pebbles,' just as the Carboniferous Conglomerates of the Cobequid mountains in Nova Scotia are the obvious secondary source of many of the rounded boulders and pebbles of Syenite, Diorite and Porphyries which are found in our post pliocene drift.

The Jasper pebbles are supposed to come from the post-pliocene,

so that they may have come from Gaspe.

Gypsum was once an article of export to Canada. It is not now exported; Nova Scotian Gypsum is preferred.

ART. III.—ON THE SEMI-ANNUAL MIGRATION OF SEA FOWL IN NOVA SCOTIA.—By J. BERNARD GILPIN, A. B., M. D., M. R. C. S.

(Read March 15, 1880.)

In this paper I wish to call the attention of the Institute to that part of the great semi-annual migration of sea fowl which passes the whole eastern coast of North America, belonging to the coasts of Nova Scotia; of the separate genera and species of which it is composed; of the monthly periods of their passing; and of the modifications both in time, in frequency and in species, which advancing civilization has produced. earliest writers and voyagers, not only along the New England coasts, but also of our own Province, we notice mention of these migrations, and are amazed by their numbers, darkening the air and blackening the shores along which they passed. With no enemy save those natural ones, which the economy of nature always provides, they passed north and south without fear or For the last three hundred years, an advancing molestation. population at almost every point on their passage, from Labrador to Florida, has thinned their numbers, altered their route, and perhaps, in one or two instances, changed their route entirely, or destroyed a species. The small part which the shores of our Province of Nova Scotia take in these migrations, or indeed the still smaller part that has come beneath my own personal observation, aided by one or two friends, will be the subject of this paper.

List of water fowl and sea fowl personally noticed in Nova

Scotia. Nomenclature of Dr. Coues, Key. North American Birds:—

Barnacle goose. luecopsis, Branta Brant. bernicla, Branta Wild goose. canadensis, Branta Mallard. boschas. Anas Black duck. obscura, Anas Pin tail. Dafila acuta, Widgeon. americana, Mareca English teal. Querquedula netion, Green-winged teal. carolinensis, Querquedula Blue-winged teal. Querquedula discors, Shoveller. Spatula clypeata, Wood duck. Aix sponsa, Fuligula Scaup. marila, Fuligula affinis, Little Scaup. Fuligula collaris. Ring-neck duck. Fuligula Canvas back. valisneria, Buchephala clangula, Golden-eye. Buchephala islandica. Barrow's Golden-eye. Buchephala Buffle-head. albeola, Harelda Old wife. glacialis, Camtolæmus Pied duck. labradoreus, Histrionicus torquatus, Harliquin. Somateria mollissima, Eider. Somateria spectabilis, King Eider. Oedemia americana. Scoter. Oedemia fusca, White-wing. Oedemia perspiliata, Surf duck.

Of this list of fourteen genera and twenty-seven species we find that nine genera, with the exception of the genus Aix, and one species obscura of the genus Anas, are more or less rare. Appearing in some years tolerably numerous and then for years not seen. I have never seen myself or heard from others of any Swans being seen in our Province. Of Geese, I had sent me from Sable Island, in the year 1870, an immature specimen which I put down to Leucopsis, especially from the dark line

running through the eyes and on the nape of the neck, the dark wing coverts, and black bill and feet. In 1874, I saw two specimens of the same shot on Halifax common, and in the collection of my friend, Mr. Downs, who considered them the young of the snow goose. With every respect for one who may be called the best field naturalist in the Dominion, I cannot reconcile the black bill and legs with Wilson's description of the pale lake or reddish purple of the bills and feet of the young snow geese shot on the Delaware river, and must maintain my opinion. These are the only specimens I have seen.

Of the Canada goose, his migrations may be said to be regular From after the middle of March to about the in the Spring. middle of April, numerous flocks pass over the land, going northeastwards, and scattered parties, of half a dozen or more, are found feeding along the shores of the tide ponds and salt estuaries of the Bay of Fundy, the Atlantic coasts, and especially the shores of Cape Breton. Should heavy north-easters prevail these flights are driven down in numbers to the land, and thus every few years wild geese are plentiful in Halifax market during April. I have noted 10th April, 1879, one being shot at Digby, near the Bay of Fundy. The Brants also pass about the same time of Spring, but are less noticed, except during a long period of foggy weather, when they seem bewildered, and cover the flats in hundreds, and are easily shot. The autumn migration of the geese and brants is less noticed. I have no notes of their alighting, but several of the peculiar note of the wild goose heard in October, November, and indeed midwinter. During one Spring, about 1870, the brants remained about Digby, N. S., till the middle of May, becoming very fat though arriving very lean. That these geese, as well as the snow goose, once bred in numbers on the salt marshes of Annapolis County, and that their habits have been altered by advancing population, is well proved by old writers. The early French writers notice the abundance of "outards," both white and grey, that bred on the Port Royal marshes, the white being no doubt the snow goose; and those bred from wild eggs, and carried to France as a royal present, still existed in their descendants, which thronged by hundreds,

in Buffon's time, the royal waters of Versailles, as the "A Canadensis." There are people still alive who recollect that the Brants bred in abundance in St. Mary's Bay when they were children. I scarcely need say that none are found breeding there now, or scarcely alighting, except in some years. This power in the individual bird of prolonging its existence by altering its breeding grounds must perpetuate its race, whilst other races having attachments stronger to one place have died out, and are still, during our own time, diminishing.

Of the next family of true duck or fresh water fowl, with the exception of the black or blue wing duck, and wood duck, which, curiously enough, are resident, consisting of the mallard, pintail, widgeon, the teals and shovellers, they may be said to be rare; never to abound in market, to appear during fall and winter, and chiefly to be found in private collections or in note books of naturalists. Thus I note, "Mallard, young male, no white collar, shot Sept., 1875, Cole Harbor, near Halifax-J. M. Halifax Museum, Jones." Pintails rather more numerous. Young collections,-Mr. Downs and Mr. Egan, males full plumage. Of the teals, blue winged, male full plumage, shot Jan'y, 1880, Halifax; green winged teal, Halifax market, 12 Dec., 1871; male, full plumage, myself; English teal (Q. netion), very rare, mounted by Mr. Downs, with American, to show the difference of species; widgeon, female, full plumage, Jan., 1880, Halifax, Mr. Egan; and a shoveller, exceedingly rare, shot at Digby by my son; and, shot April, 1879, Halifax, male in full plumage. Mr. Egan. From these extracts we find this family rare in individuals, and occurring during winter sometimes, and then in full plumage. Whilst those birds thus make our Province a casual visiting place, it is singular that the blue-winged duck, a true type of the fresh water duck, with its long and low bill, slender neck, legs brought forward, a poor diver but good walker, so closely allied to these genera in all these respects, should be a resident, in company with the wood duck, nearly as closely allied also, yet it is so. Down in the salt marshes bordering the river mouths, just above tide way, we find him nesting in May. August, the mower with his scythe cuts the young brood scarce-

ly able to fly. At the same time others are nesting along the rush fringed sides of our inland lakes, and the young are protected by their mother seeking their food in the shallow rapids. In 1854, I found them nesting on the low banks of the salt lake or lagoon which makes the centre of Sable Island, some eighty miles seaward from the Province. The nests were very inartificial, more like the circular folding or twisting of the long grass by the duck's body and legs with a few scattered feathers. The eggs were a light bluish green and about ten in number. Whilst in June I saw the mother duck leading her young flock on the lake, I have seen others sitting patiently during the last of July on, perhaps, a second or third robbed nest. If undisturbed they would doubtless remain on these salt marshes till the ice drove Disturbed by sportsmen, they seek the lakes. them out. September they are found feeding upon the blueberries covering our barrens, and as winter advances, and the frost drives them. they return to the salt marshes, and at last, in deep winter, to the bays of the ocean; thus returning to marine molluscs that furnished their first food. In deep winter he is found nestling beneath the snow, waiting for the ebb tide to bare the rocks from which, being no diver, he collects his scanty supplies of frozen molluses. On Sable Island he remains as long as the salt lake keeps open from the ice, but returns in the early Spring. This duck may be called both resident and abundant in the Province. Although often and long ago described, yet I cannot forbear describing again a male in full plumage shot at Digby, N.S., 9th February, 1880 :-

"In colour, top of head obscure line running down back of neck; shoulders, upper back axillaries and wing coverts blackish, but as almost every feather had its edges brown, the general appearance was brownish. On the top of the head the brown appears in lines, on shoulders and other parts as scales, the lower back and rump black, the tail sooty black, but each feather emanginated. The primaries sooty black, the secondaries having a speculum of blue with purple reflections, bordered above with velvet black and edged with greyish white: the tertiaries having the outside edges velvet black. Beneath the colour and shading of feathers like the upper parts, but lighter. Edge of shoulder spotted black and brown. The upper part of inside wing pure white, but shading off to bluish ash, darker towards the extremities; beneath tail, dark ash. Returning to the head, there is an obscure line passing from behind eye

to back of head. All below the eye, the cheeks, the chin, throat and sides of neck, for about four inches, may be called very pale fawn, as a back ground to numerous dark pencilled dots or lines. In the full nuptial plumage of the male, the border between this lighter neck and the deep brown of the breast becomes very distinct, indeed, with his pouting cheeks, swelling neck and tumid feathers, he looks as if he had an ashey white neck and head. The female and young are less distinctly marked. The bill is long and low, the frontal feathers coming down in a peak, the side feathers in a semi-circle. The colour of the bill is greenish horn with the tips black and a subcircular nail on each tip. The lammella very fine in both mandibles; the nostrils high up. A line runs along the upper mandible from rictus to tip, and a second line above this, from the tip, passes it. The legs are a dusky orange, with a red wash; the webs scarcely black; the soles dusky. The tarsi and toes are uninterruptedly scutellated on their front; on other parts, obscurely reticulated.

Total length, 2 feet.

Length of spread wings, 3 feet 3-10 inch.

of upper mandible, 2½ inch.

of tarsus, 2 inch.

" of longest toe, 21 iuch.

Irides, dark brown. Tail feathers, 16 —

In some young birds shot 1st August, 1880, and still in fine feather, the plumage was much darker than adult, and less diversified by fawn or brownish edges to the feather. The other resident duck we have cannot be called abundant. Unlike the last sombre colored but still very beautiful bird, he is adorned by the most beautiful metalic tints of the tropics, and seems an alien upon our frozen streams. Of the wood ducks breeding here, I have had several specimens of the young, shot August 17th, 1877, near Annapolis Royal, in their first plumage, and not having the white forked collar of the adult. The Indians all maintain he is found mid-winter about the rapids and low falls between our inland lakes, which never freeze. This has been confirmed by sportsmen, and also lumberers, who camp all winter beside these streams, yet he seems out of place, and I fancy not abundant or long to remain. I have never seen him in winter myself. Our next group of ducks, consisting of the Scaups. the Ringnecks, Canvasbacks, the Goldeneyes and Buffleheads, stand immediate between the freshwater and the sea ducks. They are at home equally in lake and ocean. They are expert divers but bad walkers, having the leg thrown far back.

bills have become short and high, their forms more robust, necks shorter, and bodies losing the long oval form of the typical black duck, and becoming round and humped, and the hind toe lobulated. With the exception of the Canvasback, of which I have noted two specimens, and the Ringneck, (F. collaris), the only specimens of which I have noted were kept alive by Mr. Downs. and I think were originally young taken in the eastern part of the Province, the other members of this group may be called The scaups, bluebills or blackheads, as they are variously called, come into the Bay of Fundy about the last of October and leave us in April. The specimens noted by me were all marilla, but a mounted specimen in Halifax Museum of affinis shows both forms to be present with us. The next group, which Dr. Baird has justly united in his new genus, Bucephala, the goldeneye and buffleheads, are common, coming to the Bay of Fundy in October and leaving us in April. Though not so numerous as the common goldeneye, yet in some seasons the Iceland species may be said to be plenty, in others rare. After a careful study of many specimens of each, both males and females and immature birds, I have been enabled to generalise that both males have the violet wash in the green of the head, though Richardson makes it typical in the Iceland species; that both females have the snuff yellow wash upon their heads, which my friend Mr. Boardman makes typical in the female Iceland; that there is a tendency in both females for the brown to run to dingy duck green on their heads, and that the party coloured bills in both females are very few in comparison with leaden coloured ones; that it appears in some young males, and their fewness can only be accounted for by considering them transient and becoming effaced by adult age. The anatomical difference in the trachea of the males, (paper read March 12, 1878,) must prove them distinct species. Before we notice the next group of purely pelagic duck, which never seek fresh water, are still shorter and rounder in figure, legs further behind, much better divers, but scarcely walkers at all, we may note that both these groups of pure freshwater fowl, and the intermediate one of partly fresh and sea fowl, although they do no doubt perform the semi-annual migration along our coasts, yet are never seen performing it, or are a scene in the landscape. We find them feeding in our inland lakes or dallying about our salt-tide marshes, and we scarcely know if they are successive flights or the same flocks. We have only what may be called stragglers from the eastern wing of the great migration, which doubtless makes the great freshwater streams and lakes their turnpikes further inland, and our rarer species must be the involuntary stragglers that are pressed towards the sea coast by westerly gales. The third group of migratory sea fowl are purely pelagic and procure their living by diving. They never affect the freshwaters or are seen They include the heralds, the scoters, the eiders, the rather scarce harlequin, and the almost extinct Labrador pied duck. Of this last species Mr. Downs secured about thirty years ago the three or four last specimens known in the Province. One of them is in the collection of Col. Drummond in Scotland: Mr. Boardman has one, and the third must be the specimen obtained by Mr. Brewster, of Cambridge, Mass., lately, and marked from Nova Scotia. Wilson, in 1818, speaks of examining many specimens in the market of Philadelphia, and in 1830 it was well known by the gunners of Newport, R. I., who called it the skunk duck, from its black and white colors. It is probable this species is becoming extinct, as the causes of its scarcity appear now permanent. Of the king duck, (S. spectabilis), I have only noted three specimens, in market, Halifax, Dec. 11, 1871, one of which is now in the collection of Mr. Boardman, St. Stephen's, and though a male in full nuptial plumage, has the peculiarity of having no frontal plates to the bill. This species is so eminently pelagic in our latitudes as never to seek our shores unless driven in by gales of wind. The common eider or sea duck, as it is here called, is plenty, especially in the form of the female and immature birds. I note that Mr. Egan informed me he once watched a pair nesting near Halifax, N. S., but this is the only instance that has come beneath my notice. With the exception of the harlequin, which are rare, the old wives, the three species of scoters, and the common eider ducks, make up our true migratory sea fowl.

I note a surf scoter (O perspitiata), a young male, as early as August 8, 1879, shot at Digby, evidently a young bird of the year's; a very early date. From this date to November, the surf scoter, the velvet scoter (O fusca) and yellow-billed or bottle-nosed scoter (O americana) come flying in the Bay of Fundy in small flocks, and remain all winter. I have never noticed the black scoter (O nigra), though given in Wilson, Nuttall and The American student must feel obliged to Dr. Coues for returning these species to one genus, and in studying their common habits, forms, and especially common colour, and protuberance at base of bills, wonder how any naturalist, either cabinet or field, could ever have divided them into two or three The old wife, or old squaw, comes to us about the same dates with these, and is often seen in company, either flying or pressed to a lee shore by heavy weather, sitting upon the waters. The eiders come in rather later, but are sometimes numerous in Spring. Whilst the semi-annual Fall migration of these sea duck are scarcely noticed, except by naturalists and gunners, whilst in the pursuit of food or warmer seas, they seem leisurely to fill our shores and pass our rocky promontries, whilst some remain all winter, seemingly, as we are unable to say they may not be successive flocks in passing, the returning Spring seems to awake new thoughts and new feelings in all these migratory fowl. Sometimes in February, oftener during March, the garrots cease their perpetual diving; the males, with tumid heads and throats, and more brilliant and purple green reflections, swim in restless circles around the sombre female which, half buried in water, with extended neck and flattened body, evade his approach. The glass-like water is thrown into mimic surf by their play. Or the male throws his purple head far backward till it rests upon his back, and a short shrill cry comes across the water from his upturned bill. The old wives, a little seaward, are playing the same antics, and a prolonged note, much like a distant bell-buoy, directs you to the male, with creamy and pouty head, long snowy axillaries falling athwart a velvet black back, and long tail carried straight and high, is circling around his greyish The coloured gentry in these magic reels, the scoters, mates.

with lake or orange bill, and scarlet leg gleaming from the velvet darkness of their suits, play this game so stoutly that among the hardy fishermen they have gained the name of courting coots. Thus it appears that pairing takes place long before the instinct of migration moves the whole mass northwards. This migration is strongest during April, and lasts into the middle of May. Beginning far away southward and west, Florida perchance, it strikes our westernmost point, Westport, Brier Island, passes along Yarmouth, Shelburne, Lunenburg, strikes Sambro, the western head of Halifax harbour, and pours its tide all along the eastern passages, Canseau, and finally leaves our shores at the north-eastern cape of Cape Breton. For all day long and for many days in fine weather, flock after flock of heralds, scoters, and eider ducks, every few minutes come scattering along, flying low upon the ocean, but rising when passing a rocky point. From many a rocky ledge, or boat anchored to a buoy, comes flash after flash, followed by the roar of a duck gun, and three: or four victims falling headlong into the sea. The heralds and eiders seem to perform their flight first, followed by the yellow billed scoters and the velvet ducks, called May whitewing, because they prolonged their migration until May. Thus, as I have said before, these flights are obvious and make a pretty scene in the landscape, whilst the geese, flying high in the air, escape our notice, and the true ducks and their allies disappear as it were unnoticed, but no doubt performing the like migrations on inland routes and fresh water streams. Some fifty years ago, it was my delight as a boy to watch this feathery stream as it flowed by the headlands of Newport, R. I. A respectable and grave set of men called gunners locally, but termed fowlers in law, and having common rights under the "Fowlers and Fishers' Act," pursued this sport with great ardour. They had unwritten but severely respected law, of every boat's exact position on the water, and every man's right of fire on land. They owned a weather stained old grey granite hut called the fish house, with its boats chained all round it, and further away towards the sea, a stone duck fort, a circular wall of dry stone, titanic, and looking so like what I have in after years seen the

Micmacs dwelling in, on the rough shore of the Bay of Fundy. They shot from long ducking guns, with buccaneer stocks, (the front of stock very convex,) flint locks, and every man measuring his charge in his palm, from a long curved powder horn; and yet they were good shots; and on the evening of a soft April day, the fog clinging around Brenton's reef, it was a pleasant sight to see them slowly following homeward, with their big spaniels and lusty Newfoundlands, two or three horse loads full of game, each horse piled high with a feathery pyramid of black and grey, gleaming with scarlet bits of leg or bill. It was rare then to see four wheeled waggons; a manlier generation used horseback, sometimes the old two wheeled chaise. knew the Labrador duck, now nearly extinct, and taught me to identify the Huron scoter, for which I vainly sought in Buonaparte's catalogue, N. Y. Lyceum, and which in after years was first scientifically described by Herbert in American wild sports, allowed by Baird, but denied by Coues. Whether this sport is still carried on, by breech-loaders and patent shell, I know not, but must return to our own part of the stream, and the modification time and civilization has wrought in it, not referring again to the ancient voyagers. The opinion of those most interested in it steadily maintain its rapid decrease, or at all events its alteration of route. Wilson speaks of birds now almost extinet as found in the markets. M. Audubon, speaking of the sea ducks in the Bay of Fundy, says "that by the 10th August they (eiders and scoters) are so naked of feathers and destitute of quills as to be unable to fly, and are clubbed by the Indians, sometimes to the number of two hundred and fifty in one foray, being unpaired birds remaining from the previous winter." With a fair knowledge of the southern coasts of the Bay of Fundy, and of the Indians about them, I can say these are the stories of former days, and that no such hunts are made now. Labrador their numbers are declining. In the official reports of the Dominion of Canada for 1878, it is stated that the Mingan Indians, during the summer of that year, were reduced to comparative starvation from the absence of feathered game on the sea coasts. We may take the fate of a kindred species, the great

auk, now universally admitted to be extinct, as a forewarning of the fate of others. If we admit, as indeed every one must, that Joseph Josselyn Gent, when writing of "N. England's varieties," 1672, was describing under the name of wobble, the great auk, then used as food and common in New England in June, "an illshaped bird having no long feathers on their pinions, which is the reason they cannot fly, not much unlike the penguin," the complete extinction of this bird shows what the presence of man can do. A bird organized for existence in temperate zones is pushed backwards to arctic lands, and those unable to adapt their organization to its new habitat perish. It is singular that the species now supposed to be becoming extinct, the Labrador pied duck, differs from all its co-genera in having a membranous bill, and is allied (Coues) to a soft-billed species in New Zealand in this respect. May we not look to this feature among the causes of its inability to maintain that position which other species around it seem able to do. There is a growing tendency in the guillimots, the puffins, and razor-bills, to become scarce about the shores of the Province, and they are less easily obtained by collectors than formerly. The family of gulls and terns, with the sheldrakes, both mergansers and goosanders, including the hooded, breed here; all the species of sheldrakes, and many of the gulls, and none of them diminishing. Yet in early autumn the numbers of gulls which arrive show that we owe their presence to migration. I had scarcely noted, Tusket, Bay of Fundy, Sept., 1879, a laughing gull (L. atricilla) for the first time, before a letter reached me from my friend Mr. Boardman, St. Stephen's, saying it appeared on the St. Croix with other southern species about the same time. Of very rare species that have reached us may be mentioned the tropic bird, the frigate pelican and the purple gallinule, from the south, and the pomerine jagger from the north, and all after very heavy storms; the jagger after the one predicted by Saxby, Oct., 1869, and the gallinule Feb., 1870, a few clays after the hurricane in which it was supposed the "City of Boston" was lost, and which the transport "Orontes" barely survived.

I have thus in this paper made a study of that portion of

these semi-migrations that touched the shores of Nova Scotia. endeavored to show the different families of sea and fresh water fowl which compose it, their various routes, and the causes that produce this variety. Some passing over the land, aerial, scarcely noticed save by the fowler or naturalist, others taking the inland water courses, and those which visit us being almost involuntary stragglers from this great western flow. Others again making the sea their pathway, and whose numbers make them common in our markets and observed by all. I have only stated what came personally to my notice or from a few friends. thinking that the narrowness of the range might be made up by the more exactness of the matter, and that perhaps others on other parts of the route may, or perhaps are now doing the same, and thus a complete account of the entire migration from personal facts be obtained. Whoever studies it is now aware he is studying a feathery stream that no longer overflows its banks, but is ever growing narrower and narrower, species dropping out, individuals diminishing, its route altering, perhaps lengthening. It is beyond doubt that that amazing feathery stream, that darkened the air, blackened the coasts it alighted upon, that had streamed on for ages, indifferent to the arrows of the thinly scattered red man, made its breeding quarters far to the southward of their present home. It is certain the snow and the Canadian goose once visited Nova Scotia, and the extinct auk spent his June in Connecticut. These, perhaps, are the most arctic species now, and we have a right to infer that the less arctic ones followed their habits. The very presence of man, with his boats and ships, has done much towards this; but the alteration of their food from the ocean, caused also by his presence, his works, his wharves and docks, his pollutions, have driven away their food fish, and made them seek it in northern climes.

By whatever means, however, this feathery stream has been diminished, altered or shortened, it leaves us some speculations of the past and for the future. Are those arctic forms now breeding at Hudson's Bay the same as once bred in sunny Connecticut; have they changed in three hundred years, or are we

wrong in asserting that an especial form is necessary for every zone, and that one form would not be sufficient for both places; or may it not have been that the great auk, with a form according to every naturalist of the purest arctic, flourished better in these warm seas, with this form, and owes his extinction to being pushed to where it was not adapted for existence.

ON A CUB FOUND IN A BEAR'S DEN, JAN. 12, 1880.—By Dr. J. Bernard Gilpin.

On the 12th January, 1880, Stephen Bradford, an Indian, hunting moose in the County of Digby, Nova Scotia, discovered a bear's den,-seeing the dark skin of the bear beneath the roots of an overturned tree, covered by its mantle of snow. His gun being foul, he exploded many caps, and succeeded in arousing the bear from her hibernation. Before he could discharge the gun, she left her den, and he then tracked her through the forest in the snow for a mile and a half, when she denned again. He returned to camp, cleaned his gun, and returning shot her, for she proved a she bear, in her temporary den. Missing his coat, he returned to the first den, where he recollected throwing it off, and there found a cub dead and frozen. cub he took to my son, who was in camp at the time, and who sent it to me. Its weight was eleven ounces. It measured, when stretched out, from tip of nose to end of hind toe, between It was covered by very fine close hair, ten and eleven inches. black upon the back and head but bluish slate towards the belly and inside of limbs. The ears were naked; the eyes closed; the tongue exposed, and the jaws slightly open. There were no teeth, but the claws were much developed, and the tail long. From the umbilicus being entirely healed, and no cicatrix upon it, I judged it to be about ten days old. After a careful and measured life-size sketch, it was placed in alcohol. Though we gain nothing new by the possession of this most rare specimen, yet we verify personal observation, and by date, statements which have come down to us since the days of Pallas, and repeated by Richardson, Godman, and Audubon. Allowing the