On the side the Engineer located, the ground was entirely submerged. The best locality he could discover was a thick cluster of ragged bushes. These he climbed into. A few ducks came around the previous afternoon, but the shooting from that stand was not first-class. Now and then a duck would light in the rear where a shot could not be had and sass the "bushwhacker" in a provoking way. So during the morning a more favorable place was speedily looked up, where position was taken in the Amateur at one edge of a heavy growth of timber and under a thick cover of overreaching branches. The twenty mallard decoys had been put out thirty yards or more in front in a natural haphazard manner. A light rain prevailed to deaden the reflection, and a sufficient breeze existed to set the decoys in motion.

And sure enough there was a flight, not such as one sometimes gets, but sufficient to keep the sportsman eagerly on the watch. Yonder come a pair, will they turn this way? Yes, indeed! See them set their wings and push in toward the decoys. Now they circle and come in the rear, and pass to the left. Here they come again, closer this time, but still too far for a shot. Away they go to the far shore. Back again in a minute, closer this time. Look out, Mr. Sportsman, keep rigid as an old log or you are detected. Ah, they veer and go over behind again where the rush of their wings can be heard for a moment only. Here they come once more, against the wind this time, straight for the decoys—this is your chance, be sharp—quick—bang, bang. Eh! old fellow, miss with the first barrel, kill with the other, what's that for? "Bushes in the way and the duck twisted on me." The bird is retrieved. In ten or fifteen minutes the chattering of an old drake's bill is heard. Soon with his flock he is seen. They circle two or three times, get a hint that something is wrong, and with whistling wings hurry away.

away.
So all the forenoon interest in the flight is kept up, even now and then a fine old mallard falling to the guns. So that when the Boss and Amateur are paddled down to the Greenwing the score is brought above the lowest she had ever gone home with. When tied together in pairs and hung up to advantage in the stern of the launch they make quite a creditable display, and number forty table ducks—all mallards but four—three snipe and three fish

ducks.

At two o'clock on Saturday the anchor was weighed and a final start for home made. It was down stream this time, and in less than two hours the shrill whistle was blowing the signal of return.

"Can you pick up that buoy?" was asked of the Pilot as a small white block of wood loomed up on the surface of the water a few hundred yards away.

"Pick up that buoy! Of course I can! I can split it," indignantly retorted the Pilot. The Engineer and Fireman smiled slightly, for there was a smart cross wind, and the Greenwing is deep astern and light draft at the bow, and when slowed up she is easily sheered.

"Hold on! Stop her! Back her!" comes in quick succession from the Pilot who has not yet fully learned the signals for the bell. And by that time the wheel was directly over the buoy, and to have put it in motion would have endangered the line attached to the buoy. So the wind is waited on to get us away a bit. Presently the launch is pushed ahead, and the Pilot takes a circuit for the buoy, but he is too close and makes a complete circle with the buoy as a center. He then makes a trip out toward the middle of Lake Centennial, rounds to, makes a straight course for the buoy again. When near the buoy the Greenwing gets demoralized and wobbles about much after the manner of a drunkard in a public thoroughfare, and the buoy is missed by ten feet or more. In the meantime a few skiffs have moved away from that part of the lake to give the Pilot ample sway. What was that the Pilot said on viewing his next failure? "Jam the jam buoy?"

"Well, jam her, Mr. Pilot—split it," And the next

Pilot said on viewing his next failure? "Jam the Jambuoy?"

"Well, jam her, Mr. Pilot—split it." And the next time the Greenwing was backed straight away, and the Pilot made a final bulge for the white block, making this time a nice allowance for windage, when the elusive buoy came alongside and was taken aboard and the line made fast to the post in the bow of the Greenwing.

As we moved away from her, after having sent all the traps ashore, it was remarked that the Greenwing looked as innocent as a sucking lamb, as though she had never kicked up any deviltry in all her days. But surely she was a gay deceiver, having more pranks at her command than a festive plantation mule. Ta, ta, Mrs. Greenwing, may you long flourish even with your capricious ways.

Vicksburg, Miss., Jan. 31.

TEN years ago when Judge Caton published his excellent and useful volume on "The Antelope and Deer of America," that careful observer treated of eight species of deer, which he took to be all the then representatives of this group in our fauna.

It will be seen in the U. S. National Museum List, which I published in my last contribution to this journal, on the PECCARY, that ten species of deer are there considered to belong to the North American fauna; these are arrayed in four genera, while Caton retained his eight species in two genera, or all in the genus Cervus, except the barren-ground caribou, which was placed apart in the genus Rangifer.

Now Cervus alces of Caton, "the Moose," has come to be Alces machtis of the above named List; the name for the "Elk" remains the same in both, i.e., Cervus canadensis. Next we arrive at a point of difference in these two authorities, which owing to the lack of literature and specimens I am, at the present time, unable to make clear, and I trust some of the readers of Forest and Streem, more fortunately situated in these respects than I am, will throw some light upon the subject. I place the authorities and species opposite each other for comparison.

Caton.

Caton.

Cervus tayandus, Woodland Cat-Rangifer tayandus, Reindeer.

CATON.

U. S. NATIONAL MUSEUM.

Cervus tarandus, Woodland Carlbou.

Rangifer tarandus, Reindeer.

opinion that "the Reindeer and our Woodland Caribou are specifically identical," in which case R. tarandus and R. t. caribou in the List of the U. S. National Museum, would be equal to his Cervus tarandus, an explanation which may be the correct one. Further investigation upon this subject seems to be desirable.

The "Mule Deer" of Catou (Cervus macrotis) is the same animal as the Cariacus macrotis of the List I published, as is the "Black-tailed Deer" (Cervus columbianus) of the first named authority, the Cariacus columbianus of the U. S. National Museum. Again the "Common Deer" of Caton (Cervus virginianus) is the "Virginia Deer" of my "List" or Cariacus virginianus. Rangifer grænlandicus, the "Barren-ground Caribou" of Caton, is the R. tarandus grænlandicus of the U. S. National Museum "List," but the former author describes the Cervus acaputemsis, the Acapulco deer, which I take to be the Cariacus voltecus or Yucatan deer of the U. S. Museum "List," and if it be not this species I am at a loss to make an agreement in the case. Judge Caton describes no species which corresponds with the "Black-faced Brocket" (Cariacus rufinus) of the above-named List, a species ranging from Mexico to Ecuador. This then appears to be the difference between the two authorities in question, for Judge Caton does not take into consideration the C. rufinus, and believes the reindeer and woodland caribou to be identical species, thus reducing his list of deer to eight, while ten species are enumerated by Mr. True in his "List" of the U. S. National Museum; and, as I have already remarked, it does not le within my power to decide upon this difference at the present writing.

In order to secure fitting illustrative figures of the Cervidæ for the contribution in hand, I overhauled all my sketches, cuts, engravings and pictures, but have failed to find anything better, nay, nothing so good for my purpose as the unpretentious yet truthful representations of these highly interesting animals in Caton's work upon their uatural history. The

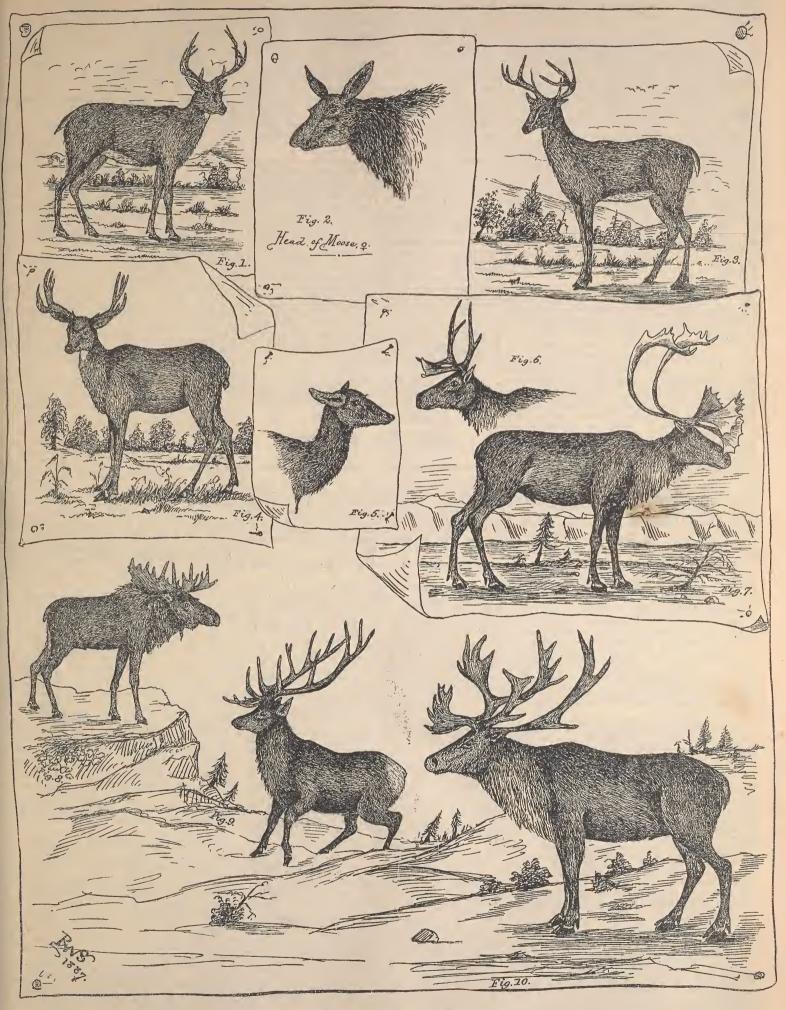
laborious and fatiguing gait has not in the course of time given place to the more easy and enduring running pace of the Virginia deer, which inhabits the same country." (Caton.)

given place to the more easy and enduring running pace of the Virginia deer, which inhabits the same country." (Caton.)

Passing next to the common or Virginia deer we meet with a species that enjoys a wider geographical range than any other representative of the family m the entire world. It is found in every State and Territory of the Union and may be taken north and south from Canada to Panama. No kind of country seems to come amiss to it: I have shot them in the dense pines that clothe the sides of the Rocky Mountains; and again on the level prairie, fifty miles from the nearest butte; and finally, when standing up to my knees in a waste of marsh land and my game in its very midst. Wonderfully beautiful in form and graceful in action, this species is by far the most engaging of its kind, and in countries where it has been much hunted, requires the best talent of the sportsman to successfully hunt it down. Owing to its wide range and the varying influences of the climate, conditions and food to which it is submitted, fairly well marked varieties may be picked out coming from the extreme limits of its domain; but naturalists have failed thus far to draw constant characters to distinguish these apart, and in reality they are seen to intergrade in all directions. Further study, however, and careful comparison of a sufficient series of specimens will undoubtedly reveal the fact that at least two, or perhaps three, "good species" are now in existence.

One who has carefully examined the antlers of the three above mentioned deer would have no difficulty in distinguishing them, and their most evident individual peculiarities are by no means badly shown in the figures illustrating this paper. The males alone of these species possess normally these appendages, and they all have their seasoual shed for them, the parts passing through the well-known metamorphoses in being reproduced afterward. All three of the species have both the tarsal and metatarsal glands, and in all the lacrymal sinus is present in front of the e

dates—the sale of the first state of the proper was weighted and a final start for home made. It was down stream that we were the sale start for home made. It was down stream that were the sale start for home made. It was down stream that were the sale weight with the was been start and the sale with white a wear start where we have the sale white a few handles proper were the sale of the Pola and the waste of the Pola and the Pola and the Waste of the Pol



AMERICAN CERVIDÆ. DRAWN BY THE AUTHOR.

Fig. 1.—Black-tailed Deer (Cariacus columbianus), 2.

Fig. 2.-Head of Moose (Alces machlis) 2.

Fig. 3.—Virginia or Common Deer (Cariacus virginianus) &.

Fig. 4.—Mule Deer (Cariacus macrotis)  $\varepsilon$ .

Fig. 5.—Head of Female "Elk" (Cervus canadensis).

Fig. 6.-Head of Barren-ground Caribou (Rangifer tarandus grænlandicus) 9.

Fig. 7.—Barren-ground Caribou (R. t. grænlandicus) 8.

Fig. 8 .- Moose (Alces machlis), adult &. Fig. 9 .- "Elk" (Cariacus canadensis), adult & .

Fig. 10.-Reindeer (Rangifer tarandus), adult 2.

[All but Fig. 9 are copied from Caton.]

United States from the Carolinas northward to the sub-polar regions, this animal has been driven by the advanc-ing civilization of the white men to a restricted habitat in certain mountainous districts north of the Territories, in Maine, portions of the Dominion of Canada and else-

where.
The forms of the male and female moose are so well known in these days to the general reader, that I will not attempt to describe them here; an old buck usually stands higher at the withers than a full grown horse, and may weigh as much as 1,2000s. In Montana they say the animal attains a greater size than it does in Maine the confirmation. The moose will end alman any kind of vegetation he may come across in his haunts, from dry moss to all kinds of leaves of trees, weeds, and many other plants.

Able pens of both sportsmen and naturalists of this country and the continent of Europe have preserved to us many a tempting picture of the charms of a good moose hunt; and indeed there are few or no sports afield that can compare with it, as it demands all the talent and endurance which the hunter may command for its successful that the continent is entered into only for the senson, while in the roe deer of Europe, although at a father than the continent is entered into only for the senson, while in the roe deer it is a life-long contract. Usually the female bears but one fawn, but may deliver triplets; she carrics about nine months, and is very solicitous of her young after their birth. How different are these sexual relations with the unbridled passions of the tribe, described above.

Often in the summer these animals come to the solitary in the water, more stands stand sometimes neck-deep in the water, more stands and stand sometimes neck-deep in the water, which worry the money the process and stand sometimes neck-deep in the water, which worry the money the process and stand sometimes neck-deep in the water, and hair-covered appendage, langing beneath the lower jaw back of the chim. Caton says that the females may also possess one of these curious structures, and he helves them to be the more vigorous individuals of that sex. The moose lives to a great age, and does not attain its growth until fourteen of fiften per service of the process of the securious structures, and he helves them to be the more vigo

deer have many interesting congeners in various quarters of the world, as the Musk Deer; the Hydropoics inermis, a deer without antlers, and long upper camine teeth; the more remotely connected Chevrotains, forms standing between the true deers and the pigs; and finally, a host of typical deer with forms and histories most interesting. Fossil deer go to show that in the earliest types these animals had no antlers, but as we pass through the forms found in the Middle Mioeene, the Upper Miocene, the Upper Pliocene, they pass suecessively from the Lower Miocene, where the species were all without antlers, to those which had simple ones, to those with two branches, and then to those which had three branches, and finally, in the Upper Pliocene, where they occur with perfect growths of this kind as in modern types. The fossil Irish Elk (Cervus megaceros), an enormous cervine form from the lake deposits of Ireland, is one of the most interesting extinct species which has rewarded the explorations of the paleontologists.

tions of the paleontologists.

BIRDS AND BONNETS IN MICHIGAN.—Editor Forest and Stream: In the report of the Michigan Association, in No. 2 of the current volume, Mr. T. E. Shepherd is represented as saying that "the association should turn its attention to the protection of song birds, which are nearly externinated, owing to the demands of fashion." I can account for the appearance of this sweeping assertion only on the supposition that Mr. Shepherd was incorrectly reported. There is no truth in the statment. I have been a constant resideut of Michigan for forty-five years, have traveled extensively in the State, and am well acquainted with the situation in many widely separated localities, and I know from personal observation that in and around some of the interior villages there has been a large increase of song birds, both in the number of species and the number of individuals. I have never known a bird killed in obedience to the demands of fashion, nor have I ever known of a person buying, or offering to buy, bird skins for ornamentation of milliners' work. Boys, and sometimes older persons, shoot song birds from pure wantonness, or for the sake of shooting something, and need to be restrained by the application of law.—M. L. LEACH (Traverse City, Mich.).

DOVER, Del., Feb. 15—The thermometer registered 60° here yesterday. Bluebirds and robins left their retreats and the town resounded with their carols.—Del. A.

## Game Bag and Gun.

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## PILGRIMAGE OF THE SAGINAW CROWD

Integration in the giraffe.

Taking all authorities into consideration it seems to be pretty well decided by the monisolieration it seems to be pretty well decided by the monisolieration it is emers to be pretty well decided by the monisolieration it is emers to be pretty well decided by the monisolieration of the fillustrations to this paper.

\*\*Rangiffer derandate is the true reindeer common to the boreal regions of both hemispheres. The accounts of the fillustrations to this paper.

\*\*Rangiffer derandate is the true reindeer common to the boreal regions of both hemispheres. The accounts of and in many cases not a little mixed up. My friend Mit.

\*\*L. M. Turner, of the U. S. National Museum, has spent acuple of years upon the range of these animals, and I look for his report of their natural history with great intersection of the state of the property of their natural history with great intersection of the state of the property of their natural history and an earn, from the Atlantic Ocean to the Sakcania and the property of their natural history and acribed article regions and southward sometimes to the borders of the Great Lakes. On the other hand, the woodland carribou seems at present to be restricted to New Brusswich, Novas Scotia, northern Maine (5), and as far north of the Great Lakes. On the other hand, the barren-ground carribou being migratory, yet the species seem to have kept absolutely distinct. Both of these species such as the companion of the seed of the control of the control of the seed of the control of th

ity where we did not so our shooting, it was impossible to give our birds away or make proper use of them, and of course we did not want to kill anything we could not use. Therefore when Ed proposed that we go to the Tertitory and visit their cattle raneh we acquiesced. The Sagnaw Cattle Company have 200,000 acres of land fenced in in the Sac and Fox Reservation, and we were very glad to go and see how the eattle looked, and besides, we had reports of plenty of birds. In looking over the old crowd two or three faces were missing. There was the General, whom we had not heard from since we were salmon fishing in the summer, and Bob wrote us that rheumatism prevented his going, "Whisky Bill," of Dakota fame, was somewhere in Kentucky buying fast horses, so they had narrowed down to Ed, the City Official, "Genial George" and Brooks or "Section 37," as he is familiarly called, and the Doctor, together with the writer of this chroniele, whom the boys micknamed "Buzzard Bill," and modubtedly the cause of the nane will come out later on. So it came to pass that the F. & P. Ai. train, leaving Sagniaw at 830 the evening of Oct. 11 bore us toward Chicago. All were present and accounted for with the exception of the Doctor, who was to meet us in Chicago in the morning. Our connection with the Wabash was very close, and the Grand Trunk is noted for being late. We had arranged, however, with the traveling passenger agent, and he of course guarantees everything the production of the power of the seabout your transfer, provided your transportation is a dray thus, you arrange for your transportation is a dray thus, you arrange for your transportation, and when we reached the outskirts of Chicago and began crossing the numerous tracks going into the city, waiting form out just as they agreed. This was no exception, and when we reached the outskirts of Chicago and began crossing the numerous tracks going into the city, waiting in we found that the Wabash train had not waited for us, but a far and something must be done. Telegraph

of the latest pattern, and the night was most comfortably passed.

On awakening the next morning we made the acquaintance of a fellow traveler, who was a thorough old Southern gentleman in the first place, but had acquired the active instincts of the Western land speculator and boomer as well. Slightly helpless from some accident or deformity, he was going accompanied by his servant to the new town of Monet, as he expressed it, to "sell out the town." In other words, with the usual enthusiasu created by a brass band and lots of "hoorah," an auction was to be held there that day to dispose of village lots. In due course of time the train pulled into the future metropolis. The brass bands were there and so were the village lots, and about as far as the eye could reach there seemed to be lots more lots of the same kind as those that were marked with stakes at each corner, with the exception of price. Those without the mystic talisman of the boundary stakes could undoubtedly be secured at the rate of about \$5 or \$6 per acre. But the staked ones, right where the city building was to be, and here where a dry goods store larger than Field's was to be erected, in those places, of course, land was bound to boom and must be worth several hundred dollars per foot. The depot was now and the surroundings neat and clean, and after getting a good substantial breakfast we exercised the dogs a little by letting them run across some of the city property (and we had a faint suspicion that they started up a rabbit on one of the lots laid out for a public square). As we gave a shrill whistle, and they obediently came in to be tied up, a long, lank individual of the thoroughly Missourian type, witnessing their obedience, rammed his hands down into his pockets a little further, if such a