure and profit in studying these pictures, which not only faithfully portray the birds themselves, but also sufficient of the natural habitat of each species to show where it may be expected to be found in life.

"The citizens of Toronto have every reason to be grateful to Mr. Robertson for the public spirit he has shown in purchasing and presenting to the city this beautiful collection of drawings."

Mr. James H. Fleming, of Toronto, a recognized and widely-known authority on ornithology, who has the most complete private collection in Canada, after carefully examining the work of Mr. Pope, writes:

"It has been my privilege to examine the Pope drawings, and where necessary to compare them with the bird or animal they represent, and I have been struck with the accuracy in drawing and coloring; in fact, they would have brought fame to the artist had they been published at the early date they were made. To the naturalist they serve as an invaluable record of the fauna of the Lake Erie region at a time when the country was still covered by its original forest. Not only are the birds and animals shown, but the backgrounds often have details that the historian will find of interest. Toronto has reason to be grateful to Mr. J. Ross Robertson for the presentation of this unique collection of drawings."

WILLIAM POPE, 1811-1902.

Mr. William Pope, the artist of the water colors in this collection, was a very interesting man. He was born in Maidstone, Kent., Eng.; educated there and at Sevenoaks, Kent. In 1834 he made his first voyage to America, travelled extensively in the States; remained for a time in western Ontario, and then returned to England. He again came to Canada in 1842. Several visits were made to the old land up to 1859, when Mr. Pope determined to settle permanently in Canada, and for more than forty years lived near Port Ryerse, Norfolk County. He took no active interest in public affairs, but remained a persistent student of nature. His work for the most part consists of a combination of pen and ink and water color, the pen being used chiefly to outline the detail in the plumage of the bird or hair of the animal. In addition to these drawings, which are rivalled only by nature, Mr. Pope wrote much that is of interest on the life and habits of his subjects. His portrait is in the collection.

CATALOGUE OF THE COLLECTION

NOTE.

Numbers in brackets are those of the Check List of the American Ornithologists' Union. Diphthongs are not indicated by the use of connected vowels in the scientific names, as in the Check List. Drawings 11, 18, 39, 50 (1) were done in England.

DIVING BIRDS—ORDER 1—PYGOPODES.

GREBES—Family Colymbidae.

Grebes are birds having a duck-like body, but with pointed bills. Their feet are unlike those of the ducks, each toe having its separate lobe, and having a broad, flat nail. Their wings are very small for the size of the body, making it impossible for them to rise in flight from the land. They rise from the water by running a few yards along the surface until they have secured sufficient headway to allow them to launch themselves into the air. On land they are very awkward and can only progress with difficulty. Together with the Loons, they are the most expert aquatic birds that we have, diving like a flash and swimming for an incredible distance under water.

1—(2) **HOLBOELL'S GREBE**—*Colymbus holboelli*—(Adult in Autumn)—This Grebe is 19 inches in length and can be distinguished by the white cheeks and throat and the reddish brown foreneck; a regular, but never a common, spring and autumn visitor to the waters of southern Ontario. They breed in the far north, placing their floating nests of decayed vegetation in the water in the midst of the marsh grass. They lay from three to six eggs of a dingy white color, stained by a thin, chalky deposit. Size of eggs 2.35 x 1.25. Made Oct. 20th, 1859.

2—(3) **HORNED GREBE**—*Colymbus auritus*—(Adult)—This species is one of the most beautiful of the Grebes, having buffy ear tufts, black cheeks and throat, and chestnut neck, breast and sides. They are abundant on the Great Lakes and all large bodies of water in spring and autumn, breeding in the large marshes. A few remain on the lakes of southern Ontario through the winter. Their nest is a floating mass of decayed matter, and their eggs white, stained to a dirty brown. Size of eggs 1.76 x 1.15. Made May 1st, 1848.

3—(3) **HORNED GREBE**—*Colymbus auritus*—**Hell Diver (Young)**—Abundant on the Great Lakes in spring and autumn; breeding in the large marshes. A few remain in southern Ontario through the winter. Made in October, 1862.

4—(6)—**PIED-BILLED GREBE**—*Podilymbus podiceps*—**Hell Diver—(Young)**—The Dabchick, as this bird is called, is the best-known species of the family. They make more substantial nests than other species by the addition of mud, which they bring up from the bottom of the pond. It is a common summer resident in marshes all over the Province of Ontario, breeding throughout its range. Arrives early in April, departs about the middle of October. The bird may also be known by the shape of its bill, which is higher than it is broad, and in the summer is white with a black band across the middle. The throat is also black. They lay from five to nine dull white eggs. Size 1.70 x 1.18. Made Nov. 12, 1862.

LOONS—Family Gaviidae.

Loons may be likened to gigantic Grebes, from which they differ externally, chiefly in the full webbed foot, instead of the individual lobed toes of the Grebe and the more pointed spear-like bill. Their nests are placed near the margin of some inland lake. Like the Grebes, they have small wings, and must first get their impetus from the water in order to rise, but they vie with them in diving, and disappear at a flash of a gun. The expression "Crazy as a Loon" is not a fanciful one, being formed from the early morning and evening antics of the bird, when two or more of them will race over the top of the water uttering their demoniacal laughter.

5—(11) **RED THROATED LOON—*Gavia stellata*—(Young)**—A common spring and autumn visitor to the waters of Ontario, breeding in the far north and retiring southward as its haunts freeze up. It is the smallest of the Loon family, being 25 inches in length. In summer the back, head and neck are grey, the latter being striped with white. A large chestnut patch adorns the front of the lower part of the neck. In winter the back is spotted with white. They have two eggs of a greenish brown spotted with black. Size 2.00 x 1.75. Made in Nov., 1862.

LONG WINGED SWIMMERS—ORDER II.—LONGIPENNES.

GULLS AND TERNS—Family Laridae.

Gulls are web-footed birds, having a slight hook to the end of the upper mandible. Their plumage is usually silver grey above and white below. They nest in large colonies on both fresh water inland and sea coast. They procure from the surface of the water their food, which consists mostly of dead fish and refuse matter. Terns are birds of similar plumage to the gulls, somewhat less robust, and their bills longer and sharply pointed.

6—(51) **HERRING GULL—*Larus argentatus*—(Young)**—The Herring Gull is twenty-four inches in length. It is a very common resident, frequenting the Great Lakes at all seasons, but most abundant in winter, and breeds regularly on many of the lakes and marshes of the interior. They lay three eggs of a greyish color, marked with brown, and, in rare cases, unspotted bluish-white eggs are found. Size 2.8 x 1.7.

7—(60) **BONAPARTE'S GULL—*Larus philadelphia*—(Young)**—A common spring and autumn visitor to the Great Lakes. Occasionally seen during the summer months, but the bulk go north and west of Ontario to breed. They nest in great numbers on the marshes of Manitoba. The nests, of sticks and grass, are placed on the higher parts of the marsh, and three or four eggs are laid during the latter part of June. Eggs are greyish to greenish brown, marked with dark brown and lilac. Size 1.90 x 1.30.

8—(60) **BONAPARTE'S GULL—*Larus philadelphia*—(Young)**—Made Nov. 10, 1863.

9—(77) **BLACK TERN—*Hydrochelidon nigra surinamensis*—(Adult)**—This tern is common in summer in some of the large marshes of Ontario, but is not generally distributed; breeds where it occurs. It is ten inches in length; a dainty, graceful bird; very active. They capture many insects in the air; breed in large colonies, making a nest of decayed reeds and grasses, or other, laying their eggs upon rafts of decayed vegetation which are floating on the water. They lay three eggs of a brownish or greenish color, very heavily blotched with blackish brown. Size of eggs 1.35 x .95. Made June 13, 1845.

TOT PALMATE SWIMMERS—ORDER IV.—STEGANOPODES.

CORMORANTS—Family Phalacrocoracidae.

Cormorants are found in nearly all quarters of the globe. They feed upon fish which they catch by pursuing under water. Most of the Cormorants have green eyes.

10—(120) **DOUBLE-CRESTED CORMORANT**—*Phalacrocorax auritus auritus*—(Young)—A regular but not a common spring and autumn visitor to our lakes; probably breeds about the northern waters of the lakes of Ontario, as it does in Manitoba, Saskatchewan and Alberta. In the interior they place their nests on the ground or occasionally on low trees or islands in the lakes. They breed in large colonies, making their nests of stick and weeds, and lay three or four eggs, greenish white. Size 2.30 x 1.40. Made Nov. 20, 1865.

LAMELLIROSTRAL SWIMMERS—ORDER V.—ANSERES.

DUCKS, GEESE AND SWANS—Family Anatidae.

Birds comprising this family are of greatly varying sizes, but all have webbed feet and, generally, the bill is broader than high, and is serrated on the edges or provided with gutters to act as a strainer in assisting the birds to gather their food.

11—(131) **SMEW**—*Mergus albellus*—(Female)—A European species which has been taken occasionally in American waters. This species are almost exclusively fish-eating birds, therefore their flesh is unpalatable.

12—(132) **MALLARD**—*Anas platyrhynchos*—(Male)—The Mallard is regarded as one of the most esteemed table birds. They feed on vegetable matter, mollusks and marine insects which they reach by tipping in shallow water. It is a common summer resident of the western part of Ontario, less abundant in the east. Arrives as soon as the marshes open and retires southward as the shallow waters it frequents become frozen over; breeds throughout its range in Canada.

13—(132)—**MALLARD**—*Anas platyrhynchos*—(Female)—It is a common summer resident of the western part of Ontario, less abundant in the east. Arrives as soon as the marshes open and retires southward as the shallow waters it frequents become frozen over; breeds throughout its range in Canada. They nest in close proximity to ponds or lakes, placing their nests of grasses and feathers in the tall grass. In May and June they lay from six to ten eggs of a pale greenish color. Size 2.25 x 1.25. Made Nov. 30, 1859.

14—(133) **BLACK DUCK**—*Anas rubripes*—(Male)—A common summer resident, breeding in all suitable places in Ontario. Made Nov. 30, 1859.

15—(133) **BLACK DUCK**—*Anas rubripes*—(Female)—A common summer resident, breeding in all suitable places in Ontario. Their nests are placed on the ground in marshes, swamps or fields bordering on a pond, lake or along the sea coast. In the latter case their nest is under an overhanging rock. It is made of weeds, grass and moss, lined with feathers and down. They lay from six to twelve eggs during May and June, buff or greenish buff in color. Size 2.30 x 1.70. Made Nov. 30, 1859.

16—(135) **GADWALL**—*Culelasmus streperus*—(Male)—A very rare summer resident of Ontario; breeds commonly in Manitoba and provinces westward. The males of these birds may be identified by the white speculum and the chestnut wing coverts. Made in October, 1864.

17—(135)—**GADWALL**—*Chaulelasmus streperus*—(Female)—A rare summer resident; breeds commonly in Manitoba. Gadwalls nest on the ground among the reeds and marshes. They make little or no nest, but line the cavity with down from their breasts. They lay from seven to twelve eggs of a creamy buff color. Size 2.10 x 1.60. Made in October, 1869.

18—(136) **WIDGEON**—*Mareca penelope*—(Female)—A European duck, which has occasionally been taken in America. It is similar in build and plumage to the following species, except that the whole head, with the exception of the white crown, is chestnut. They lay from six to ten light buff-colored eggs. Size 2.20 x 1.50.

19—(137) **BALDPATE**—**AMERICAN WIDGEON**—*Mareca americana*—(Male)—The Baldpate (so called because of the white crown) is regarded as a great table delicacy. The male birds are handsomely marked, having a white crown, wing coverts and under parts, and a broad green stripe back of the eye. It is a fairly common migrant and an occasional summer resident in Lakes Erie and Ontario. Arrives in April, and leaves with the first sharp frost. They build their nests in the rushes, making them of reeds and grass, and lining them with feathers. Made in October, 1863.

20—(139) **GREEN-WINGED TEAL**—*Nettion carolinense*—(Male and female)—Common in the spring and autumn migrations; breeding in the north from Labrador to the Pacific coast. Arrives as soon as the marshes are open, and leaves about the end of October. These birds can be identified by the reddish brown head and neck, with a large green patch behind each ear; length fourteen inches. They are our smallest representative of the Duck family. They are eagerly sought by sportsmen, both because of their beauty and the excellence of their flesh. Eggs buffy, four to ten in number. Size 1.85 x 1.25.

21—(140) **BLUE-WINGED TEAL**—*Querquedula discors*—(Male and female)—Common summer resident; breeding in all suitable places throughout the Province of Ontario. Arrives in April, and leaves about the end of September. It is another small species known by the blue wing coverts and the white crescent in front of eye. They place their nest of grass and weeds on the ground in meadows near water, the same as the preceding species. Eggs buffy white, six to twelve in number. Size 1.90 x 1.30. Made in 1864.

22—(142)—**SHOVELLER DUCK**—*Spatula clypeata*—(Female)—A regular, but uncommon, summer resident of Ontario; breeds throughout its range. Very abundant in the prairie sloughs of Manitoba. This duck is twenty inches in length, has a green head and speculum, blue wing coverts and chestnut belly. The bill is long and broad at the tip. It makes its nest on the ground in marshy places, of grass, weeds and feathers. Six to ten eggs of greenish or leaden grey color. Size 2.10 x 1.50. Made in October, 1863.

23—(143) **PINTAIL DUCK**—*Dafila acuta*—(Male)—A common spring and autumn visitor to southern Ontario; occasionally breeding in the marshes about Lake Erie. Arrives as soon as the marshes open, and leaves when they freeze. Also known as the Sprig-tail, is about thirty inches long, its length depending upon the tail feathers, the central one of which is long and pointed. Made April 20, 1847.

24—(143)—**PINTAIL DUCK**—*Dafila acuta*—(Female)—A common spring and autumn visitor of southern Ontario; occasionally breeding in the marshes about Lake Erie. They nest near the water, laying from six to twelve eggs of dull olive color. Size 2.20 x 1.50. Made in April, 1847.

25—(144)—**WOOD DUCK**—*Aix sponsa*—(Male and female)—Formerly an abundant summer resident; breeding everywhere throughout the Province of Ontario. It is still fairly common, but its numbers are decreasing rapidly. Arrives as soon as the ice is out of the marshes; departs about the end of September. Bristle Duck is a name often given to this the most beautiful of all ducks. They build their nests in hollow trees and stumps, often at quite a distance from the water. When the young are a few days old they scramble or flutter down the tree trunk to the ground and are led to the water. Eggs are buff color, number eight to fifteen. Size 2 x 1.5.

26—(146) **REDHEAD DUCK**—*Marila americana*—(Male and female)—A common spring and autumn migrant. They breed from the Great Lakes northward, and abundantly in Manitoba and the Prairie Provinces. In some seasons a considerable number spend the winter on Lakes Erie and Ontario. A bird commonly seen in the markets. The nests are placed on the ground in marshes or sloughs, and are made of grasses and lined with feathers. Eggs from six to fourteen in number. Buffy white color. Size 2.40 x 1.70. Made in October, 1862.

27—(147) **CANVAS-BACK DUCK**—*Marila valisneria*—(Male)—A regular, but not generally a common, spring and autumn migrant in Ontario. It is a noted table bird, especially in the south, where it feeds on wild celery, and can be distinguished from the Redhead by its darker head, lighter back and sloping bill. Made Oct. 20, 1862.

28—(147) **CANVAS-BACK DUCK**—*Marila valisneria*—(Female)—A regular, but not generally a common, spring and autumn migrant in Ontario. They lay from six to ten eggs of a darker shade than the Redheads. Size 2.40 x 1.70. Made Oct. 20, 1862.

29—(148) **SCAUP DUCK**—*Marila marila*—(Male and female)—The great majority of these birds are spring and autumn visitors to southern Ontario, but they do not go very far north to breed, and a good many spend the winter in the open bays of Lake Erie and Lake Ontario. Widely known as "Blue Bills," owing to the slaty blue color of the bill, plumage is black and white. The nest is made of marsh grass and lined with feathers; six to ten eggs, pale greenish grey. Size 2.50 x 1.70. Made in November, 1862.

30—(148)—**SCAUP DUCK—BLUE BILL**—*Marila marila*—(Female)—The great majority of these ducks are spring and autumn visitors to southern Ontario. Some, however, remain through the winter on the open waters of Lakes Erie and Ontario. Made in April, 1847.

31—(150) **RING-NECKED DUCK**—*Marila collaris*—(Female)—A rather uncommon duck, most frequently seen in spring and autumn. The habits of the Ring-necked Duck do not differ from the Scamp Duck. They lay from six to twelve eggs. Size 2.25 x 1.60. Made in November, 1863.

32—(150) **RING-NECKED DUCK**—*Marila collaris*—(Male)—A rather rare migrant in spring and autumn; probably breeds in the interior. This duck has a narrow chestnut collar around the neck. The back is black and the speculum grey. Made April 17, 1843.

33—(151) **GOLDEN-EYE DUCK**—*Clangula clangula americana*—(Male)—Common winter visitor, breeding in the interior of the province. The bulk arrive in southern Ontario about the end of October, and remain wherever there is open water until the ice breaks up in the spring. Handsome duck, known as "Whistlers," from the noise of their wings when flying, and "Great Heads," because of the puffy crest. Made in Nov., 1863.

34—(151) **GOLDEN-EYE DUCK—WHISTLER—***Clangula clangula americana*—(Female)—Common winter resident of the southern part of Ontario; breeds in the interior. This species nests in hollow trees near the water, lining the cavity with grass, moss and leaves, and down from their breasts. In May and June they lay from six to ten eggs of a greyish green color. Size 2.30 x 1.70. Made June 5, 1847.

35—(153) **BUFFLE-HEAD DUCK—***Charitonetta albeola*—(Male)—This handsome little duck is also known by the names of "Butter-ball" and "Dipper." It is fifteen inches long, and has a large white patch in the back of the head from eye to eye. It is capable of diving to a great depth to get its food, is a common spring and autumn visitor to southern Ontario, breeding at some points throughout the province, probably regularly in the north. Arrives as soon as the ice goes out in the spring, and remains in the autumn until its haunts are frozen over.

36—(153) **BUFFLE-HEAD DUCK—***Charitonetta albeola*—(Female)—Common spring and autumn visitor throughout the province, breeding at some points in southern Ontario, and probably doing so regularly in the northern portions. Nests in hole in tree stump lined with down. Eggs eight to fourteen. Size 2. x 1.40. Made Nov. 9, 1843.

37—(154) **OLD SQUAW—COWEEN—***Harelda hyemalis*—(Female)—A very abundant winter resident on the lakes, arriving about the beginning of November, and departing at the end of April. Breeds along the Arctic coast. Is called "Long-tailed Duck." In summer the plumage of the male is blackish brown with a white patch around the eye. In winter they are largely white. The central tail feathers are much lengthened. They place their nests of grasses and weeds on the ground near the water. Eggs number from six to twelve. Size 2. x 1.50.

38—(163) **AMERICAN SCOTER—***Oidemia americana*—(Female)—A regular winter visitor to the Great Lakes, but never very common. Breeds in the Arctic regions. Scoters, or "Coots," as they are called, are Sea Ducks. It is entirely black without markings, base of bill yellow and orange. Nest a hollow in the ground lined with down. It conceals its nest like the Eider. Six to ten eggs of a dingy buff color. Size 2.50 x 1.70. Made in Nov., 1863.

39—(164) **VELVET DUCK—***Oidemia fusca*—(Female)—A European duck, which has sometimes visited American waters. Called "Velvet Scoter." The females of all the Scoters are a dingy brownish color, but show the characteristic marking of the species, although the white is dull and sometimes mottled. Made in October, 1860.

40 (166) **SURF SCOTER—***Oidemia perspicillata*—(Female)—Breeds along the coast or in the interior, building a nest lined with down in the marsh grass bordering small ponds. They lay from five to eight buffy cream-colored eggs. Size 2.40 x 1.70. The Surf Scoter is a regular but not common visitor to our lakes in spring and autumn. Made in Nov., 1863.

41 (166) **SURF SCOTER—***Oidemia perspicillata*—(Female) Made in April, 1870.

42—(167) **RUDDY DUCK—***Erismatura jamalensis*—(Male) Common in spring and autumn. Breeds from our southern boundary northward. May be recognized by the brownish or chestnut upper parts, blackish crown, white cheeks and silver white under parts. The bill is very stout and broad at the end, and the tail feathers are stiff and pointed like those of a Cormorant.

43—(167) **RUDDY DUCK**—*Erimatura jamaicensis*—(Female)—Common in spring and autumn. Breeds from our southern boundary northward. Nests are built in low, marshy places, made of rushes and grasses, sometimes lined and sometimes not, with down from the parents' breast. Eggs from six to twelve, greyish in color. Size 2.40 x 1.75. Made October 20, 1859.

44—(172)—**CANADA GOOSE**—*Branta canadensis canadensis*—A regular spring and autumn visitor, but not nearly so abundant as formerly. Has occasionally been found nesting in southern Ontario, but they usually resort to the marshes of the north for that purpose. Its familiar "honk" has long been regarded as the signal of the coming of spring, and the V-shaped formation in which the flocks migrate is of interest to everyone. They construct quite a large nest of weeds and grass, lined with a few feathers. Four to nine eggs of a buff or drab color. Size 3.50 x 2.50.

45—(181) **TRUMPETER SWAN**—*Olor buccinator*—A very rare visitor; breeds in the barren grounds of the Arctic. A magnificent bird, five and one-half feet in length, snow white. The bill is entirely black. Nest a mass of weeds, sods and grass. Eggs are soiled whitish, and number from three to six. Size 4.00 x 2.75 or a trifle larger. Made April 6, 1847.

IBISES, STORKS, HERONS, ETC.—ORDER VII.—HERODIONES, BITTERNS AND HERONS—Family Ardeidae.

Hérons and Bitterns are long-legged waders, having straight-pointed bills and with head feathered, except for the lores.

46—(191) **LEAST BITTERN**—*Ixobrychus exilis*—(Male)—This bird is an abundant summer resident of the larger marshes of southern Ontario; breeding throughout its range. Arrives about the middle of May, and leaves early in September. A small variety, very quiet and sly. When approached they will remain perfectly quiet with body erect and the head and neck pointed skyward, in which position their yellowish brown plumage resembles the rushes among which they are found. Their nests are of strips of rushes woven together about upright stalks generally over water. They lay from three to five eggs of a pale bluish white color. Size 1.20 x .90.

47—(194) **GREAT BLUE HERON**—*Ardea herodias herodias*—(Young)—A common summer resident; breeding in communities in the interior of the province. The Great Blue Heron is four feet in length. Its general color is a bluish grey, relieved by a black crest and a white crown. They breed singly or in colonies, placing their rude platforms of sticks well up in trees near ponds, swamps or rivers. Unless disturbed, they return to the same breeding grounds year after year. Three to five greenish blue color eggs. Size 2.50 x 1.50. Made in September, 1863.

CRANES, RAILS, ETC.—ORDER VIII.—PALUDICOLAE.

RAILS, GALLINULES AND COOTS—Family Rallida

Members of this family are almost exclusively frequenters of marshes, where they lead a shy, retiring life, and are more often heard than seen.

48—(212) **VIRGINIA RAIL**—*Rallus virginianus*—(Adult)—Length about nine inches, found chiefly in fresh water swamps, where it builds in tufts of rushes. An abundant summer resident, arriving about the middle of April, and leaving early in October. Eggs number from six to fourteen, and are a creamy white or white speckled with reddish brown. Size 1.25 x .90. Made July 15, 1845.

49—(214) **SORA RAIL**—*Porzana carolina*—(Young)—About eight inches long, and known by the black face and throat of the adult. It is a very abundant summer resident of marshes all over the province. Arriving about the middle of April, and departing about the end of October. They are annually slaughtered by thousands in the United States, and it is only because of the large families that they rear that they are able to withstand this decimation of their ranks. During May they lay from six to sixteen eggs of a bright buffy grey color, spotted with reddish brown and lavender. Size 1.25 x .90.

50—(219) **FLORIDA GALLINULE** (2)—*Gallinula galeata*—A common summer resident of the southern marshes of Ontario; breeding throughout its range. Arrives about the middle of April, and departs towards the end of October. This bird is thirteen inches long, dark slate colored, with flanks streaked with white and bill and crown plate reddish. Nests in marshes and swamps. Eggs pale buff, spotted with rufous brown. Size 1.75 x 1.20.

MOORHEN (1)—*Gallinula chloropus*—A common British bird, frequenting rush bordered streams and marshy places.

51—(221) **AMERICAN COOT**—*Fulca americana*—(Adult)—The Coot bears some resemblance to the Gallinule, but is somewhat larger. Its bill is white with a blackish band about the middle, and each toe has a scalloped lobe. They are a common summer resident, breeding sparingly in our southern marshes and sloughs, and more abundantly northward. In order to avoid observation the Coot skulks through the grass rather than flies. Nests are either floating piles of decayed vegetation or dead rushes in clumps on the banks. Eggs six to ten, of a greyish ground color and speckled over the surface with blackish. Size 1.80 x 1.30. Made Oct. 7, 1862.

SHORE BIRDS—ORDER IX.—LIMICOLAE.

PHALAROPES—Family Phalaropodidae.

Phalaropes are small plover-like birds, but with lobate webbed feet similar to those of the Grebes and Coots.

52—(222) **RED PHALAROPE**—*Phalaropus fulicarius*—This species, an irregular spring and autumn visitor of rare occurrence, is about nine inches in length. All the Phalaropes are good swimmers and this species is often found in large flocks off the coast floating on the surface of the water. They feed upon small marine insects, nest in hollows on the ground lined with a few grasses; eggs three or four in number, greenish buff color blotched with brown and blackish. Made Oct. 15, 1868.

SNIPES, SANDPIPERS—Family Scolopacidae.

Members of this family are long-legged waders, and found either about streams or ponds in the interior or along the coasts. They feed upon small shell fish or insects which they get usually by probing in the soft mud.

53—(228) **AMERICAN WOODCOCK**—*Phallohela minor*—(Male)—A summer resident of swampy woods, and one of our best game birds, breeds throughout its range in Ontario. Arrives about the end of March and departs in November, usually remaining until the first severe frost. Their flight is very rapid and erratic and accompanied by a peculiar whistling sound made by the rapid motion of the wings. Their eggs are laid upon the bare ground among the leaves and sticks. They are of about the color of dead leaves as is also the bird, making it quite difficult to discover their nests; four eggs of a buffy color with reddish brown spots. Size 1.50 x 1.15. Made in June, 1859.

54—(230) **WILSON'S SNIPE**—*Gallinago delicata*—(Adult)—Abundant in spring and autumn, the majority going north to breed. Some, however, leave their young in all the larger marshes throughout the province. The first arrivals in spring generally appear before the end of March, and in the autumn the last stragglers remain until the marshes freeze up. Their bill is eleven inches long. Their nests are depressions in grassy low meadows, generally unlined. Three or four eggs, olive-grey color, strongly marked with blackish brown. Size 1.50 x 1.10.

55—(231) **DOWITCHER**—*Macrorhamphus griseus griseus*—This rare spring and autumn visitor to the shores of the lakes is commonly known as "Red-breasted Snipe," because of the rich rusty red of the underparts, and as "Grey Back" in winter, because of its color at that season. Their bill is very long, two inches and over, and nearly one quarter the length of the whole bird. They place their three or four eggs in a slight hollow; eggs greenish or brownish buff, boldly marked with dark brown. Made October 10, 1865.

56—(239) **PECTORAL SANDPIPER**—*Pisobia maculata*—A common autumn visitor to the marshes and sandbars, not observed in spring. Arrives in July, leaves about the end of October. This is a peculiar species, having the power during the mating season of inflating the throat to a great extent making a balloon-like appendage, nearly the size of the bird. They have more the habits of the snipe than most of the sandpipers, frequenting grassy meadows or marshes in preference to the seashore. Nests are grass-lined depressions. Eggs greyish or greenish buff, blotched with brown. Size 1.45 x 1.20. Made April 10, 1843.

57—(243a) **RED-BACKED SANDPIPER—BLACK HEART PLOVER**—*Pelidna alpina sakhalina*—A very abundant visitor in the spring, arriving about the 20th May, and going north about the end of the first week in June. In the autumn they are much less abundant, the majority going south by another route. The first of the autumn fliers arrive early in October, and by the end of the last week in November the last have gone. They are very handsome birds, eight inches in length, with nesting habits similar to others of the family. Three or four eggs, greyish or greenish buff color, heavily blotched and spotted with shades of brown and chestnut. Size 1.40 x 1.00. Made Nov. 10, 1866.

58—(243a) **RED-BACKED SANDPIPER—BLACK HEART PLOVER**—*Pelidna alpina sakhalina*—Made June 1, 1843.

59—(246) **SEMI-PALMATED SANDPIPER (STINT)**—*Ereunetes pusillus*—Very abundant from about the 20th of May to the end of the first week in June, and from the middle of July until the end of the first week in September. Their appearance very similar to that of the least sandpipers, but they are slightly larger and the feet are partially webbed. Eggs greenish buff or grayish ground color, spotted with brownish or blackish. Size 1.20 x .80. Made Aug. 1, 1857.

60—(231) **HUDSONIAN GODWIT**—*Limosa haemastica*—A rare visitor to the shores of our lakes; breeds on the barren grounds. Length eighteen inches. Color deep reddish brown below. They lay four eggs on the ground in marshes, lining the hollow with weeds and dried leaves. The eggs are of a dark brownish buff ground color, and blotched with brownish black. Size 2.20 x 1.40. Made Oct. 11, 1844.

61—(254) **GREATER YELLOW-LEGS**—*Totanus melanoleucus*—Common in spring from early in April until the first week in May. In the autumn sometimes abundant, arriving about the end of July, and remaining until the end of October. Breeds in the far north. These birds are

commonly called "Tell Tale." The legs, as implied by the name, are yellow and long. Length of bird fourteen inches. Eggs laid on the ground in an open marsh. They are greyish white boldly splashed with shades of brown and lilac. Size 1.65 x 1.25.

62—(254) **GREATER YELLOW-LEGS**—*Totanus melanoleucus*—Made Oct. 20, 1862.

63—(256) **SOLITARY SANDPIPER**—*Helodromas solitarius solitarius*—A bird with greenish-grey back, barred with white and white below. Length 8.5 inches. Generally distributed through the province, but nowhere abundant. In the spring migration this bird is rarely seen; but in July, after breeding, it may be found along the margins of our streams or upon muddy flats in the marshes. It departs about the end of September. The eggs are very rarely found. They are clay colored spotted with brownish black. Five in number. Made July 24, 1859.

64—(263) **SPOTTED SANDPIPER**—*Actitis macularius*—An abundant summer resident; breeding throughout the province. Arrives about the 1st of May; departs about the middle of September. The young, like those of all shore birds, are hatched covered with down, and run about as soon as born. The adults attempt to lead an enemy away from the young by feigning a broken wing or lameness. It is a small wader, 7.5 inches in length, the most abundant of all the shore birds, and its "peet weet" is a familiar sound to every country boy. The Spotted Sandpiper has a peculiar habit of moving its tail up and down when at rest on a stone or running along the shore, thus receiving the very common names of "Teeter Tail" and "Tir Up." Eggs number three to five, greyish buff, heavily spotted with dark chocolate. Size 1.30 x .90. Made July 24, 1859.

PLOVERS—Family Charadriidae.

Plovers are stouter built birds than those of the Sandpiper, have larger head, shorter necks and but three toes. The bill also is much harder and shorter.

65—(270) **BLACK-BELLIED PLOVER**—*Squatarola squatarola*—A remarkably handsome species when in summer dress; known to sportsmen as the "Bull-head" or "Beetle-head Plover." It has a very small hind toe; is a common spring and autumn visitor; passing through in the spring migration between the 20th of May and the end of the first week in June. They return from the north in August, and remain until the middle of October. Breeds in the Arctic regions. The eggs are three or four in number, brownish or greenish buff in color, and boldly marked with black. Size 2.00 x 1.40. Made May 25, 1867.

66—(270) **BLACK-BELLIED PLOVER**—*Squatarola squatarola*—Made in November, 1862.

67—(273) **KILLDEER PLOVER**—*Oxyechus vociferus*—(Adult)—A common summer resident generally distributed over the province, breeding wherever it occurs. Arrives about the end of March, departs early in October. They are very noisy birds, continually uttering their "Killdeer, killdeer," from which they take their name. Eggs are drab or greenish buff spotted with black. Size of eggs 1.50 x 1.10. Made in October, 1865.

68—(274) **SEMI-PALMATED PLOVER**—*Aeolalitis semipalmata*—Common along the shores of the lakes from the middle of May to the end of the first week in June, when they go north to breed. In July they return and are abundant until the end of September. Have occasionally been found nesting in this province. They have a small web between the bases

of the two outer toes, single broad black band across the breast. Black line from base of bill to eye. They are usually unsuspecting, and will allow a close approach. Nest on the ground. Eggs buffy speckled with black. Size 1.30 x .90. Made May 26, 1843.

69—(277) **PIPING PLOVER**—*Aegialitis meloda*—(Adult)—A regular but not common summer resident. They arrive early in May, and probably leave as soon as the young can fly, for they are not seen in the autumn; handsome little bird with a black crescent on each side of neck, a small black patch on top of the head. It is the lightest colored of any of the eastern Plovers. Length seven inches. They are rather shy and will attempt to escape by running along the beach or by hiding rather than by flight. They lay their eggs on sandy beaches and unlined hollows. Eggs pale clay colored ground and sparsely speckled with black dots. Size 1.25 x 1.20. Made May 23, 1845.

GALLINACEOUS BIRDS—ORDER X.—GALLINAE.

GROUSE, PARTRIDGES, ETC.—Family Tetraonidae.

Members of this family are birds of robust form, comparatively short legs and neck. The tarsi and toes are feathered in the Ptarmigan, the tarsi only, feathered in the Grouse, and the tarsi and toes bare in the Bob Whites. They feed upon berries, buds, grain and insects.

70—(289) **BOB WHITE**—*Colinus virginianus virginianus*—(Male and female)—A common resident in the south-western counties of Ontario, sometimes ranging east to the County of Ontario—a valuable game bird and one of the farmer's best friends. Their nests are built on the ground, and are made of dried grasses arched over with hanging leaves so as to conceal the eggs. Ten to twenty pure white eggs. Size 1.20 x .95. Two or three broods are raised in a season.

71—(300a) **CANADA RUFFED GROUSE—PARTRIDGE**—*Bonasa umbellus togata*—The Ruffed Grouse is "King of the Game Birds," and a common resident in woodlands throughout the Province of Ontario. Resorts are heavily timbered woods. Nests are hollows in the leaves under fallen trees. When the bird flies it makes a rumble and roar, which disconcerts the novice. Eight to fifteen eggs, brownish buff color with a few faint markings of brown. Size 1.55 x 1.15. The adults are skillful in leading enemies away from their young, feigning lameness, broken wings, etc. Made April 30, 1835.

PIGEONS AND DOVES—ORDER XI.—COLUMBAE.

Family Columbidae.

Pigeons and Doves are distributed throughout nearly every temperate and tropical country on the globe, five hundred species being known, of which two occur within our limits. Their plumage is soft and subdued in color, the head small, the wing strong and the flight rapid.

72—(315)—**PASSENGER PIGEON**—*Ectopistes migratorius*—(Male and Female)—This handsome species is practically exterminated by being hunted and trapped. It was formerly a very abundant summer resident, occurring in flocks of countless thousands. Nests very rude, frail platforms of twigs, on which one or two white eggs are laid. Size of eggs 1.50 x 1.02.

73—(315) **PASSENGER PIGEON**—*Ectopistes migratorius*—(Young)—Formerly a very abundant summer resident, occurring in flocks of countless thousands, now practically extinct. Made June 23, 1860.

74—(316) **MOURNING DOVE**—*Zenaidura macroura carolinensis*—(Young)—A common summer resident, but somewhat locally distributed. Many winter in the south-western counties of Ontario. Now that the Passenger Pigeon has disappeared this species becomes the only one found in Ontario. Their nests are generally at a low elevation of twigs and rootlets, and eggs may be found from early in April until the latter part of September. Two eggs, white. Size 1.15 x .80.

75—(316)—**MOURNING DOVE**—*Zenaidura macroura carolinensis*.

VULTURES, HAWKS AND OWLS—ORDER XII.—RAPTORES.
KITES, HAWKS AND EAGLES—Family Buteonidae.

The members of this family live by preying upon small animals or birds. They have strong, sharply hooked bills, powerful legs and feet, armed with curved and sharply pointed talons.

76—(331) **MARSH HAWK**—*Circus hudsonius*—(Female)—This species is easily identified by the white patch on the rump. It is a common summer resident, breeding in secluded marshy places throughout the province. Arrives early in April, leaves about the end of October. One of our most useful hawks, feeding principally upon the destructive meadow mouse. Their nests, well lined with grasses or rushes, are made in swampy ground in the centre of a hummock or clump of grass. Four to seven pale bluish white eggs. Size 1.80 x 1.40. Made in Oct., 1860.

77—(332) **SHARP-SHINNED HAWK**—*Accipiter velox*—(Young)—A common summer resident, breeding throughout its range in Ontario. Arrives early in April. The bulk depart about the middle of September, but stragglers often remain until the end of October. This hawk is very destructive to young poultry and small insectivorous birds. It is one of the smallest of the Hawks, and, in the adult, has most beautiful plumage, being barred below with light brown and having a bluish slate back. Its nest is a rude frail platform of twigs and leaves placed against the trunk of a tree. Eggs are bluish white, blotched and spotted with shades of brown.

78—(333) **COOPER'S HAWK**—*Accipiter cooperi*—(Young)—A rather uncommon summer resident. Breeds in the interior of the province—a very destructive hawk. Length seventeen inches. The plumage almost exactly the same as that of the preceding hawk. Nest in crotches of high trees, made of sticks and twigs, and often lined with pieces of bark. Eggs bluish white, faintly spotted with pale brown. Made June 2, 1843.

79—(334) **GOSHAWK**—*Astur atricapillus atricapillus*—(Adult)—A winter visitor to southern Ontario, resident and breeding in the interior—very destructive to game and poultry. One of the largest and strongest species, very handsome in the adult plumage. Length twenty-three inches. Nest in the tallest trees in dense woods. Three or four eggs, are bluish white, occasionally with faint spots of brown. Size 2.30 x 1.70. Made November 10, 1860.

80—(334) **GOSHAWK**—*Astur atricapillus atricapillus*—(Young)—A winter visitor to southern Ontario, resident and breeding in the interior—very destructive to game and poultry. Made November, 1863.

81—(339) **RED-SHOULDERED HAWK**—*Buteo lineatus lineatus*—(Adult)—Length nineteen inches. They rarely feed upon poultry, confining their diet to mice, rats, frogs, snakes, etc. Summer resident tolerably common in some parts of Ontario; breeds in the interior. Specimens are

occasionally seen in winter. Nest in the larger growths of timber, high above the ground; the nest is of sticks lined with leaves, weeds and bark. Three or four eggs, a white ground color, blotched and spotted with different shades of brown. Size 2.15 x 1.75.

82—(343) **BROAD-WINGED HAWK**—*Buteo platypterus*—(Young)—This hawk, a common summer resident, breeding throughout its range in Ontario, has a weird cry, like the creaking of branches. A medium-sized bird, sixteen inches in length, short tail and broad rounded wings; adults have the under parts handsomely barred with brown. Nest in the crotch of large trees, made of sticks and lined with bark. Two to four eggs, greyish in color, spotted and blotched with brown. Size of eggs 1.90 x 1.55.

83—(352) **BALD EAGLE**—*Haliaeetus leucocephalus leucocephalus*—(Young)—A resident species which formerly regularly nested in certain localities along the shores of the lakes, but has now retired to the quiet of the interior, only visiting southern Ontario in the winter. It only attains the white head and tail when three years old. Adult is thirty-four inches in length and expands seven feet. Food consists of fish (which they sometimes capture themselves, but more often take from the osprey), carrion and ducks; their nests are massive structures of sticks in the top of tall trees. Two eggs, which are white. 2.75 x 2.10.

FALCONS—CARACARAS—Family Falconidae.

84—(356) **DUCK HAWK**—*Falco peregrinus anatum*—(Young)—A regular, but not common, autumn visitor to southern Ontario, rarely seen in the spring; has been found nesting in eastern Ontario and also in Muskoka. This beautiful bird is characterized by its black moustache and is the most graceful, fearless and swift of the Falcons, striking down birds of several times its own weight, such as the larger ducks. It lays its eggs on rocky ledges. They are the darkest, brightest marked and most beautiful of all Falcon eggs. Color buff or reddish buff, heavily marked with brown. Size 2. x 1.55.

85—(356a) **DUCK HAWK**—*Falco peregrinus anatum*—(Young)—A regular, but not common, autumn visitor to southern Ontario; rarely seen in the spring; has been found breeding in eastern Ontario and also in Muskoka. Made Oct. 25, 1846.

86—(360) **AMERICAN SPARROW HAWK**—*Falco sparverius sparverius*—(Female)—A common summer resident, breeds throughout its range in Ontario, arrives early in April, departs about the end of September. A very useful hawk, feeding chiefly on mice and insects; one of the smallest of American hawks, only ten inches in length. The birds are very noisy, especially when the young are learning to fly, uttering a loud tinkling "killy, killy, killy." They are very amiable birds and nest harmoniously in the same tree with other birds, such as Flickers, Robins, etc. Nest in cavities in trees either in woods or open fields. Eggs buff in color, spotted or blotched with reddish brown. Size 1.35 x 1.10. Made August 24, 1860.

OSPREY—Family Pandionidae.

87—(364) **OSPREY**—**FISH HAWK**—*Pandion halliaetus carolinensis*—(Adult)—Summer resident, breeding in suitable places in Ontario. Its nesting places now are in the unsettled parts of the interior where the lakes are still surrounded by trees sufficiently large to meet the bird's requirements. Arrives in April, departs at the end of September. This great fisherman is protected by law in a great many States on the other side. It is a pleasant sight to watch a number of these birds as they soar

at an elevation above the water waiting for fish to come to the surface, when, with folded wings, the bird speeds downward and plunges into the water, rarely missing its prey. Nests are platforms of sticks used year after year, and, being added to, become of enormous proportions. Eggs two or three, bright cream color, blotched with chestnut brown. Size 2.40 x 1.80.

HORNED OWLS—Family Bubonidae.

88—(367) **SHORT-EARED OWL**—*Asio flammeus*—Sometimes very common in the autumn about the low meadows and marshes, occasionally breeding in southern Ontario. This bird is fifteen inches in length, has very short ear tufts, and is streaked beneath. Its food consists almost entirely of small rodents, which they hunt towards dusk and at night over the marshes and meadows. Four to seven white eggs laid upon the ground on a lining of sticks and weeds under a bush or close to an old log. Size of eggs 1.55 x 1.25. Made in November, 1863.

89—(367) **SHORT-EARED OWL**—*Asio flammeus*—This owl is sometimes very abundant in the autumn about the low meadows and marshes. It occasionally breeds in southern Ontario, but the great majority retire to the marshes of the interior for that purpose. Made in November, 1863.

90—(368) **BARRED OWL**—*Strix varia varia*—Generally distributed through the province, but not common anywhere. Nests have been found all through its range. Its length is twenty inches; food chiefly of rats, mice, and frogs, and, sometimes, but not often, poultry. Nests in hollows of large trees in the forest. Four pure white eggs. Size 1.95 x 1.65.

91—(372) **SAW-WHET OWL**—*Cryptoglaux acadica acadica*—(Female)—Although this little owl is a resident of Ontario, it is peculiar in its distribution. It is most frequently seen in winter and will in some seasons be quite common in the locality for a time, and may not again be seen there for several years. It breeds sparingly in southern Ontario. Length eight inches. They nest in hollow trees in deserted woodpecker holes, and have been known to nest in bird boxes near farm houses. They lay from three to six white eggs. Size 1.20 x 1.00. Made in April, 1865.

92—(372) **SAW-WHET OWL**—*Cryptoglaux acadica acadica*—(Young)—Made in July, 1859.

93—(375) **GREAT-HORNED OWL**—*Bubo virginianus virginianus*—(Adult)—A fairly common resident, breeding throughout its range; the strongest and most courageous of our birds of prey. This bird, which is twenty-two inches in length, captures rabbits, grouse and poultry, and has been known to kill and eat skunks. Deserted hawk or crow nests are used if they are located in dense woods. They also sometimes nest in cavities in large trees. Two to four white eggs. Size 2.25 x 1.85.

94—(376) **SNOWY OWL**—*Nyctea nyctea*—A winter visitor from the Arctic regions, occurring in varying numbers almost every season. This beautiful species varies in plumage from pure white to specimens heavily and broadly barred with blackish brown. It is next to the Great Gray Owl, being two feet in length. They feed upon hares, squirrels and smaller mammals, as well as grouse, etc. They nest upon the ground in a hollow in the moss. Two to eight eggs, white in color. Size 2.25 x 1.75. Made in November, 1862.

95—(376) **SNOWY OWL**—*Nyctea nyctea*—A winter visitor from the Arctic regions, occurring in varying numbers almost every season. Made in November, 1862.

CUCKOOS, KINGFISHERS, ETC.—ORDER XIV.

Family Cuculidae.

96—(388) **BLACK-BILLED CUCKOO**—*Coccyzus erythrophthalmus*—A common summer resident, breeding through its range in Ontario. Arrives about the 20th of May—departs about the end of September. All the Cuckoos are close sitters, and will not leave the nest until nearly reached with the hand, when they will slowly flutter off through the underbrush and continue to utter their mournful "Kuk, kuk, kuk," many times repeated. Nests on bushes or low trees are made of twigs lined with shreds of grape vine bark or catkins, and are so flat on the top that the eggs frequently roll off. Three or four eggs, greenish blue. Size 1.15 x .85. Made July 20, 1843.

KINGFISHERS—Family Alcedinidae.

97—(390) **BELTED KINGFISHER**—*Ceryle alcyon*—(Female)—A common summer resident, breeding throughout its range in Ontario. Arrives about the beginning of April—departs early in October. Its rattling notes are among the most familiar of sounds in all localities near water. Their food is small fish. Nests are located in tunnels which are dug by the birds, commencing two or three feet from the face of the bank and extend back from six to eight feet. The end is enlarged to form a suitable nesting place. Five to eight eggs, pure white and glossy. Size 1.35 x 1.05. Made July 2, 1860.

WOODPECKERS—ORDER XV.—PICI.

Family Picidae.

Woodpeckers have sharp, chisel-like bills sharp pointed and stiff tail feathers, feet with two toes forward and two back, except in one genus. Their food is insects and grubs, which they get from boring in trees, clinging to the sides of the trunks with their strong curved nails, aided by the tail for a prop.

98—(394) **DOWNY WOODPECKER**—*Dryobates pubescens pubescens*—(Female)—The smallest of the North American Woodpeckers, length six inches. A common resident, breeding throughout the province; a very useful bird in wood yard and garden. They nest in holes in trees. Three to six glossy eggs are laid upon the bottom of the cavity. Size .75 x .60. Made July 7, 1843.

99—(402) **YELLOW-BELLIED SAPSUCKER**—*Sphyrapicus varius varius*—(Adult)—A common summer resident, breeding throughout its range in the Province of Ontario, chiefly in the north. Arrives about the middle of April—departs about the middle of September. These can be recognized by the red crown and throat (white on the female), each bordered by black, and the yellowish underparts. They are the only woodpeckers ever injurious to cultivated trees, but that only to a slight extent, in boring holes for the purpose of obtaining sap. Four to seven glossy eggs on the bottom of holes in trees. Size of eggs .85 x .60.

100—(405a) **PILEATED WOODPECKER**—*Phloeotomus pileatus abieticola*—(Male and female)—Resident, but restricted to that part of the country still covered with heavy timber. About seventeen inches in length, breed in most heavily timbered districts. Nest in a cavity twenty-five inches in depth and eight inches in diameter. Very shy bird. Lay from three to six white eggs. Size 1.50 x 1.00. Made Jan. 23, 1843.

101—(406) **RED-HEADED WOODPECKER—ALBINO—*Melanerpes erythrocephalous***—A summer resident, breeds throughout its range in the province. Arrives early in May, and departs early in September. They feed upon insects and many kinds of fruits and berries. Lay from four to eight white eggs. Size 1.00 x .75. Made in July, 1859.

102—(406) **RED-HEADED WOODPECKER—*Melanerpes erythrocephalous***—(Adult and young)—Made in July, 1859.

103—(409) **RED-BELLIED WOODPECKER—*Centurus carolinus***—(Female)—A rare summer resident of the south-western counties of Ontario. Occasionally it wanders as far east as Toronto. These birds are quite tame and during winter months come about yards and houses. Eggs laid during May are glossy white and number four to six. Size 1.00 x .75.

104—(412a) **NORTHERN FLICKER—HIGH HOLER—*Colaptes auratus luteus***—(Adult female and young)—Common summer resident, breeds throughout the Province of Ontario. Arrives about the middle of April, departs about the middle of October. Flickers are large woodpeckers, with a brownish tone to the plumage. They are often found on the ground in pastures, or on side hills, feeding upon ants. They nest in cavities in trees, fence posts, holes under roofs of buildings, etc. Eggs white, five to ten, and very glossy. Size of eggs 1.10 x .90. Made June 27, 1859.

GOATSUCKERS, SWIFTS AND HUMMINGBIRDS—ORDER XVI.— MACROCHIRES GOATSUCKERS—Family Caprimulgidae.

Goatsuckers are long-winged birds with small bills and extraordinary large mouths. They are dusk or night fliers, their food consisting of insects which they catch on the wing. Their plumage is mottled, black, brownish and white, resembling the ground upon which they lay their eggs.

105—(417)—**WHIP-POOR-WILL—*Antrostomus vociferus vociferus***—(Male)—In their pursuit of insects they glide like a shadow over fields and woods, their soft plumage giving forth no sound. Their notes, "Whip-Poor-Will," ring out in wooded, hilly districts. A summer resident in woodlands, somewhat local in distribution, never seen flying about cities. Arrives early in May, departs early in October. Eggs greyish white or cream marbled with pale brown, with fainter markings of lilac. Size 1.50 x .85.

HUMMINGBIRDS—Family Trochilidae.

Hummingbirds are the smallest of birds. Their plumage is a metallic green with throat or crown patches of the brightest of iridescent shining red, orange, blue or violet. Their flight is accompanied by a buzzing sound, produced by the rapidly vibrating wing feathers. Their food is small insects and honey which they get from flowers.

106—(428) **RUBY-THROATED HUMMINGBIRD—*Archilochus colubris***—(Male and female)—A common summer resident, breeds throughout its range in the province. Arrives about the middle of May, departs about the middle of September. It is a small species, 3.5 inches. Its nest is beautiful, built on horizontal limbs of trees, an inch or more in diameter. The nests are made of plant fibres and down, and the exterior is completely covered with green lichens so that it appears like a small bunch of moss on the limb. Two white eggs. Size .50 x .35.

PERCHING BIRDS—ORDER XVII.—PASSERES.

FLYCATCHERS—Family Tyrannidae.

Flycatchers, which are found only in America, are insect-eating birds. They all have the habit of sitting erect on a twig and watching for insects which they catch on the wing.

107—(452) **CRESTED FLYCATCHER**—*Myiarchus crinitus*—(Adult)—Common summer resident, breeding in woods and orchards throughout its range in the Province of Ontario. Arrives about the middle of May, departs about the middle of August. This is a shy species. They build in cavities of trees at any elevation, the nest being made of twigs, weeds and trash. Four to six eggs, buff color, blotched and lined with dark brown and lavender. Size .85 x .65. Made in 1859.

108—(444) **KINGBIRD**—*Tyrannus tyrannus*—(Adult)—An abundant summer resident, breeds throughout its range in Ontario. Arrives about the 10th of May, departs about the end of August. They drive away any kind of feathered creature to which they take a dislike, regardless of size. Their sharp clatter is kept up all day long. They nest in trees or on fence rails, and are great insect destroyers. The nests are made of strips of vegetable fibre, weeds, etc., and lined with horse hair or catkins. Three to five eggs, creamy ground color, splashed with reddish brown and lilac. Size .95 x .70. Made in 1859.

109—(426) **PHOEBE FLYCATCHER**—*Sayornis phoebe*—(Adult)—Known as "Bridge Birds," because they frequently construct their nests under bridges and arches. Freak situations in which to locate their nests are often chosen by these birds, brake beam of a freight car, crevices of old wells, hen houses, etc. The birds are one of the most useful that we have; an abundant summer resident; arriving early in April and departing early in October, and will return year after year to its nesting place on the farm if not molested. Insects constitute nearly their whole bill-of-fare. Nests of mud, moss and grass, lined with feathers. Four or five eggs. Size .75 x .55.

110—(461)—**WOOD PEWEE**—*Myiochanes virens*—(Adults)—Its pleasing notes may be heard resembling "Pee wee." A common summer resident, breeding in woods and orchards throughout its range in Ontario. Arrives about the middle of May. Departs about the middle of September. They nest on horizontal limbs, making handsome nests of plant fibres and fine grasses, covered on the exterior with lichens. They are shallow and resemble a small knot on the limb of the tree. Three or four eggs of a cream color, spotted in a wreath about the large end with reddish brown and lavender. Size .80 x .55. Made June 25, 1863.

111—(467) **LEAST FLYCATCHER**—*Empidonax minimus*—Common summer resident, breeding in orchards, shrubberies and woodlands throughout its range in Ontario. It arrives about the middle of May. Departs at the end of August. Little birds, 5.5 inches long. They are known by the name of "Chebec," from their continually uttered note. Nest of plant fibres, fine grasses, string and cobwebs. Three to five eggs, pale creamy white. Size .65 x .50.

LARKS—Family Alaudidae.

112—(474b) **PRAIRIE-HORNED LARK**—*Otocoris alpestris praticola*—(Male)—A common summer resident, breeding in open fields wherever it occurs in the province. Arrives about the 10th of February and departs late in November. In the south-western counties of Ontario it is resident, large numbers remaining all winter. Nests are made of grasses and

lined with horse hair or feathers, placed in slight hollows under a tuft of grass or sods. They raise two and sometimes three broods a season. Three or four eggs of buff ground, thickly sprinkled with lavender. Size .83 x .60. Made in 1875.

CROWS, JAYS, MAGPIES—Family Corvidae.

113—(477) **BLUE JAY**—*Cyanocitta cristata cristata*—A common resident, breeding throughout its range in the province. The most beautiful of North American Jays, but beneath their handsome plumage beats a heart as cruel and cunning as that in any bird of prey. Fall, Winter and Spring their food is acorns, chestnuts, berries, seed, grain, insects, lizards, etc., but in the Summer months they destroy a great many eggs and young of the smaller birds. They are known to watch a nest until it is full of eggs before making their theft. Nests are made of twigs and rootlets in low trees. Four to six eggs of a greenish buff color spotted with olive brown. Size 1.10 x .80.

114 (486a) **NORTHERN RAVEN**—*Corvus corax principalis*—Tolerably common resident in the interior of the Province of Ontario. Twenty-four inches or a little larger, habits similar to those of the crow, but more dignified. They remain mated for life. They feed largely upon animal matter, lizards, shellfish, frogs, young of birds and carrion. Quite common on the cliffs of Labrador and Alaska. Nest on ledges of high inaccessible cliffs, made of sticks lined with smaller ones and hair or wool. Four to seven eggs laid in April or May. A lightish green color blotched with amber and drab. Size 1.95 x 1.25. Made in Nov., 1859.

115—(488) **AMERICAN CROW**—*Corvus brachyrhynchos brachyrhynchos*—Abundant resident in southern Ontario, summer resident in the northerly parts of the province. Breeds throughout its range. These birds post a sentinel in some tree top to keep watch while the rest of the flock is feeding in the field below. In the Fall and Winter large numbers of them flock, and at night all roost together in one piece of woods. Their nests, placed near the top of large trees, are made of sticks, lined with rootlets, and the eggs, which are laid in April or May, are four to seven in number, a bluish white densely speckled with various shades of brown and lilac. Size 1.60 x 1.15.

BLACKBIRDS, ORIOLES, ETC.—Family Icteridae.

116—(494) **BOBOLINK**—*Dolichonyx oryzivorus*—(Male)—Abundant summer resident. The male sings all day long during May and June to his sparrow-like mate, who is sitting on her nest concealed in the meadow grass. Breeds in the hay meadows throughout its range in Ontario, which does not extend north of the cultivated lands. Arrives about the 10th of May. Departs about the end of August. Nests are hollows in the ground with the top slightly arched to conceal the eggs, which are greyish white, clouded with brownish grey and lilac. Size .84 x .62. Four to six eggs laid in June. Made May 15, 1847.

117—(495) **COWBIRD**—*Molothrus ater ater*—(Male and female)—An abundant summer resident. Deposits its eggs in the nests of other small birds. Breeds throughout its range. Arrives about the 1st of April, departs early in October. This is about the most injurious bird we have, as each egg deposited by it means the destruction of a whole brood of one of our beneficial species. Their eggs are white, spotted and speckled all over more or less strongly with brown and yellowish brown. Size .85 x .64. Made April 14, 1860.

118—(498) **RED-WINGED BLACKBIRD**—*Agelaius phoeniceus phoeniceus*—(Male)—A very abundant summer resident, breeding in marshes or hay meadows throughout its range in Ontario. Arrives about the middle of March, departs about the middle of October. These birds do considerable damage to grain fields in the Fall, but they do a greater amount of good at other seasons in the destruction of injurious insects and weed seed. They make their nests of grasses woven and twisted together in bushes, in swamps, or over water. Eggs three to five in number, bluish white spotted or lined with blackish brown and purplish. Size 1.00 x .70.

119—(498)—**RED-WINGED BLACKBIRD**—*Agelaius phoeniceus phoeniceus*—(Young).

120—(501) **MEADOW LARK**—*Sturnella magna magna*—A common summer resident in southern Ontario, gradually extending its range northward as the land is cleared. Nests on the ground in meadows throughout its range. Arrives towards the end of March. In mild seasons these birds stay very late, and small parties often spend the winter here. This species is of great value to the farmer. It has a high, pleasing, flute-like whistle. They are shy birds and hard to see, and conceal their nests among the tall grass of meadows, arching them over with dead grass. In May or June they lay from four to six white eggs, speckled with reddish brown and purplish. Size 1.10 x .80. Made Feb. 20, 1860.

121—(507) **BALTIMORE ORIOLE**—*Icterus galbula*—(Male and Female)—Easily identified by its orange flame color and entirely black head. Their nests are made of plant fibres and string and reach in length about ten inches, and half that in diameter. They are attached to drooping branches by the rim, so that they rock to and fro. The Oriole is a common summer resident, breeding throughout its range in Ontario. Arrives early in May, departs about the end of August. The eggs, laid in May and June, are white, streaked and lined with blackish brown and greyish. Size .90 x .60. Made in June, 1859.

122—(511b) **BRONZED GRACKLE**—*Quiscalus quiscula aeneus*—(Male)—A common summer resident, breeding throughout its range in the province. Arrives about the middle of March, departs early in October. This is the most common of the Crow Blackbirds in Ontario, and is distinguished by the brassy color of the upper parts. Large pines appear to be the favorite sites for them to locate their large nests of twigs, weeds, grass and trash. Eggs from three to five, greenish white, splashed, spotted and scrawled with various shades of brown and grey and with streaks of black. Size 1.10 x .80.

FINCHES, SPARROWS, ETC.—Family Fringillidae.

123—(514) **EVENING GROSBEAK**—*Hesperiphona vespertina vespertina*—(Male)—They breed in the mountainous portions of their summer range, placing their flat nest of sticks or rootlets in low trees or bushes. Eggs, laid in May or June, are greenish white, spotted and blotched with brown. Size .90 x .65. An irregular winter visitor from the west. Made in February, 1864.

124—(515) **PINE GROSBEAK**—*Pinicola enucleator leucura*—(Male and female)—An irregular winter visitor to southern Ontario, in some seasons quite common, in others entirely absent. Breeds far north. They build in conifers, making their nests of small twigs and rootlets lined with fine grasses and lichens. In May or June they lay three or four eggs, greenish blue, spotted and splashed with dark brown with fainter markings of lilac. Size 1.00 x .70.

125—(515) **PINE GROSBEAK**—*Pinicola enucleator leucura*—(Female)
—Made in November, 1842.

126—(515) **PINE GROSBEAK**—*Pinicola enucleator leucura*—(Female)
—Made March 2, 1865.

127—(517) **PURPLE FINCH**—*Carpodacus purpureus purpureus*—(Male and female)—A common resident and a beautiful songster. Breeds throughout its range in Ontario. Their nests are made of fine weeds and grasses and lined with horse hair. They nest in trees, in orchards, or in evergreens. The eggs, laid in June, are greenish blue, spotted with dark brown. Size .85 x .65. Made in May, 1863.

128—(522) **WHITE-WINGED CROSSBILL**—*Loxia leucoptera*—(Male)—They have a roving disposition, and are apt to be found in any unexpected locality. This species is rosy red with two white wing bars. Eggs greenish white, spotted with brown and with lavender shell markings, very blotchy. Size .80 x .55. An irregular visitor to southern Ontario—never abundant. Resident in the northern part of the province. Made in November, 1875.

129—(528) **LESSER REDPOLL**—*Acanthis linaria linaria*—(Male and female)—Generally common in winter, but sometimes entirely absent. Breeds in the far north, near Hudson's Bay. Feeds on seeds of weed stems that project above the snow. Their flight is similar to that of the Goldfinch. Nests in low elevations. Eggs, three to six, pale bluish, speckled with reddish brown. Size .65 x .50. Made March 2, 1864.

130—(756) **VEERY-WILSON'S THRUSH**—*Hylocichla fuscescens*—An abundant summer resident of woodlands. Breeds throughout its range in the province. Arrives early in May, departs at the end of August. Nests on the ground or near it, making a structure of woven bark strips and grasses in the midst of a clump of ferns. Three or four eggs, bluish green. Size .90 x .65. Made June 11, 1859.

131—(529)—**AMERICAN GOLDFINCH**—*Astragalinus tristis tristis*—(Male and female)—The wild canary, as it is commonly called, is one of the best known Ontario birds, its bright color and sprightly song combining to render it attractive. It breeds in all parts of the Province of Ontario. More abundant in summer than in winter, a large number going south at the approach of cold weather. Made June 11, 1859.

132—(529)—**NEST OF AMERICAN GOLDFINCH**—*Astragalinus tristis tristis*—It builds in small trees, often in gardens or orchards, and in shade trees by the roadside. The nest is made of plant fibres and thistledown firmly woven together. Three to six plain bluish white eggs. Size .65 x .50. Made August 7, 1864.

133—(534)—**SNOW BUNTING**—*Plectrophenax nivalis nivalis*—A common winter visitor, arrives about the end of October, departs at the middle of March; breeds in the Arctic regions. Their nests are built on the ground, being sunk into the sphagnum moss, and made of grasses lined with feathers. Four to five greenish white eggs, splashed with yellowish brown and lilac. Size .90 x .65. Made February 9, 1860.

134—(540) **VESPER SPARROW**—**BAY WING**—*Poœcetes gramineus*—An abundant summer resident in open fields, building on the ground in a hollow lined scantily with grasses. Breeds throughout its range in Ontario; arrives about the middle of April, departs early in October. Their clear, musical song is known to many frequenters of weedy pastures. Four or five eggs, dull whitish, blotched and splashed with light brown and lavender tints. Size .80 x .60. Made October 20, 1846.

135—(554) **WHITE-CROWNED SPARROW**—*Zonotrichia leucophrys leucophrys*—(Male)—It is a common migrant, arriving about the 10th of May and soon passing northward, returning towards the end of September, departing southward late in October; breeds in the far north. Known by the broad white crown, bordered on either side by black. Nests are built on the ground near the edges of woods. From four to six eggs, pale greenish blue, spotted with reddish brown and greyish. Size .90 x .65. Made in May, 1863.

136—(558) **WHITE-THROATED SPARROW—PEABODY**—*Zonotrichia albicollis*—(Male)—Very abundant during the migrations and a regular though not a common summer resident in southern Ontario, where a few pairs always remain to breed. Arrives about the end of April, departs early in October. The most beautiful of sparrows, softly blended plumage and pure white throat, greyish breast and sides of the head. The lores are adorned with a bright yellow spot; their musical piping song is heard from hedge and wood. They lay three or four eggs in grass lined hollows on the ground or in thickets. Eggs are bluish white, spotted with brown. Size .85 x .62. Made in May, 1865.

137—(559) **TREE SPARROW**—*Spizella monticola monticola*—A common winter visitor; arrives early in October, departs late in April. Breeds from the northern limit of Ontario northward. They breed abundantly in Labrador and Hudson's Bay, placing their nests in hollows on the ground or moss. Three or four eggs, greenish white, speckled with reddish brown. Size .80 x .55.

138—(563) **FIELD SPARROW**—*Spizella pusilla pusilla*—Their high piping song is frequently heard on hot sultry days in summer. A common summer resident in scrubby fields in Southern Ontario; breeds throughout its range; arrives about the middle of April, departs early in October. Eggs laid in May or June are a pale bluish white, blotched with yellowish brown and greyish purple. Size .65 x .50. Made June 4th, 1863.

139—(567) **SLATE-COLORED JUNCO**—*Junco hyemalis hyemalis*—A common resident, most abundant in spring and late autumn migrations; breeds throughout its range in the province. They place their nests on the ground, partially concealed by rocks, stumps, etc. They are made of grasses, lined with hair. Four or five greenish white eggs, speckled with reddish brown, with a wreath around the large end. Size .80 x .55. Made April 7th, 1864.

140—(581) **SONG SPARROW**—*Melospiza melodia melodia*—An abundant summer resident; breeds throughout its range in the province; arrives about the middle of March, departs late in October. They are sweet and persistent songsters, frequenting gardens, roadsides and pastures. They conceal their nest (made of grass and weed stems, occasionally lined with horse hair) on the ground or in bushes. Eggs, three to five, greenish white marked, spotted and blotched with many shades of brown, two or three sets being laid during the season. Size .80 x .60.

141—(584) **SWAMP SPARROW**—*Melospiza georgina*—This is a dark colored sparrow. An abundant summer resident in marshes, breeding throughout its range in Ontario. It arrives about the middle of April, departs early in November. Owing to its shy habits, it is not commonly seen during the breeding season. Nest made of grasses, and on the ground, in places where the walking is extremely treacherous. Eggs greenish white, clouded with brown spots. Size .75 x .55. Made October 5th, 1845.

142—(587) **TOWHEE**—*Pipilo erythrophthalmus erythrophthalmus*—(Male and female)—An abundant summer resident in the woods of Southern Ontario, and one which is extending its range as the land is brought into

cultivation. Breeds wherever it occurs in the province. Arrives about the end of April, departs early in October. While they are scratching among the leaves for food, they will utter their familiar "Two-hee" or "Che-wink," and then again will mount to a tree or bush and sing their refrain. Their nest is on the ground or in low bushes, well lined with dry grasses. Eggs are pinkish white, with markings of light reddish brown. Size .90 x .70.

143—(595) **ROSE-BREADED GROSBEAK**—*Zamelodia ludoviciana*—(Male and female)—This is one of the most pleasing of our songsters. It is black and white, with rosy red breast and under wing coverts. Nests in bushes or low trees. Three or four eggs, laid in June, of a greenish blue, spotted heavily with reddish brown. Size 1.00 x .75. A tolerably common summer resident, breeding in the woods throughout its range in the province; arrives about the end of April, leaves early in October. Made August 15th, 1859.

144—(598) **INDIGO BUNTING**—*Passerina cyanea*—(Male and female)—A common summer resident in Southern Ontario; arrives early in May, departs about the end of August. Its song is a sweet refrain. They nest in low bushes. Nest of grass and weeds, lined with fine grass or hair. Quite a substantial structure. Eggs pale bluish white. Size .75 x .52. Made in July, 1863.

TANAGERS—Family Tanagridae.

145—(608) **SCARLET Tanager**—*Piranga erythromelas*—(Male and female)—This beautiful scarlet and black bird is very quiet in actions, but its loud warbling song is heard at a great distance. It is a tolerably common summer resident, breeding throughout its range in the province; arrives early in May, and departs about the end of August. They nest upon horizontal limbs or forks, at elevations of four to twenty feet, making frail nest of twigs, rootlets and weeds. Eggs greenish blue, spotted with various shades of brown. Size .95 x .65. Made June 10th, 1859.

SWALLOWS—Family Hirundinidae.

146—(613) **BARN SWALLOW**—*Hirundo erythrogastra*—(Male and female)—This swallow is the most beautiful and graceful of the family. It is a common summer resident, nesting in barns and outhouses throughout its range in the province; arrives about the end of April, departs early in September. Before the advent of civilized man they attached their nests to the sides of eaves and crevices among rocks and in hollow trees. Eggs creamy white, spotted with reddish brown. Size .80 x .55. Made in June, 1863.

147—(614) **TREE SWALLOW—WHITE-BREADED SWALLOW**—*Iridoprocne bicolor*—(Male)—A vivacious, active species, resident during the summer, naturally nesting in trees or stumps, though large numbers take up their abode in houses provided for them by man. Nest of straw and grass, lined with feathers. Four to six white eggs. Size .75 x .50. Arrives quite early in April, departs about the end of September. Made May 5th, 1835.

148—(612) **CLIFF SWALLOW**—*Petrochelidon lunifrons lunifrons*—(Male)—A regular summer resident, somewhat irregularly distributed, being abundant at some points and absent from others. Breeds in colonies. Arrives early in May; departs about the end of September. Easily recognized by their brownish throat and breast, white forehead and buffy rump. They build a flask-shaped structure of mud cemented to the face of a cliff or eaves of a building, the entrance being small, while the nest proper is large and rounded, and lined with grass and feathers. Eggs creamy white, spotted with reddish brown. Size .80 x .55. Made May 5, 1835.

WAX WING—Family Ampelidae.

149—(619) **CEDAR WAXWING—CHERRY BIRD**—*Bombycilla cedrorum*—A resident species, common, and generally distributed in summer, irregular in winter, its movements at that season depending on the food supply. They feed upon berries and catch insects in the air after the manner of the fly catchers. Their notes are a strange lisping sound often barely audible. Builds in orchards and groves in any kind of tree. The nests are made of grasses, strips of bark, moss, string, etc. Eggs dull bluish, speckled with blackish brown. Size .85 x .60. Made March 2, 1862.

SHRIKES—Family Laniidae.

150—(621) **NORTHERN SHRIKE**—*Lanius borealis* Length ten inches. These are bold and cruel birds, feeding upon insects, small rodents and small birds. They have weak feet, and in order to tear their prey to pieces with their hooked bill they impale it upon thorns. A regular but not abundant winter visitor. The majority of them breed in the north, but nests have been found in various places in southern Ontario. Arrives in October; departs in April. The nests are found in thickets and tangled underbrush, and are made of vines, grasses and catkins. Four to six greyish white eggs, spotted with brown and amber. Size 1.05 x .75. Made October 23, 1865.

VIREOS—Family Vireonidae.

151 (624) **RED-EYED VIREO**—*Vireosylva olivacea* The most common of the Vireos and a persistent songster. Their eyes are brownish red. They swing their nests about ten feet from the ground from the forks of trees in woods and orchards. The nests are made of strips of bark, fibre, etc., and have pieces of string or paper woven into the sides, and are among the most beautiful of bird homes. Three or four eggs, often accompanied by one of the Cowbird's, are laid in May or June; white, speckled with blackish brown. Size .85 x .55. The vireo breeds throughout its range in Ontario; arrives early in May, departs towards the end of September. Made in June, 1863.

152 (624) **RED-EYED VIREO**—*Vireosylva olivacea* A common summer resident in woods and orchards, nesting throughout its range in the province; arrives early in May, departs toward end of September. Made May 20, 1877.

153 (628) **YELLOW-THROATED VIREO**—*Lanivireo flavifrons*—A handsome bird, an uncommon summer visitor, which arrives about the beginning of May, departs early in September. They place their beautiful basket-like structure in forks of branches, adorning the outside with lichens, thus adding to the natural beauty of the nest. Four or five eggs, pinkish or creamy white, speckled about the large end with reddish brown. Size .80 x .60. Made in May, 1875.

WARBLERS—Family Mniotiltidae.

As a family they may be classed as the most beautiful and useful birds that we have. They feed upon small injurious insects. Their songs are simple but effective, and their nests of a high order of architecture.

154—(645) **NASHVILLE WARBLER**—*Vermivora rubricapilla rubricapilla*—A common migrant, breeds sparingly in southern Ontario and no doubt regularly in the Interior; arrives early in May, departs early in October. The nest of this small species is placed flush with the surface of the ground, covered with overhanging grasses, and is made of grass and pine needles. Eggs white, speckled with bright reddish brown. Size .60 x .45. Made May, 1875.

155—(636) **BLACK AND WHITE WARBLER**—*Mniotilta varia*—This striped black and white warbler is seen creeping about tree trunks and branches after the manner of the Nuthatch. They are active gleaners and of inestimable value to man, and are a common summer resident, breeding in woodlands throughout their range in Ontario; arriving early in May, departing early in September. They nest on the ground in woods or swamps. Nest of strips of bark and grass. Three to five eggs, white, speckled and wreathed with reddish brown. Size .65 x .50. Made May 29, 1845.

156—(657) **MAGNOLIA WARBLER**—*Dendroica magnolia*—An abundant migrant, breeds from central Ontario northward; arrives early in May, departs about the end of September. One of the most beautiful of the warblers. Yellow breast and sides streaked with black. Builds in coniferous trees. Nest of rootlets and grass stems, lined with hair. Eggs dull white, speckled with pale red brown. Size .65 x .48.

157—(646) **ORANGE-CROWNED WARBLER**—*Vermivora celata celata*—A rare summer visitor. They have been found breeding about Hudson Bay and in the Mackenzie River district, placing their nests in hollows on the ground, on the sides of banks or hills, concealed by tufts of grass or bushes. Eggs white, speckled with brown. Size .54 x .45.

158—(657) **MAGNOLIA WARBLER**—*Dendroica magnolia*—(Male).

159—(667) **BLACK-THROATED GREEN WARBLER**—*Dendroica virens*—(Female)—A common summer resident; arrives early in May, departs early in October. They are nearly always found in pines, with nests placed among the pine needles, where they are very difficult to locate. They lay in June, three to four white eggs, speckled with brown and lilac. Size .60 x .50.

160—(654) **BLACK-THROATED BLUE WARBLER**—*Dendroica caerulescens caerulescens*—(Female)—In migrations in southern Ontario they are common, breeding sparingly in the south and more abundantly in the interior. Arrives early in May, departs at the end of September. They nest in underbrush a few inches above the ground. Nest of bark strips, moss, and rootlets lined with fine grasses or hair. Eggs pale buffy white, dotted with pale brown. Size .65 x .50.

161—(659) **NEST OF CHESTNUT SIDED WARBLER**—*Dendroica pennsylvanica*—One of the few warblers which regularly breeds through its range in the Province of Ontario. Its nest, of grasses, weed stems and some fibres, is usually built in low bushes, within a few feet of the ground. The eggs are white or creamy white, speckled with brown and grey. Size .65 x .50. Made June 20, 1863.

162—(659) **CHESTNUT SIDED WARBLER**—*Dendroica pennsylvanica*—(Male)—The adults of this species may be known by the white underparts and the broad chestnut stripe on the flanks. The crown is yellow.

163—(660) **BAY-BREASTED WARBLER**—*Dendroica castanea*—This species is a regular but not a common migrant in the spring, rarely seen in autumn, breeds in the interior; arrives early in May, departs in September; has crown, throat and sides of a rich chestnut, forehead and face black, underparts white. Nests in coniferous trees in swampy places. Three or four eggs, white, spotted and blotched with red, brown, umber and grey. Size .70 x .50. Made May 20, 1875.

164—(662) **BLACKBURNIAN WARBLER**—*Dendroica fusca*—(Male)—Tolerably common in spring and autumn in southern Ontario, probably breeds in the interior; arrives early in May, usually when the apple trees

are in bloom, departs at the end of September. Without exception this is the most exquisite of the family. The male can always be known by the bright orange throat, the upper part being largely black. Nests are placed on horizontal limbs of coniferous trees, constructed of rootlets, fine weed stalks, and grasses, lined with hair. Three to four eggs, greenish white, blotched with reddish brown and neutral tints. Size .70 x .48.

165—(671) PINE WARBLER—*Dendroica vigorsi*—An irregular summer resident; arriving toward the end of April, and departing in September; generally found in pine woods, where they can be always located by their peculiar musical lisp-trill. They nest high in the trees, placing their nest in a thick bunch of needles. Three or four dull whitish eggs, blotched with shades of brown and lilac. Size .68 x .52.

166—(674) OVEN-BIRD—*Seiurus aurocapillus*—An abundant summer resident in woods; arrives early in May; departs early in September. Is often known as the Golden-crowned Thrush because of its brownish orange crown bordered with black. They are woodland birds and nest in the ground, arching the top over with rootlets or leaves, the nest being made of grasses and leaf skeletons; four to six eggs, white, glossy and spotted or wreathed with red, brown and lilac. Size .80 x .60. Made May 10th, 1863.

167—(681) MARYLAND YELLOW-THROAT—*Geothlypis trichas trichas*—(Male and Female) They are ground-loving birds and can be located by their loud unmistakable song, "Witchery, witchery, witch"; a common summer resident; arrives about the 10th of May; departs at the end of September. Breeds throughout its range in Ontario. They lay from three to five eggs, white, speckled about the larger end with red, brown and umber and with shell markings of stone grey. Size .70 x .50. Made May 20th, 1847.

168—(685) WILSON'S WARBLER—*Wilsonia pusilla pusilla*—(Male) —These handsome little black-capped, fly-catching warblers are abundantly found on the edge of woods and orchards. They are a regular migrant in spring and autumn, breeding in the interior. They nest on the ground. Nest is made of bark strips, fibres and leaves. Eggs are white, speckled with red brown. Size .60 x .50. Made in May, 1863.

169—(687) AMERICAN REDSTART—*Setophaga ruticilla*—(Male and Female) —A summer resident, breeding throughout its range in Ontario; arrives about the 10th of May; departs early in September. The male of this bird is black with a white belly and orange patches on the sides, wings and bases of outer tail feathers. They are abundant in swamps and woods, nest in trees, five to thirty feet above ground in an upright fork. The nests are compactly made of fibres and grasses felted together and lined with hair. Eggs are white, blotched with brown and grey. Size .65 x .50.

170 (687) AMERICAN REDSTART—*Setophaga ruticilla*—(Female).

WAGTAILS—Family Motacillidae.

171 (697) AMERICAN PIPIT—*Anthus rubescens*—The tit larks are abundant birds during migrations; more frequently seen in autumn than in spring. They are found in fields and cultivated ground. Breeds in the Arctic regions; arrives about the 10th of May; passes on northward very quickly. Early in September they return, and remain until the first week in November. Their nests are placed in the ground and are made of moss and grasses. Four to six eggs, dark grey, heavily spotted with brown and blackish. Size .75 x .55. Made in October, 1853.

WRENS, THRASHERS. ETC.—Family Troglodytidae.

172—(704) **CATBIRD**—*Dumetella carolinensis*—(Male and Female)—This well known mimic, abundant in open woods, swamps and hillsides, is a very common summer resident; breeds throughout its range in Ontario. Arrives about the end of April; departs early in October. Their nests are low down in bushes or trees and are constructed of twigs and rootlets. A tangled mass of vines and briars is a favorite place for them to locate their home. Eggs three to five in number, bright bluish green in color. Size .95 x .70.

173—(705) **BROWN THRASHER**—*Toxostoma rufum*—A common summer resident; breeds throughout its range in the province of Ontario. Arrives at the end of April, departs early in October. A large, handsome songster; nests near or on the ground, in hedge or thicket. Three to five eggs, greenish white, dotted with red brown. Size 1.05 x .80. Made in July, 1863.

174—(722) **WINTER WREN**—*Nannus hyemalis hvemalis*—A summer resident; breeds throughout its range in the province; commonly in the interior and northward. The smallest of the wrens, four inches in length, a very short tail. They have a sweet song, not as loud as that of the House Wren. Nest in crevices or stumps, etc., made of twigs and leaves lined with feathers. Eggs pure white, finely and sparingly dotted with red brown. Size .60 x .48.

175—(721) **HOUSE WREN**—*Troglodytes aedon aedon*—This familiar and noisy little wren, a common summer resident, builds in bird houses or any nook that may suit them. It arrives about the first of May; departs early in October. The eggs are pinkish white, minutely dotted with pale red brown, darker spots about the large end. Size .65 x .52.

KINGLETS AND GNATCATCHER—Family Sylviidae.

176—(748) **GOLDEN-CROWNED KINGLET**—*Regulus satrapa satrapa*—They are an abundant migrant and common winter resident, found in company with Chickadees, and may be seen hanging to twigs in all sorts of positions. Nest is large round structure of green moss, bark, strips and fine rootlets very thickly lined with soft feathers. They are placed in forks or partially suspended among the branches of spruce trees high above the ground; during June they lay from five to ten eggs, gray color, spotted with pale brown and lilac. Size .55 x .42.

177—(749) **RUBY-CROWNED KINGLET**—*Regulus calendula calendula*—(Adult)—Abundant during spring and autumn migrations; probably breeds in the coniferous woods of the interior, as it is known to do in Nova Scotia. This little bird is 4.25 inches long and has a partially concealed patch of red on the crown. Four to nine eggs, creamy white speckled with red-brown. Size .56 x .44.

178—(749) **RUBY-CROWNED KINGLET**—*Regulus calendula calendula*—(Young)—Made Oct. 15, 1846.

NUT HATCHES—Family Sittidae.

179—(727) **WHITE-BREASTED NUTHATCH**—*Sitta carolinensis carolinensis*—These birds, common residents, are creepers and run up and down the trunks of trees. They nest in holes in trees, lining the cavity with bark, strips and hair or feathers. Four to nine white eggs speckled with reddish brown and lilac. Size .80 x .60. Made Feb. 4, 1843.

180—(726) **BROWN CREEPER**—*Certhia familiaris americana*—A common resident; most abundant in Southern Ontario during migrations. These peculiar weak-voiced creepers are common during the winter when they may be seen working up the tree trunks. They build their nests of twigs, moss, etc., held together with cobwebs, under the loosened bark on coniferous trees. Eggs white, spotted with red brown. Size .58 x .48.

181—(728) **RED-BELLIED NUTHATCH**—*Sitta canadensis*—A resident species, but most frequently observed during the migrations. The breeding habits are the same as the white-bellied variety. They lay from four to six white eggs, spotted with reddish brown. Size .60 x .50.

182—(727) **WHITE-BREADED NUTHATCH**—*Sitta carolinensis carolinensis*.

183—(636) **BLACK AND WHITE WARBLER**—*Mniotilta varia*.

184—(735) **CHICKADEE**—*Penthestes atricapillus atricapillus*—These birds, very common residents, and among the most useful birds of the orchard, are favorites with everybody. They breed in holes in trees and in bird boxes, lining the cavities with fine grasses and feathers, and during May and June lay from five to eight white eggs, dotted with reddish brown. Size .55 x .45.

THRUSHES, BLUEBIRDS—Family Turdidae.

185—(756) **VEERY WILSON'S THRUSH**—*Hylocichla fuscescens fuscescens*—Made May 15, 1861.

186—(761) **AMERICAN ROBIN**—*Planesticus migratorius migratorius*—(Male and Young)—An abundant summer resident; breeding throughout its range in Ontario; arrives early in March. The bulk usually depart early in November, but some small flocks remain where food is plentiful, until severe frost comes, and a few always remain in sheltered spots all the winter. Their nests are made of grasses cemented together with mud and lined with finer grasses, firmly saddled in crotches of trees at any height. Eggs greenish blue. Size 1.15 x .80. They raise several broods in a season.

187—(766) **BLUEBIRD**—*Sialia sialis sialis*—(Male and female)—These birds build in cavities in trees (usually lower than twenty feet from the ground), bird boxes or any suitable nook, providing that English sparrows do not molest them. A common resident, breeding throughout its range. Arrive about the middle of March, depart towards the end of October. Several broods a year, commencing in April, are raised. Six pale bluish white eggs. Size .80 x .60. Made in May, 1875.

EGGS OF CANADIAN BIRDS.

188—1, Brown Thrush. 2 and 3, Meadow Lark. 4, Whip-Poor-Will. 5, Red-winged Blackbird. 6, Towhee Bunting. 7 and 8, Unnamed. 9, Tawny Thrush.

Note—Nos. 7 and 8 are Warblers' eggs. It is impossible to recognize them from the drawing.

189—1, Grey Duck. 2, Wood Duck. 3, Woodcock. 4, Blue-winged Teal. 5, Cow Bunting. 6, Snow Finch. 7, Chipping Sparrow.

190—1, Tree Sparrow. 2, Blue Bird. 3, Phoebe Flycatcher. 4, Killdeer Plover. 5, Killdeer Plover. 6, Kingbird. 7, Chipping Sparrow. 8, The Ruffed Grouse. 9, Warbler.

BRITISH BIRDS.

191—**BLACK-HEADED GULL**—*Larus ridibundus*—A European gull.

192—**POCHARD**—*Nyroca ferina*—A European duck, common in British waters.

193—**JACK SNIPE**—*Limnocyptes gallinula*—A winter visitor to England, generally very abundant.

194—**MAGPIE**—*Pica pica*—Common in some parts of Britain, but not generally distributed. Length of bird twenty inches. They are well-known as being great thieves. They nest in bushes and trees not far from the ground, making a large nest of sticks with an opening on the side, the interior made of weeds and mud lined with fine grasses. These nests reach a diameter of three feet. Eight greyish white eggs, spotted with brown and drab. Size 1.25 x .90. Made in 1836.

195—**STARLING**—*Sturnus vulgaris*—Commonly and generally distributed in Great Britain. It was liberated a number of years ago in Central Park, New York city, and has now become abundant there and is spreading slowly in all directions. They build their nests wherever they can find a sufficiently large crevice or opening, making them of straw, twigs and trash. Four to six pale pluish green eggs. Size 1.15 x .85. Two broods are reared in a season. Made in 1836.

196—**BULLFINCH**—*Pyrrhula pileata*—A tolerably common resident in some localities in England. Made Feb. 28, 1836.

197—**GOLDFINCH**—*Acanthis carduellis*—A resident of Great Britain and a favorite cage bird. Made in 1836.

198—**MARSH TIT**—*Parus palustris*—Tolerably common in the lowlands of England. Made March '6, 1837.

199—**LONG-TAILED TITMOUSE**—*Mecistura rosea*—A tolerably common British bird, famous for its beautiful nest. Made March 25, 1837.

200—**SKYLARK**—*Alauda arvensis*—A common British bird and splendid songster, singing when soaring high in the air. Stragglng casually to Greenland and Bermuda, this noted bird has been imported and liberated a number of times in this country, but is not able to thrive here. In Great Britain they nest on the ground in cultivated fields or meadows, laying from three to five greyish eggs, marked with brown, drab and lavender. Made April 28, 1837.

201—**WOODLARK**—*Lullula arborea*—A generally distributed British bird, resident in the southern counties. Made Aug. 7, 1838.

202—**WHEATEAR**—*Oenanthe oenanthe*—A British summer resident, common on the South Downs of Sussex and Hampshire. They nest in crevices or quarries or stone walls, making a nest of weeds, moss or grasses. Lay from four to six pale greenish blue eggs. Made in 1836.

203—**HEDGE SPARROW**—*Accentor modularis*—A very familiar British bird, frequenting farms, orchards and gardens. Made Jan. 10, 1837.

204—**ROBIN**—*Erithacus rubecula*—The familiar Robin Redbreast of English song and story. It is very much smaller and quite a different type of bird from the American Robin, nearer the size of the ordinary English sparrow. These birds are very tame in England and are very common. Made Jan. 18, 1837.

205—**BLACKCAP**—*Sylvia atricapilla*—A summer resident of the southern counties of England—a famous songster. Made in April, 1837.

206—**NIGHTINGALE**—*Luscinia megarhyncha*—Tolerably common summer resident of the southern counties of England, and one of the most famous bird songsters.

207—**RED WING**—*Turdus iliacus*—A winter visitor to Great Britain, sometimes appearing in vast numbers.

208—**BLACKBIRD**—*Turdus merula*—A common resident of Britain. Made in 1836.

209—**STOAT**—*Mustela erminea*—Common in Britain. Made in 1836.

210—**MISSEL THRUSH**—*Turdus viscivorus*—Tolerably common in some parts of Great Britain, but not generally distributed.

211—**SONG THRUSH**—*Turdus musicus*—A common resident of Great Britain and fine songster. Made March 6, 1837.

EGGS OF BRITISH BIRDS.

212—1, Land Rail. 2, Starling. 3, Blackbird. 4, Thrush. 5, Blackbird. 6, Jay. 7, Missel Thrush. 8, Missel Thrush. 9, Turtle Dove.

213—1, Chaffinch. 2, House Wren. 3, Robin. 4, House Sparrow. 5, House Sparrow. 6, Unnamed. 7, Hedge Sparrow. 8, Nightingale. 9, Redstart. 10, Grosbeak. 11, Blackcap. 12, Unnamed. 13, Redbacked Shrike. 14, Unnamed. 15, Greenfinch. 16, Goldfinch. 17, Skylark. 18, Wrenneck. 19, Unnamed. 20, Unnamed. Note—Nos. 6, 12, 14, 19 and 20 are impossible to recognize from the drawing.

MAMMALS IN COLLECTION.

214—**VARYING HARE—WHITE HARE**—*Lepus americanus*—An animal of the woods. Wherever any extent of thick cover remains this hare may still be found in considerable numbers. The varying hare is remarkable for the seasonal change which takes place in the color of its fur. In summer it is a dark reddish brown. In winter it becomes white. The hare does not live in burrows like the rabbit, but only makes a slight depression in the ground. They are born with their eyes open and covered with hair, and for four or five weeks they remain under the care of their mother, but after that time they depend upon themselves for their subsistence.

215—**VARYING HARE—WHITE**—*Lepus americanus*—Changing from summer to winter coat.

216—**MUSKRAT**—*Ondatra zibethica*—It is common everywhere in Ontario, about marshes, rivers and streams; in marshes it builds houses for winter protection. Muskrat's fur, when in prime condition, is of high quality, and if it were not so common would be more valued than it is at present. The length of the muskrat is a little over two feet. The nest is composed of sedges, water lily leaves and similar plants. The hind feet of the muskrat are well webbed, and its food is largely vegetable. Made in 1847.

217—**MASKED SHREW**—*Sorex personatus*—Common and generally distributed, resembling the mouse in general form. The fore feet are small, the hind ones larger, and the tail shorter than the body. It is found in burrows or among heaps of stones, or in holes made by other animals. They feed on insects and grain. One species of the shrew family enjoys the reputation of being the smallest living mammal. It is but an inch and a half, with a tail an inch in length.

218—**WHITE-FOOTED MOUSE**—*Peromyscus leucopus*—Common and generally distributed throughout Ontario.

219—**MEADOW MOUSE—FIELD VOLE**—*Microtus pennsylvanicus*—Common everywhere and the most destructive animal we have.

220—**WOODCHUCK—GROUND HOG**—*Arctomys monax*—The Woodchuck belongs to the Marmots. It is common and generally distributed; sufficiently abundant in some localities to be a nuisance in the fields, for it is an expert excavator and digs very large and complicated burrows. The tunnel which leads to these chambers is only large enough to admit the body of the animal. They close up the entrance of the burrows with grass and earth and enter into a lethargic hibernating state in the winter.

221—**GREY SQUIRREL—BLACK SQUIRREL**—*Sciurus carolinensis*—Formerly abundant in all the hardwood forests of southern and western Ontario, but the destruction of the woods and constant persecution have sadly reduced their numbers. Specifically the grey and the black forms are identical. Squirrels are furnished with long finger-like toes upon the fore feet, are armed with sharp, curved claws, in order to enable them to maintain a firm clasp upon the branches and bark of trees. The nest of the squirrel is placed on the fork of some lofty branch or in the hollow of a decayed tree concealed from sight. It is made of leaves, moss and grass woven together so as to be rain and windproof. A pair of squirrels will go back to the same nest year after year. Its food consists of nuts, acorns and other fruits and seeds. In autumn it hides its food in all kinds of nooks and crevices near the tree in which it lodges.

222—**RED SQUIRREL**—*Sciurus hudsonicus*—Common everywhere in the province.

223—**FLYING SQUIRREL**—*Sciuropterus volans volans*—Common in Ontario, but not often seen, as it is nocturnal in his habits—seldom venturing until after sunset from its retreat in some hollow tree. The flying squirrel possesses a parachute flying membrane. When it intends to leap it stretches its limbs to their fullest extent, and is up-borne through the air by the delicate fur clad membrane which extends along its sides.

224—**SKUNK**—*Mephitis mephitis*—The Skunk, common and generally distributed, is about eighteen inches in length, has short legs and a body that is broad and flat. It lives upon small animals, insects, eggs and wild fruits; is usually met with in the early morning or evening twilight, and the observer would be wise to let the animal pass unmolested. The fur is valuable and beautiful.

225—**MINK**—*Mustela vison*—It frequents the banks of ponds, lakes and rivers. Its food consists of small animals, fish, frogs, crawfish and aquatic insects. The feet are adapted for swimming, being webbed between the toes. Its fur, which is beautiful and valuable, bears a great resemblance to that of the sable. Made in 1860.

226—**CANADA LYNX**—*Lynx canadensis*—Now only found in the forested districts, its range extending north nearly to the timber line. The limbs of the Lynx are very powerful and the thick, heavy feet are furnished with strong white claws that are not seen unless stretched out. It feeds on small quadrupeds, such as the hare, etc. The ears are erect and tipped with a long pencil of black hair. The Lynx, which is a good swimmer, may be distinguished by its peculiar gait.

