3 twelfths. The proventriculus, *c c*, 9 twelfths long, with a complete belt of oblong glandules. There is a small roundish pyloric lobe *e*. Intestine, *f, g*, 2 feet 11 inches long, its diameter uniform, 1 twelfth, or about the thickness of a Crow's quill. Rectum enlarged to 3 twelfths, and $3\frac{1}{4}$ inches long, its cœcal extremity rounded, and only 1 twelfth long.

The trachea is $7\frac{1}{4}$ inches long, of nearly uniform diameter, averaging 2 twelfths; the rings 160, nearly circular and ossified. The bronchial half-rings about 18. The lateral muscles are very inconspicuous; sterno-tracheals, and a pair of inferior laryngeal, going to the first bronchial rings.

The Herons generally differ from the other Grallæ in having the œsophagus much wider, and similar to that of the fish-eating palmipedes; the stomach in a manner membranous, like that of the rapacious land-birds, without lateral muscles or strong epithelium; the intestine extremely slender, and the anterior extremity of the large intestine or rectum furnished with a single cœcum, in place of two, as in almost all other birds.

THE GREAT WHITE HERON.

+*ARDEA OCCIDENTALIS*, *Aud.*

PLATE CCCLXVIII.—MALE.

I am now about to present you with an account of the habits of the largest species of the Heron tribe hitherto found in the United States, and which is indeed remarkable not only for its great size, but also for the pure white of its plumage at every period of its life. Writers who have subdivided the family, and stated that none of the true Herons are white, will doubtless be startled when they, for the first time, look at my plate of this bird. I think, however, that our endeavours to discover the natural arrangement of things cannot be uniformly successful, and it is clear that he only who has studied *all* can have much chance of disposing all according to their relations.

On the 24th of April, 1832, I landed on Indian Key in Florida, and immediately after formed an acquaintance with Mr. EGAN. He it was who first gave me notice of the species which forms the subject of this article, and of which I cannot find any description. The next day after that of my

Great White Heron.

Male adult, Spring Plumage.

Lab. Printed & Col'd by J. T. Bowen, Philad'a

arrival, when I was prevented from accompanying him by my anxiety to finish a drawing, he came in with two young birds alive, and another lying dead in a nest, which he had cut off from a mangrove. You may imagine how delighted I was, when at the very first glance I felt assured that they were different from any that I had previously seen. The two living birds were of a beautiful white, slightly tinged with cream-colour, remarkably fat and strong for their age, which the worthy pilot said could not be more than three weeks. The dead bird was quite putrid and much smaller. It looked as if it had accidentally been trampled to death by the parent birds ten or twelve days before, the body being almost flat and covered with filth. The nest with the two live birds was placed in the yard. The young Herons seemed quite unconcerned when a person approached them, although on displaying one's hand to them, they at once endeavoured to strike it with their bill. My Newfoundland dog, a well-trained and most sagacious animal, was whistled for and came up; on which the birds rose partially on their legs, ruffled all their feathers, spread their wings, opened their bills, and clicked their mandibles in great anger, but without attempting to leave the nest. I ordered the dog to go near them, but not to hurt them. They waited until he went within striking distance, when the largest suddenly hit him with its bill, and hung to his nose. Plato, however, took it all in good part, and merely brought the bird towards me, when I seized it by the wings, which made it let go its hold. It walked off as proudly as any of its tribe, and I was delighted to find it possessed of so much courage. These birds were left under the charge of Mrs. EGAN, until I returned from my various excursions to the different islands along the coast.

On the 26th of the same month, Mr. THRUSTON took me and my companions in his beautiful barge to some keys on which the Florida Cormorants were breeding in great numbers. As we were on the way we observed two tall White Herons standing on their nests; but although I was anxious to procure them alive, an unfortunate shot from one of the party brought them to the water. They were, I was told, able to fly, but probably had never seen a man before. While searching that day for nests of the Zenaida Dove, we observed a young Heron of this species stalking among the mangroves that bordered the key on which we were, and immediately pursued it. Had you been looking on, good reader, you might have enjoyed a hearty laugh, although few of us could have joined you. Seven or eight persons were engaged in the pursuit of this single bird, which, with extended neck, wings, and legs, made off among the tangled trees at such a rate, that, anxious as I was to obtain it alive, I several times thought of shooting it. At length, however, it was caught, its bill was securely tied, its legs were drawn up, and fastened by a strong cord, and the poor thing was thus

conveyed to Indian Key, and placed along with its kinsfolk. On seeing it, the latter immediately ran towards it with open bills, and greeted it with a most friendly welcome, passing their heads over and under its own in the most curious and indeed ludicrous manner. A bucketful of fish was thrown to them, which they swallowed in a few minutes. After a few days, they also ate pieces of pork-rhind, cheese, and other substances.

While sailing along the numerous islands that occur between Indian Key and Key West, I saw many birds of this species, some in pairs, some single, and others in flocks; but on no occasion did I succeed in getting within shot of one. Mr. EGAN consoled me by saying that he knew some places beyond Key West where I certainly should obtain several, were we to spend a day and a night there for the purpose. Dr. BENJAMIN STROBEL afterwards gave me a similar assurance. In the course of a week after reaching Key West, I in fact procured more than a dozen birds of different ages, as well as nests and eggs, and their habits were carefully examined by several of my party.

At three o'clock one morning, you might have seen Mr. EGAN and myself, about eight miles from our harbour, paddling as silently as possible over some narrow and tortuous inlets, formed by the tides through a large flat and partially submersed key. There we expected to find many White Herons; but our labour was for a long time almost hopeless, for, although other birds occurred, we had determined to shoot nothing but the Great White Heron, and none of that species came near us. At length, after six or seven hours of hard labour, a Heron flew right over our heads, and to make sure of it, we both fired at once. The bird came down dead. It proved to be a female, which had either been sitting on her eggs or had lately hatched her young, her belly being bare, and her plumage considerably worn. We now rested awhile, and breakfasted on some biscuit soaked in molasses and water, reposing under the shade of the mangroves, where the mosquitoes had a good opportunity of breaking their fast also. We went about from one key to another, saw a great number of White Herons, and at length, towards night, reached the Marion, rather exhausted, and having a solitary bird. Mr. EGAN and I had been most of the time devising schemes for procuring others with less trouble, a task which might easily have been accomplished a month before, when, as he said, the birds were "sitting hard." He asked if I would return that night at twelve o'clock to the last key which we had visited. I mentioned the proposal to our worthy Captain, who, ever willing to do all in his power to oblige me, when the service did not require constant attendance on board, said that if I would go, he would accompany us in the gig. Our guns were soon cleaned, provisions

and ammunition placed in the boats, and after supping we talked and laughed until the appointed time.

“Eight Bells” made us bound on our feet, and off we pushed for the islands. The moon shone bright in the clear sky; but as the breeze had died away, we betook ourselves to our oars. The state of the tide was against us, and we had to drag our boats several miles over the soapy shallows; but at last we found ourselves in a deep channel beneath the hanging mangroves of a large key, where we had observed the Herons retiring to roost the previous evening. There we lay quietly until day-break. But the mosquitoes and sandflies! Reader, if you have not been in such a place, you cannot easily conceive the torments we endured for a whole hour, when it was absolutely necessary for us to remain perfectly motionless. At length day dawned, and the boats parted, to meet on the other side of the key. Slowly and silently each advanced. A Heron sprung from its perch almost directly over our heads. Three barrels were discharged,—in vain; the bird flew on unscathed; the pilot and I had probably been too anxious. As the bird sped away, it croaked loudly, and the noise, together with the report of our guns, roused some hundreds of these Herons, which flew from the mangroves, and in the grey light appeared to sail over and around us like so many spectres. I almost despaired of procuring any more. The tide was now rising, and when we met with the other boat we were told, that if we had waited until we could have shot at them while perched, we might have killed several; but that now we must remain until full tide, for the birds had gone to their feeding grounds.

The boats parted again, and it was now arranged that whenever a Heron was killed, another shot should be fired exactly one minute after, by which each party would be made aware of the success of the other. Mr. EGAN, pointing to a nest on which stood two small young birds, desired to be landed near it. I proceeded into a narrow bayou, where we remained quiet for about half an hour, when a Heron flew over us and was shot. It was a very fine old male. Before firing my signal shot, I heard a report from afar, and a little after mine was discharged I heard another shot, so I felt assured that two birds had been killed. When I reached the Captain’s boat I found that he had in fact obtained two; but Mr. EGAN had waited two hours in vain near the nest, for none of the old birds came up. We took him from his hiding place, and brought the Herons along with us. It was now nearly high water. About a mile from us, more than a hundred Herons stood on a mud-bar up to their bellies. The pilot said that now was our best chance, as the tide would soon force them to fly, when they would come to rest on the trees. So we divided, each choosing his own place, and I went to the

lowest end of the key, where it was separated from another by a channel. I soon had the pleasure of observing all the Herons take to wing, one after another, in quick succession. I then heard my companions' guns, but no signal of success. Obtaining a good chance as I thought, I fired at a remarkably large bird, and distinctly heard the shot strike it. The Heron merely croaked, and pursued its course. Not another bird came near enough to be shot at, although many had alighted on the neighbouring key, and stood perched like so many newly finished statues of the purest alabaster, forming a fine contrast to the deep blue sky. The boats joined us. Mr. EGAN had one bird, the Captain another, and both looked at me with surprise. We now started for the next key, where we expected to see more. When we had advanced several hundred yards along its low banks, we found the bird at which I had shot lying with extended wings in the agonies of death. It was from this specimen that the drawing was made. I was satisfied with the fruits of this day's excursion. On other occasions I procured fifteen more birds, and judging that number sufficient, I left the Herons to their occupations.

This species is extremely shy. Sometimes they would rise when at the distance of half a mile from us, and fly quite out of sight. If pursued, they would return to the very keys or mud-flats from which they had risen, and it was almost impossible to approach one while perched or standing in the water. Indeed, I have no doubt that half a dozen specimens of *Ardea Herodias* could be procured for one of the present, in the same time and under similar circumstances.

The Great White Heron is a constant resident on the Florida Keys, where it is found more abundant during the breeding season than anywhere else. They rarely go as far eastward as Cape Florida, and are not seen on the Tortugas, probably because these islands are destitute of mangroves. They begin to pair early in March, but many do not lay their eggs until the middle of April. Their courtships were represented to me as similar to those of the Great Blue Heron. Their nests are at times met with at considerable distances from each other, and although many are found on the same keys, they are placed farther apart than those of the species just mentioned. They are seldom more than a few feet above high water-mark, which in the Floridas is so low, that they look as if only a yard or two above the roots of the trees. From twenty to thirty nests which I examined were thus placed. They were large, about three feet in diameter, formed of sticks of different sizes, but without any appearance of lining, and quite flat, being several inches thick. The eggs are always three, measure two inches and three quarters in length, one inch and eight-twelfths in breadth, and have a rather thick shell, of a uniform plain light bluish-green colour. Mr.

EGAN told me that incubation continues about thirty days, that both birds sit, (the female, however, being most assiduous,) and with their legs stretched out before them, in the same manner as the young when two or three weeks old. The latter, of which I saw several from ten days to a month old, were pure white, slightly tinged with cream colour, and had no indications of a crest. Those which I carried to Charleston, and which were kept for more than a year, exhibited nothing of the kind. I am unable to say how long it is before they attain their full plumage as represented in the plate, when, as you see, the head is broadly but loosely and shortly tufted, the feathers of the breast pendent, but not remarkably long, and there are none of the narrow feathers seen in other species over the rump or wings.

These Herons are sedate, quiet, and perhaps even less animated than the *A. Herodias*. They walk majestically, with firmness and great elegance. Unlike the species just named, they *flock* at their feeding grounds, sometimes a hundred or more being seen together; and what is still more remarkable is, that they betake themselves to the mud-flats or sand-bars at a distance from the keys on which they roost and breed. They seem, in so far as I could judge, to be diurnal, an opinion corroborated by the testimony of Mr. EGAN, a person of great judgment, sagacity and integrity. While on these banks, they stand motionless, rarely moving towards their prey, but waiting until it comes near, when they strike it and swallow it alive, or when large beat it on the water, or shake it violently, biting it severely all the while. They never leave their feeding grounds until driven off by the tide, remaining until the water reaches their body. So wary are they, that although they may return to roost on the same keys, they rarely alight on trees to which they have resorted before, and if repeatedly disturbed they do not return, for many weeks at least. When roosting, they generally stand on one foot, the other being drawn up, and, unlike the Ibises, are never seen lying flat on trees, where, however, they draw in their long neck, and place their head under their wing.

I was often surprised to see that while a flock was resting by day in the position just described, one or more stood with outstretched necks, keenly eyeing all around, now and then suddenly starting at the sight of a Porpoise or Shark in chase of some fish. The appearance of a man or a boat, seemed to distract them; and yet I was told that nobody ever goes in pursuit of them. If surprised, they leave their perch with a rough croaking sound, and fly directly to a great distance, but never inland.

The flight of the Great White Heron is firm, regular, and greatly protracted. They propel themselves by regular slow flaps, the head being drawn in after they have proceeded a few yards, and their legs extended behind, as is the case with all other Herons. They also now and then rise

high in the air, where they sail in wide circles, and they never alight without performing this circling flight, unless when going to feeding grounds on which other individuals have already settled. It is truly surprising that a bird of so powerful a flight never visits Georgia or the Carolinas, nor goes to the mainland. When you see them about the middle of the day on their feeding grounds they "loom" to about double their size, and present a singular appearance. It is difficult to kill them unless with buck-shot, which we found ourselves obliged to use.

When I left Key West, on our return towards Charleston, I took with me two young birds that had been consigned to the care of my friend Dr. B. STROBEL, who assured me that they devoured more than their weight of food per day. I had also two young birds of the *Ardea Herodias* alive. After bringing them on board, I placed them all together in a very large coop; but was soon obliged to separate the two species, for the white birds would not be reconciled to the blue, which they would have killed. While the former had the privilege of the deck for a few minutes, they struck at the smaller species, such as the young of *Ardea rufescens* and *A. Ludoviciana*, some of which they instantly killed and swallowed entire, although they were abundantly fed on the flesh of green turtles. None of the sailors succeeded in making friends with them.

On reaching Indian Key, I found those which had been left with Mrs. EGAN, in excellent health and much increased in size, but to my surprise observed that their bills were much broken, which she assured me had been caused by the great force with which they struck at the fishes thrown to them on the rocks of their enclosure,—a statement which I found confirmed by my own observation in the course of the day. It was almost as difficult to catch them in the yard, as if they had never seen a man before, and we were obliged to tie their bills fast, to avoid being wounded by them while carrying them on board. They thrived well, and never manifested the least animosity towards each other. One of them which accidentally walked before the coop in which the Blue Herons were, thrust its bill between the bars, and transfixed the head of one of these birds, so that it was instantaneously killed.

When we arrived at Charleston, four of them were still alive. They were taken to my friend JOHN BACHMAN, who was glad to see them. He kept a pair, and offered the other to our mutual friend Dr. SAMUEL WILSON, who accepted them, but soon afterwards gave them to Dr. GIBBES of Columbia College, merely because they had killed a number of Ducks. My friend BACHMAN kept two of these birds for many months; but it was difficult for him to procure fish enough for them, as they swallowed a bucketful of mullets in a few minutes, each devouring about a gallon of these fishes.

They betook themselves to roosting in a beautiful arbour in his garden; where at night they looked with their pure white plumage like beings of another world. It is a curious fact, that the points of their bills, of which an inch at least had been broken, grew again, and were as regularly shaped at the end of six months as if nothing had happened to them. In the evening or early in the morning, they would frequently set, like pointer dogs, at moths which hovered over the flowers, and with a well-directed stroke of their bill seize the fluttering insect and instantly swallow it. On many occasions, they also struck at chickens, grown fowls and ducks, which they would tear up and devour. Once a cat which was asleep in the sunshine, on the wooden steps of the viranda, was pinned through the body to the boards and killed by one of them. At last they began to pursue the younger children of my worthy friend, who therefore ordered them to be killed. One of them was beautifully mounted by my assistant Mr. HENRY WARD, and is now in the Museum of Charleston. Dr. GIBBES was obliged to treat his in the same manner; and I afterwards saw one of them in his collection.

Mr. EGAN kept for about a year one of these birds, which he raised from the nest, and which, when well grown, was allowed to ramble along the shores of Indian Key in quest of food. One of the wings had been cut, and the bird was known to all the resident inhabitants, but was at last shot by some Indian hunter, who had gone there to dispose of a collection of sea shells.

Some of the Herons feed on the berries of certain trees during the latter part of autumn and the beginning of winter. Dr. B. STROBEL observed the Night Heron eating those of the "Gobolimbo," late in September at Key West.

Among the varied and contradictory descriptions of Herons, you will find it alleged that these birds seize fish while on wing by plunging the head and neck into the water; but this seems to me extremely doubtful. Nor, I believe, do they watch for their prey while perched on trees. Another opinion is, that Herons are always thin, and unfit for food. This, however, is by no means generally the case in America, and I have thought these birds very good eating when not too old.

GREAT WHITE HERON, *Ardea occidentalis*, Aud. Orn. Biog., vol. iii. p. 542; vol. v. p. 596.

Male, 54, 83. Female, 50, 75.

Resident in the southern Florida Keys. Texas. Never seen to the eastward of Cape Florida, nor on the mainland. Common.

Adult Male.

Bill much longer than the head, straight, compressed, tapering to a point, the mandibles nearly equal, but the point of the upper considerably extended beyond that of the lower. Upper mandible with the dorsal line nearly straight, the ridge broadly convex at the base, convex and narrowed towards the end, a groove from the base to near the tip, beneath which the sides are convex, the edges extremely thin and sharp, towards the end broken into irregular serratures, the tip acute. Lower mandible with the angle extremely narrow and elongated, the dorsal line beyond it ascending and slightly curved, the ridge convex, the sides ascending and slightly concave, the edges as in the upper, the tip acuminate. Nostrils basal, linear-oblong, longitudinal, with a membrane above and behind.

Head of moderate size, oblong, compressed. Neck extremely long, slender. Body slender and compressed; wings large. Feet very long; tibia elongated, its lower half bare, very slender, covered all round with large elongated hexagonal scales; tarsus long, thicker than the lower part of the tibia, compressed, covered anteriorly with large scutella, excepting at the two extremities where there are large angular scales. Toes of moderate length, rather slender, scutellate above, flattened, and reticularly granulate beneath, the thick margins covered with small scales, the sides with larger; the third and fourth toes connected at the base by a reticulated web; the third toe much longer than the fourth, which is considerably longer than the second, the first about half the length of the third; claws of moderate size, strong, compressed, curved, obtuse, the first largest, the third next in size, and with an inner regularly pectinated edge, all more or less convex beneath.

Space between the bill and eye, and around the latter, as well as at the angle of the mouth bare, as is the lower half of the tibia. Plumage soft, the edges of the feathers loose and blended. Feathers of the upper part of the head and hind neck elongated and tapering; of the back long and loose, of the rump soft and downy; scapulars very long, rather compact, the upper loose. Feathers of the fore-neck elongated, of the sides of the breast anteriorly very long, loose and tapering; of the rest of the lower parts broader but pointed; of the tibia shortish. Wings large, rounded; primaries curved, strong, broad, tapering, the three first slightly sinuate on the inner web; third quill longest, fourth scarcely shorter, third almost as long as fourth, first a quarter of an inch shorter; secondaries very large, broad and rounded, the inner extending as far as the longest primary when the wing is closed. Tail short, slightly rounded, of twelve broad, rounded feathers.

Bill yellow, the upper mandible dusky-green at its base; loreal space yellowish-green; orbital space light blue. Iris bright yellow. Tibia and hind part of tarsus yellow; fore part of tibia and toes olivaceous, sides of the

latter greenish-yellow; claws light brown. The whole of the plumage is pure white.

Length to end of tail 54 inches, to end of wings 54, to end of claws 70; extent of wings 83; wing from flexure 19; tail 7; bill along the back $6\frac{3}{4}$, along the edges $8\frac{3}{4}$; bare part of tibia 6; tarsus $8\frac{1}{2}$; middle toe $4\frac{1}{2}$, its claw $\frac{1}{2}$. Weight $9\frac{1}{2}$ lbs.

The Female is smaller, but similar to the male. The dimensions of an individual were as follows.

Length to end of tail 50, to end of wings 50, to end of claws 65; extent of wings 75; wing from flexure $18\frac{3}{4}$; tail $6\frac{3}{4}$; bill along the back $5\frac{1}{2}$, along the edges $7\frac{3}{4}$, its depth at base $1\frac{5}{12}$; tarsus $7\frac{1}{2}$; middle toe $4\frac{1}{4}$, its claw $\frac{9}{12}$. Weight $7\frac{1}{4}$ lbs.

The Young are at first covered with white down, and when fledged, are of the same colour. An individual just able to fly was of the following dimensions.

Length to end of tail $43\frac{1}{2}$, to end of claws 56; wing from flexure 18; bill $5\frac{4}{12}$; along the edge $7\frac{1}{4}$; tarsus $6\frac{1}{2}$; middle toe $4\frac{1}{4}$, its claw $\frac{3}{4}$. The serrature of the middle claw is distinct at this age.

In this species, the skin is uncommonly tender, and of a yellow colour.

An adult male, received from Captain NAPOLEON COSTE, of the United States Revenue Cutter "Campbell." The width of the mouth is $1\frac{1}{4}$ inches; but the lower mandible is capable of being dilated to $2\frac{1}{2}$ inches, by means of an articulation on each side; the palate ascending, convex, with two longitudinal ridges, anteriorly with two papillate ridges and a median ridge, which runs to the point of the mandible; the posterior aperture of the nares linear, $1\frac{1}{2}$ inches in length. Tongue $4\frac{1}{4}$ inches long, slender, tapering, trigonal, sagittate at the base, with a large pointed papilla on each side, flat above, with a median groove for half its length, afterwards convex, the tip acute. There is a large gular sac, although covered by feathers. The œsophagus is 2 feet 7 inches long, of great width in its whole extent, its diameter opposite the glottis being $2\frac{1}{2}$ inches, in the other parts from 2 to $1\frac{3}{4}$. Its walls are very thin, but with the external muscular fibres distinct; the inner coat longitudinally plicate.

The heart is of moderate size, 1 inch 10 twelfths in length, $1\frac{1}{3}$ in breadth. The aorta branches immediately in the usual manner, sending off to the left a common carotid and subclavian, which branches at the distance of $7\frac{1}{2}$ twelfths; to the right the same; and more to the same side, the carotid properly so called, which is smaller than either of the other vessels. The liver is of moderate size, its lobes very unequal, the left $2\frac{1}{4}$ inches, the right $3\frac{1}{4}$ inches in length. There is an enormous accumulation of fat in the omentum,

covering nearly the entire surface of the proventriculus and stomach, and extending under the intestine, being in one place 9 twelfths thick.

On entering the thorax the œsophagus immediately enlarges to $2\frac{1}{2}$ inches, and gradually increases to 3, which is the greatest breadth of the proventriculus, *a b c*. The stomach, *c p e*, is a very large round sac, 3 inches in width, a little compressed, with roundish tendons, *p*, $\frac{3}{4}$ inch in diameter; its muscular coat extremely thin, and formed of very slender fasciculi; the inner coat soft and smooth. The proventricular glands form a complete belt, $1\frac{1}{2}$ inches in breadth, at the upper part of which are numerous irregularly dispersed very large apertures of mucous crypts. The pyloric lobe of the stomach, *e*, is globular, 9 twelfths in diameter. The aperture of the pylorus $1\frac{1}{2}$ twelfths in diameter, without valve. The intestine, *e f j k*, doubles in the usual manner, to form the duodenum, *e f g*, at the distance of 6 inches, then proceeds to the right lobe of the liver, bends backward, and is convoluted, with 18 turns, terminating in the rectum above the proventriculus; its length 7 feet 10 inches; the width of the duodenum $3\frac{1}{2}$ twelfths, that of the rest of the intestine pretty uniformly 3 twelfths, a little narrowed towards the rectum, which is $5\frac{1}{2}$ twelfths long, and at its commencement forms a single cœcum, $\frac{1}{2}$ inch long, and 3 twelfths in width. The average width of the rectum is 5 twelfths, and it terminates in a globular cloaca, *j k*, 1 inch 10 twelfths in diameter.

Trachea 22 inches long, considerably flattened, 5 twelfths in breadth at the upper part, $4\frac{3}{4}$ twelfths at the middle, and lastly contracting to $3\frac{1}{2}$ twelfths. The rings cartilaginous, 270, the last 4 dimidiate. The right bronchus has 25 rings, the left 28; they are wide and compressed. There is a pair of cleido-tracheal muscles, passing from the thyroid bone to near the middle of the furcula. The lateral muscles are thin and slender at the upper part, at the lower part thicker and expanded over the whole surface before and behind; the anterior part gives off the sterno-tracheal, at the distance of 9 twelfths from the last ring, and the posterior part passes in the form of a compact slip, to the last half ring.

Great White Heron.

Male adult, Spring Plumage.

Audubon, John James. 1843. "The Great White Heron, *Ardea occidentalis*, Aud. [Pl. 368]." *The birds of America : from drawings made in the United States and their territories* 6, 110–121. <https://doi.org/10.5962/p.319482>.

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