

on the beach. Hastily getting my rifle, I fired at him, breaking his back. Having cleaned the deer and cooked our breakfast, we started down the lake and spent the rest of the week cruising along the shore toward the town.

I would tire the reader were I to give a detailed description of every trip we took from May to January. However, I shall give a general outline of our expeditions.

The next week was spent in fly-fishing in the lower end of the lake and the Spokane River, having a glorious time with the trout. After that we formed a party to hunt deer on a table-land about 11 miles up the lake. There we spent three weeks killing deer and fly-fishing. From there we went to a small lake lying on the left of the Cœur d'Alene River, where the trout were large, running from two to three pounds, and very game and finely flavored. There are a great many lakes on both the Cœur d'Alene and "St. Jo" Rivers in which the fishing is good, but none compare to this particular one. The game also appears more plentiful here than on the others. We killed five deer, a couple of lynx, and a large silver-tip bear, and caught a great many trout. Most of the deer and trout we sent to our friends in Cœur d'Alene by the steamer Cœur d'Alene which makes daily trips from the town to the mission on the river for passengers, freight and ore from the mines; it was then in charge of a most obliging gentleman, Capt. Sanborn.

The water now being quite low, we turned our attention to the "St. Jo" and St. Mary's rivers. We had a number of exciting little incidents as we poled and packed the canoe up the riffles, and when about four miles up the "St. Jo," above the swift water, we found the best trout fishing it has ever been my good luck to find, all large and game and very finely flavored. Higher up the river we found the signs of game, or, I should say, animals, plentiful. The bear, cougar and lynx keeping the deer in constant readiness to jump into the river at any moment, but these wild animals were very shy, and we had a good deal of trouble and luck in getting any. We also saw a good many elk signs, but they were nearly all old, and the elk seemed to have taken back into the hills. We saw a few mountain goats and had the luck to get two, the other game killed being deer, two bears, a cub and a female, two cougars, three lynx, and plenty of pheasants.

Thinking we had worked pretty hard, I proposed as a rest a duck and goose hunt at "St. Jo" lake and bar. The ducks, geese and swan now going south, stopped there in vast numbers, and for nearly five weeks we had most excellent shooting. None of the game went to waste as we gave all we didn't use to the "Siwash," who were there in good numbers hunting deer and fishing, drying all they got for winter use.

We had also some good trolling for "bull trout," getting some very large ones, the largest being 8lbs. (The largest bull trout caught in the lake last year was caught on a spoon by Corp. Guy Norton, Co. D, 4th U. S. Infantry.)

This ended our hunt with the exception of a short visit to the head of Blue and Wolf Lodge Creeks, but the snow being very deep we had rather indifferent success, our party killing five deer in seven days.

I wish I could give a full outline of the whole trip. I am sure I could induce some of our sportsmen to forsake the old fished and shot-out regions for these comparatively new fields. Should any one contemplate the trip, I should be pleased to give him hints as to the best shooting and fishing points, etc.

Let me also say that at Spirit Lake, only twelve miles from Rathdrum, Idaho, on the N. P. R. E., one can find elegant fishing, plenty of deer and bear. An old hunter, Pete Rhoterbeck, has cabins there and will show any one the best places.

The following flies are the best in April and May: Gray drake, Abbie, professor, scarlet-ibis, March-brown; on hooks from 10 to 6.

June and July: The gray-professor with yellow body is best, ibis, Parmachene-belle, Seth-Green, orange-miller; hooks 6 to 4.

August, September: Cowdung, grizzly-king, ibis, Seth-Green. NICA.

A POCONO PARADISE.

IF among your readers there be any who are in search of a good place to go to for wholesome air, fine scenery, fair trout fishing and decidedly a surplus of game if they can kill it, we would inform them that we have found just such a place. It is in a region 2,500ft. above the heated walls and slums of Gotham, where ozone abounds in inexhaustible quantities and free to all, where nature is seen in its pristine grandeur, and moreover where the speckled trout gleam in the sparkling brooks, the ruffed grouse drums in the neighboring copse, "the stag at eve," does "drink his fill," Bob White whistles from surrounding thickets, and bunnies scurry away at sight of sly reynard's approach. Even dusky bruin is not far off, and the panther is occasionally an unwelcome visitor to the farmer's pets.

On the 1:15 P. M. train, D., L. & W., from Hoboken not long ago might have been seen the following party, all enthusiastic members of the J. C. H. G. C.: K., the able and genial teller of a Bowery bank and the hero of the slaying of two bull caribou in Maine last fall, he has the head of one of the caribou, a magnificent specimen, mounted in his dining room; Dr. L., the popular clerk of the Circuit Court of this city; the versatile Jerry M., the champion wild goose shot of the club, having bagged thirty-eight last fall down in Maryland; and lastly your humble servant. We were bound for a day's trout fishing. Our objective point we understood was Pocono Mountain or thereabouts, somewhere in the wilds of Pennsylvania. We found both the mountain and the wilds.

Having got pleasantly fixed in the smoking car and cigars alight, we interviewed the conductor. Now there are conductors and conductors. This conductor was a sportsman, therefore a gentleman. He was posted and willing to post us. Long may he conduct, or until he does better and perhaps superintends. Well, we rushed through the State of Jersey and the magnificent scenery piled up all along the Delaware Water Gap and adjacent thereto, but we have no time nor space to go into the raptures; it has been done too well and too often before.

We disembarked at Cresco station, a little one-horse affair with a one-horse station master, we don't know how many miles from Hoboken. The excursion ticket

there and back is \$4.60. We wanted to take a certain train back that did not stop regularly at Cresco; the station master informed us positively that he could not or was not allowed to flag that train; the superintendent of the road tells us differently, and that station master is lazy or unaccommodating and may get into trouble. We were met at the station by Milton Price with a spanking team, who drove us some three miles to the domicile of the Price brothers, whose post-office address is Canadensis, Monroe county, Pa. Here we found a capacious farm house with the appurtenances owned by the brothers Milton and Westley, and (very successfully) presided over by their niece, Clara Price, not to forget her able assistant, little black-eyed Fanny Crowe. The Prices own a farm of 300 acres, 40 of which are under cultivation, situated on Broadhead Creek, a tributary of the Delaware, and right in the heart of the wilds of Pennsylvania. They are good fishermen, good shots, and good hosts. You are at home at once. Upon jumping out of the buggy we were asked if we would have supper right away; it was then about 6 o'clock. Supper! not much—the roar of the water over the dam and the rapids just below the sawmill and but a short distance from the house had excited the Doctor and Jacobstaff, and the joining of rods, donning of rubber boots and discussion of flies were more important just then than supper. We were soon at the stream, where your correspondent landed the first fish, of about 4oz. It was the first one in eight years. He felt good, it brought back old times. He was soon followed by K. with one of about the same size, then by the Doctor with a littler one, while poor Jerry, whose flies and leaders had become inextricably mixed, was using words akin to club language when pinocle goes wrong. Then we were called to supper. Ah! what a supper, and what an appetite that high mountain air had given us for those biscuits, that butter and cream and coffee (that was coffee) and honey and cider, to say nothing about the crisp, delicious trout freshly caught from those cold waters.

We were up early in the morning after a refreshing sleep on hair mattresses and spring beds. K. and Milt took the buggy for the Buckkill, a stream four miles away, the Doctor and I a small brook near by, called the Sprucekill, while Jerry, wanting larger game, proposed to confine himself to the main stream; and Charlie, a younger brother and quite a boy, started for a stream some four miles over the mountain. I need not describe our day's sport nor could I do it justice. What a time we had getting through laurel thickets and black alder brush, over blackened logs and mossy stones as slippery as the eel of historical note, taking a little beauty from that ripple, a larger one from under that mossy stone and a bigger still from just above the foam lying above that driftwood, while the dull roar of muffled thunder on either mountain side told us that there were grouse and more than one in the neighborhood. Suffice is to say we had a right good day. Comparing notes we found that having a guide to the manor born was a good thing, for K. with Milt had beaten us two to one, and even the boy was ahead of us individually, but was not that to be expected? These country boys know where to go, when to go and what to do when they get there, and don't you ever bet that they won't beat you on their own ground.

Well, we enjoyed a good time. K. had to be in New York by 8 A. M. the next day, so he started homeward that evening. The rest of us did some more fishing in the dusk and the dawn, and took the 6:12 train in the morning, arriving in Hoboken at 9:30, well satisfied with our one day's fish.

The Price boys have a well-broken Gordon setter and a black and tan hound, part beagle and part foxhound, that they say it A1 on the Molly Cottontails. We are going up there again when the season opens in November. We hope to be in time before the woodcock get away south. We saw many borings, though we put up no birds. The boys say there are many around there and nobody shoots them. By driving only a few miles north a good deer region is reached, and it is only about twelve miles, we believe, from the celebrated Blooming Grove Park. We are going up after the timberdoodles, grouse and Bob White and the hares, and may be a deer or a bear, who knows? We will tell you about it. JACOBSTAFF.

Natural History.

MUSSEL, BOWFIN, OTTER.

Editor Forest and Stream:

I can add my testimony concerning the edibility of the fresh-water clam. "N. A. T." need not be afraid of their hurting anything but his jaws and perhaps his feelings, when he finds that what looks as good to eat as an oyster or salt-water clam is a rank-flavored delusion and a leathery snare.

When we boys used to go fishing at the lake we often tried them, raw, stewed, fried and in soup, but a little in any way was enough, if not as good as a feast, and we soon gave over begrudging the muskrats all our share of them. Yet tastes differ, and I have seen old Hi Potter get the better of three dozen, raw on the half shell, with the addition of a little salt which he had brought on purpose in a little calico bag all the way from Monkton; and he swore they were better than oysters. But his example and his profanity failed to convince us. Also an ancient worthy of more pleasant memory, one of the old-time hunters, used to aver that if you would "bile 'em into brine and fry 'em into butter they'd be good," but we never tried his recipe.

Did "N. A. T." ever examine his unios for pearls? Some valuable ones have been found in the fresh-water clams of the Winoski.

I remember that not long ago the edible qualities of the bowfin were discussed in your columns. I have had recent experience in this matter which may possibly interest some one now. One night this spring our men went fishing for pouts in the Slang and caught a bowfin of about 2lbs. weight, which they brought home, and after dressing it nicely and removing all traces of its identity, handed it over to the woman-kind under the attractive name of sweetfish. They marveled somewhat at this heretofore unheard of fish, but fried it according to the best of their skill along with bull pouts, and it was served up with them. It was not ill-flavored, but it was soft and yet it was not soft. It separated easily into fibers, but beyond that no amount of chewing would reduce it,

and if swallowed it must be as a bit of soft wood would be, ground into a stringy pulp. Though all who partook of it agreed that it might be better than no fish, if one were fish-hungry, no one asked to be helped to it a second time. It was like a "chip in porridge, neither good nor bad." If I could be informed in time of the next impending battle of the Ichthyophagi with the uncatable, I would try to send them this adversary, worthy of their ivory if not of their stomachs.

Of the otter killed in the township of Monkton, I have heard that it was somehow taken in the outlet of Bristol Pond, near Hog's Back Mountain. It was a fine specimen, and the captor sold the skin in Bristol for \$12. A third of this he invested in illicit strong waters, and therewith so loudly celebrated his good fortune, and mistaking his wife for a drum, beat her, that he was mulcted in a fine of \$8. His neighbor, S. L., who was never guilty of a pun, says, "He hadn't ought 'er then."

Some may think this an inglorious end of the story of the last otter in the county, but many an otter of the olden time went in much the same way, only in those happy days a man was not fined for ever so much rejoicing over his luck. AWAHOOSE.

FERRISBURGH, Vt.

TREATMENT OF SNAKE BITE.

BY DR. H. C. YARROW.

[Seventh and concluding paper of the Series, "Snake Bite and its Antidote."]

CAN we now in view of the results of our experiments propose any plan of treatment for snake bite which will afford reasonable ground for a belief that danger may be averted and human lives spared? It is thought the question may be answered in the affirmative, especially as regards those persons bitten by North American species of poisonous reptiles, and the following suggestions are offered with the earnest desire that they may realize fully the hopes of the writer.

What shall a person do who is bitten by a venomous snake? The first advice to give is that he or she should not lose presence of mind, and become so nervous as to be incapable of cool and deliberate thoughts. If the bite is upon one of the lower limbs or upon the arms, a broad bandage of unyielding texture, if possible, should be placed tightly around the affected member, and between the bite and the heart, and be securely fastened. This bandage or ligature can be made by tearing up a shirt and using two or three thicknesses of the material, an inelastic suspender will answer, pieces of a handkerchief may be used, or if in the woods a strip of bark from a sapling can be hastily slit off and applied. A leather strap or thong is better than anything else, but even long grass rolled together so as to form a cord may be used in an emergency. In applying the band or ligature of whatever nature, it should be started about six inches above the bite and the turns made to run downward toward the puncture, and should be wrapped so tightly as to cause the injured limb to become turgid with venous blood. Having fastened it securely, a number of cross cuts should be made through the points of the puncture from the snake's fangs, deep enough to pass down into the muscular tissue, taking care to avoid veins which will be seen standing prominently forth, and bleeding from the cuts can be encouraged by rubbing the limb gently up and down below the ligature. A wide-mouthed bottle or similar utensil, from which the air has been driven forth, by burning some whisky or a piece of paper in it, should be applied to the wound and it will act as a cupping glass; or still better, let the bite be sucked by the patient himself, if he can get at it, or have some courageous friend with a healthy mouth perform this act for him. The pulse should be felt, and if it weakens, showing that possibly a portion of venom is reaching the general system notwithstanding the constricting band, whisky should be given in moderate quantities. From time to time the band should be slightly loosened and then replaced so as to admit of partial circulation, but as the heart flags, the stimulant must again be administered. It is no use to make the patient drunk, for alcoholic liquors are not antidotes, in any sense they simply act as a tonic to the failing circulation.

The writer has been informed by a gentleman, long resident in Texas, that the plan proposed has been constantly employed in that State; and that few deaths result there from the bite of venomous snakes. Of course it will be understood that these suggestions are intended to meet sudden emergencies and not to take the place of treatment by intelligent bystanders or physicians. Under all circumstances, the ligating band should be first applied and the incision made, and then if circumstances will admit the following procedure, it is thought, will be the best. Cupping glasses should be applied over the wound, after which a 20 per cent. solution of permanganate of potassa should be injected with a hypodermic syringe directly into the wounded tissue and retained there by means of the finger or compress. The flesh should also be kneaded so as to distribute the solution through the tissues in the immediate vicinity of the bite. In addition the patient should be made to swallow 20 minims fluid extract of jaborandi, or its alkaloid, pilocarpine, may be used hypodermically. If the venom appears to be gaining ground another injection of the permanganate may be given, followed by more of the jaborandi, or pilocarpine, but the latter drug should be suspended when it is found the patient is perspiring freely and when excessive salivation is produced. Carried too far this remedy would weaken instead of strengthening the heart. Whisky or brandy may also be used in limited quantities from time to time. In the absence of any of the means suggested in the way of remedies the primary fact to keep in mind is the importance of the ligature, incision or scarifying the affected part, and the promotion of a free flow of blood. If nothing can be found to use as a cupping glass or no one is courageous enough to use the mouth, the old-fashioned country remedy of splitting open a live chicken and applying it over the wound may be tried, or as has been tried in India with success, the anus of a chicken may be applied over the wound, using a number of different fowls for the purpose. The writer recommends these methods only because there is undoubted evidence of their efficacy. A piece of porous clay might be applied as it would doubtless act in the same manner as did the snake stone in our experiments. It is very important to remember that the ligature or constricting band cannot be allowed to remain very long as gangrene would inevitably result,

it should be loosened from time to time so as to admit of a slight circulation through the affected part, and to permit a small amount of the venom only to enter the system, and the effect of this should be met by the administration of the remedies already indicated. In the case of a rapidly weakening heart, tincture digitalis in 15 drop doses might be given every two hours, or, if at hand, a few drops of nitrate of amyl might be inhaled. Everything failing it might be worth while to attempt artificial respiration, in the hope that if life could be prolonged, the system might throw off the poison, as it has been shown by the Indian Snake Commission that the action of venom actually is delayed by this method. In one case mentioned by Vincent Richards of a grain of cobra venom was injected into a dog. "It took four hours and ten minutes before the animal appeared to be dying, until artificial respiration was resorted to. In four minutes more in the absence of this system this animal's heart would have ceased to beat and somatic death been completed. But by its steady application life was extended to forty-one hours and fifty-two minutes. In a desperate case there should be no hesitation in trying the effect of artificial respiration.

* Before leaving the subject of snake bites it seems proper to allude to a matter which has of late received some little attention, viz., the preventive inoculation of serpent venom to prevent danger from bites, and while the writer does not commit himself to the theory he believes it may be worth of serious consideration. As has already been stated in this paper the Ann Arbor experiments showed conclusively that after a time with repeated inoculation of venom the animals experimented upon seemed to be much less susceptible to its effect, and quite recently an individual has been visiting the principal cities claiming an immunity from snake bite, on account of an inoculation performed on him by some South American Indians, and offering to have the matter tested upon a large dog, which had also been inoculated. It has been stated that in Philadelphia these experiments were successful. Tschudi informs us that some of the South American Indians are said to acquire an immunity from snake bite, having been previously inoculated, but the process has to be repeated from time to time. In this connection the following extract is given from "The Veterinarian," Lond., 1887, LX., 565, as it seems to bear the impress of truthfulness. "Three of the oxen were bitten by snakes. One of the bushmen undertook to cure them, and taking a knife made one or two slight incisions round the place where the bite was, which was easily seen by swelling, and rubbed in a powder which he said was made from the dried poison sacs of another snake. In a few hours the poison had entirely subsided and the cattle were as well as their half starved state would allow them to be. I expressed some doubt whether this cure would be efficacious in the case of the more deadly kind of snake, but the bushman assured me that it would, and that he was not afraid of being bitten by any snake in this country so long as he had the poison sac of another snake to use as an antidote.

"The very next day I had an opportunity of putting him to the test. While walking ahead of the wagon I saw a full-grown capell or spunge slange lying under a bank, and calling the bushman said, 'Catch that snake alive. You are afraid of it, are you?' 'No, boss,' he replied, 'I am not afraid, and will catch it for a roll of tobacco.' Not wishing to be accessory to his death, I refused to bribe him, and went to get the driving whip to kill the snake with. I had scarcely returned when he gave it a kick with his naked foot, and the horrible reptile bit him. Coolly taking out some dried poison sacs he reduced them to powder, pricked his feet near the puncture with his knife, and rubbed the virus powder in just as he had done with the cattle. In the meantime I had put a stop to the snake biting any more by a blow from the whip stock, and the bushman extracted the fangs, drank a drop of poison from the virus sac, and soon fell into a stupor, which lasted some hours. At first the swelling increased rapidly, but after a time it began to subside, and next morning he inoculated himself again. That night the swelling disappeared, and in four days he was as well as ever."

In conclusion it may be mentioned that this record of experimental inquiry is not intended as an exhaustive treatise, for as opportunely occurs other experiments will be tried with such supposed remedies for snake bite as may be offered, and the results will be duly published. In conducting the experiments the writer has been influenced by the motives only of adding to the sum of human knowledge and alleviating human misery, and if he has succeeded in this he will be amply repaid for the labor and dangers incident to the research. His thanks are offered to several persons who have aided him, more especially to his industrious and energetic assistant Mr. E. B. Rheem and to Capt. Bendire, U. S. A. It is proper to add that the greater part of the expenses of the investigation have been borne by the National Museum.

A "WOOLLY CROCODILE."—*Editor Forest and Stream:* I see it reported that "a curious creature was brought to San Francisco by a ship which arrived there the other day. It has some characteristics of the crocodile, but is covered with a coat of short bristles or hair, which gives it a most peculiar appearance. It has been domesticated to a certain extent and will permit the captain or any of the crew to approach it and receive their caresses with evident pleasure, but if a stranger approaches, it distends its big jaws and shows fight. The crew call it a 'woolly crocodile.' It is active and weighs about forty pounds." I think you will agree with me that this is "important if true," in its bearing on the theory of evolution; for if the "woolly crocodile" actually exists, and is possessed of the characteristics here described, it is in truth a "missing link."—C. F. AMERY.

FAMILIARITY OF THE GRAY JAY.—*Editor Forest and Stream:* I was very much interested in Mr. Grinnell's description in the article on the "Autumn Birds of the St. Mary's Lake Region," relative to the habits of the gray jays. Some years ago while deer shooting in northern Michigan I was seated on a runaway back in the woods waiting for something to turn up, and had kindled a little fire to warm my stiffening fingers, when I noticed a flock of birds of a kind unknown to me at that time, in the surrounding trees. They were chock-full of curiosity and impudence, and seemed to be chattering at me; and every little while one would hop on some twig a little nearer,

and all seemed to take a good deal of interest in what I was doing and what I had a fire for. Finally they approached quite near, and taking some crackers from my pocket I broke them in pieces and tossed them to the birds, and they at once scrambled down to where the dainty morsels were and proceeded to walk off with them. I then put some pieces on top of a stump beside me, and it was not long before they alighted within two or three feet of where I was sitting, seemingly not in the least afraid, and picked up pieces of cracker. They continued doing this until finally they became so bold that they would take the pieces from between my fingers, and one, more courageous than the others, seemed to be quite vexed because I pinched the cracker and would not let it get it at once, and twisted his head and pulled at it three or four times as you have seen chickens do when you held something tightly between your fingers for them to take. I was very much interested in their actions and anxious to know what kind they were. Later I found that they were the gray jays.—W. B. MERSHON.

THE BIRDS' RETURN.—Charlestown, N. H., May 27.—I note your remarks on "The Bird Hosts" in last number, and can add the result of my observations to confirm the opinion that our native birds are decidedly more numerous this year than for some years past. The spring of 1886 was the first but one for many years that I have spent in a country village, and I was then struck by the absence of my old familiar friends. Last year, 1887, there were more, and several orioles, of which I only saw one in '86, built their nests in my immediate neighborhood. This year, although a few days later, there are decidedly more of them, and I have seen the scarlet tanager and the indigo bird again, and in my rambles along the trout brooks, or in search of flowers, have been greeted by hosts of brown thrushes, bobolinks and red-winged blackbirds, while one village street is thronged with flocks of the little gold finch or yellow bird, as the boys call them. Now, as the English sparrow has not infested this entire neighborhood very much yet, I am inclined to attribute this marked increase to some extent to the good work of the Audubon Society.—VON W.

SPARROWS AND SONG BIRDS.—Philadelphia, May 14.—Some twenty years ago I had a nice home in the country, where our happiness was increased by the companionship of wrens, orioles and bluebirds. Business compelled me to move into the city. After years of labor I have been enabled to escape the hot streets, sewer gas and other offensive odors and to return to my lovely old home in the country, with its grass, shade and fruit trees. My walk over the grounds was saddened by the positive absence of the little songsters that made its former possession so bright and cheerful, and I am told that their absence dated from the advent of the English sparrow. I write now for advice. I want my wrens, bluebirds and orioles, and care nothing for the sparrow. If I kill the quarrelsome pests do you think I can coax the little warblers to come on the ground where sparrows are forbidden? My .22 Ballard will soon rid me of these English emigrants if such riddance will bring back my little friends.—G. N.

Game Bag and Gun.

IN THE MATTER OF BUFFALO.

LAST May I clad myself lightly in a photograph outfit and an editorial pass and started out to Garden City, Kansas, to visit my old friend C. J. Jones and his herd of tame buffalo. I had helped catch some of these buffalo two years before, or at least had stood around and watched the other fellows catch them, so I felt a sort of two-ply interest in the outfit.

The familiar gray landscape of the upper Arkansas country swam by the Pullman window, and I lay and let it swim till the porter, who should have called me half an hour before, poked his head through the curtains at 8 o'clock and hurriedly called out, "Boss, get up, quick, we're pulling into Garden City now!" That porter missed my quarter, but received my blessing, as I gathered my vestments, my photograph outfit and my editorial pass all in my arms together and stepped lightly and gracefully into the depot building to complete my toilet. I dressed in the simplest and swiftest manner within my power, thanked my admiring audience for their kind attention and went up to Ben Phillip's Buffalo Hotel for a good breakfast.

It began to rain after breakfast and it was therefore impossible to go out to the herd, which was some four miles down the river, with any prospect of successful results at photographing. I found Mr. Jones at his office, up to his eyes in some political scheme or other. I believe he was laying for the honor of being a delegate to the Republican convention at Chicago in June. Mr. Jones divides his time between politics, a big irrigation ditch, the glorious climate of Kansas and buffalo catching. He is a rustler in all these pursuits, but I believe he rather has a leaning to the latter.

The moment he saw me, Mr. Jones insisted I should stay over and start next week with him for the Panhandle, on a hunt which should be positively the last appearance of the North American bison on the stage of history or of sporting journalism. He explained that he already had the teams and running horses down on the range, with half a dozen men, and that word was up that the boys had found the herd, which numbered forty-two head all told. Mr. Jones again affirmed his ability to rope and throw a full grown buffalo (at which I again laughed) and further expressed his determination not to be contented with a few paltry calves, but to bodily round up, wear out, tame down and drive in the whole existing band of buffalo then on the range. There was "go" enough in this idea to fairly set me wild; but at the expense of all my effort, I was forced to confess that I could not possibly get off to join the expedition. I knew very well what I was missing, for I had been out with Mr. Jones before on one of these wild hunts.

The rain abating somewhat, we started down to the herd. At the distance of a mile, we could see the black lumps of the buffalo strung out in line among the herd of cattle with which they are kept. A half-wild old herdsman, covered with a tattered blanket, was urging his pony about the herd, and gradually working them up toward the corral, away from the river. Twice before,

some of the buffalo had crossed the Arkansas, and led the herder a pretty chase.

As we drew near, it was easy to see that the buffalo were no longer wild buffalo, but quite thoroughly domesticated. It was almost impossible to separate them from the cattle, and they seemed not to care much for the approach of the mounted herder. They would let him ride up close, then dodge around him and cut back into the bunch again. They frequently passed within a dozen yards of us, as we stood by the wire fence. I recognized one two-year old as he passed, carefully avoiding the barbs of the fence. I remembered the hot run at sun-up when we caught him, down on the plains forty miles from water; and I remembered how the herd of big buffalo ran directly over and through a strong wire fence that morning, and scattered it as if it were built of straw.

There were yearlings, two-year-olds and three-year-olds in the lot, thirty-nine in all, I believe. Mr. Jones had purchased one large young cow in Colorado, and I think also one from the Cimarron country; he had also sold three two-year-olds to Pawnee Bill's Wild West show. I saw these three specimens at Wichita. They were the poorest of the lot, one of them being a spindling, big-headed brute. Those left on the Jones ranch appeared to be in very good condition. I recognized the big heifer, Paladora. She was smooth as a seal.

I made several flying shots with the drop shutter at members of the herd as they passed, but feared the light was too dim to get a good negative on an instantaneous exposure, as the clouds had now again entirely overcast the sky; moreover, I wished a view of the herd as a whole, if possible; we accordingly undertook to drive the buffalo into the small corral near the cabin, where we could inclose them and approach closely. As the herder cut them out from the cattle, Mr. Reeves (Mr. Jones's brother-in-law; Mr. Jones himself could not come out with us) and I directed them through the little gate. As I stood with the camera near by, and nothing but a little switch in my hand, the buffalo passed within ten feet of me. They certainly looked very large, some of them, and quite capable of making away with one; but beyond a wild look from under their shaggy frontlets, they seemed disposed to keep the peace. In a short time we had them nicely inclosed, and walked up to the fence to look them over. What a strange sight it was! Here, on the native ground of the buffalo, but ground long since swept clean of them by the skin-hunter, we had a band of buffalo rounded up; we had a "stand" on them; they were not a dozen feet from us. And they were genuine buffalo, shag-headed, mournful-eyed and grim. No doubt of it. I tickled one with the switch. It kicked, shook its head, and ran off a few steps, much like a domestic calf. Half a dozen of the herd were large, nearly full grown. From this they ranged down to curly little rascals which would make the sourest cynic laugh in spite of himself.

A number of negatives were taken from different points of view, the buffalo being very patient under the process, and not even taking much fright at the flapping of the camera cloth. The animals were usually from twenty to fifty feet away from the instrument. The herder went into the corral and drove them about, so that often they passed so close one could almost have touched them with his hand through the fence.

A drizzling rain had by this time set in, so that it was very difficult to operate the camera. We adjourned until after dinner, and then came out with a larger instrument, which belonged to Mr. Jones. We had again to drive up the buffalo, and by the time this was done the blackening clouds were just on the point of saturation. I had just gotten a group arranged to my liking and was adjusting the focus of the instrument when the heavens opened and a sheet of rain came driving across the sand hills in a way which might have pleased William Black, but which didn't please us at all under the circumstances. The rains in that country are often very heavy. This was one of the worst. The earth narrowed to a circle of steaming mist as the cloud swept over us. It was impossible to tell anything about the focus. I tried to protect the lens as best I might, and as the buffalo stood there staring dumbly at me, I ran through plate after plate in the blinding rain, and only started in when the wet began to swell the slides, and I realized that perhaps I was ruining another man's instrument.

As I turned to go the rain fairly redoubled, and shut in the little corral in a veritable fog. Out of this frame of mist, gray and twisting, showed the silent, patient, motionless front of the group of buffalo, standing face toward me, wondering, dumb. Their brown backs loomed up high over their lowered heads. Their big, melancholy eyes stared out mournfully, asking that old question which looks out always from a buffalo's eyes, of "What next, Mother Nature?" I came away and left them standing there in the rain, patient, motionless. Soon I was whirling away east again, back to work.

The buffalo have been with the herd of cattle since their captivity, and Mr. Jones has looked forward to this spring with great interest as a time which would determine some of his notions as to cross breeding. At the time of my trip nothing could yet be known, though it was expected cross-bred calves would be dropped both by domestic and buffalo cows. I shall be glad to report upon this phase of the interesting question of buffalo raising as soon as I can hear definitely. Mr. Reeves, who was well posted upon the history of the herd, was of the opinion that Mr. Jones made a mistake in allowing to run with the herd a black Galloway bull, whose known fighting propensities may have driven off the male buffalo, which were younger and not so strog.

When Mr. Jones started down on the hunt he took with him a number of carrier pigeons, which were subsequently used in sending up reports to Garden City, a distance of two or three hundred miles. By the last report, sent from Mount Blanco, Texas, I learn that the party have gotten among the buffalo, and have caught several calves. From the camp on the Canadian, exploring parties were sent out in all directions. I have no definite knowledge, but presume that Lee Howard's old camp is the rendezvous, and that Lee himself is helping Mr. Jones on the hunt. Last year he did so, and in pay for this Mr. Jones gave him the game Kentucky running mare Jennie, who did such noble work on the hunt which I accompanied. The buffalo are reported now to be broken up into small bunches. Mr. Jones had given up the idea of roping and hobbling the full grown buffalo, as after being chased they show themselves ferocious and unmanageable. An adult buffalo is nearly as strong as a steam engine. On