CURRITUCK'S GAME CLUBS.

HERE CANVASBACKS, WILD GEESE, AND SWANS MAY BE SHOT.

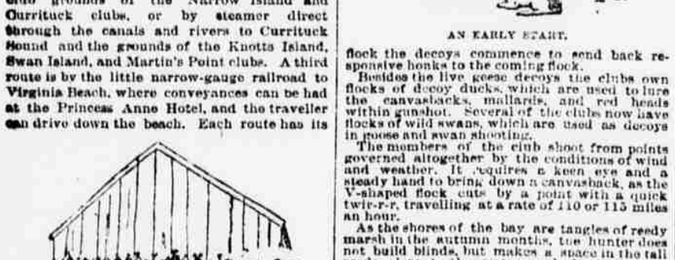
Back Bay Frozen Over This Winter—Shooting in Blinds Made of Snow or Ice—Geese Trained to Decoy Their Wild Brothers.

In the extreme southeastern part of Virginia and in the northeastern part of North Carolina there is a narrow strip of land varying in width from one to three miles and sixty miles in length, bounded on the east by the Atlantic Ocean and on the west by Back Bay and Currituck Sound. South of what was once Currituck Inlet, but is now closed by the tons of sand washed up by the waves, the bay widens, and the bar and mainland are indented by coves and canals. For ages the waves of the Atlantic have pounded and hammered the beach until it has become as firm and hard as a city pavement, making an excellent wagon road, unequalled by any city boulevard from Virginia Beach to the lighthouse off Roanoke Island.

On the mainland and on the thousands of islets which dot the bay grows the succulent wild celery and duck grass, whose roots supply the winter food of the canvasback, the redhead, and the ruddy duck. For years Havre de Grace in Maryland was the headquarters of the sportsmen, but within the last five years the shooting grounds to the south have been growing in favor rapidly. There is not an acre of ground on the strip which does not lie within the domain of some sportsmen's club, whose membership consists largely of New York and Northern men.

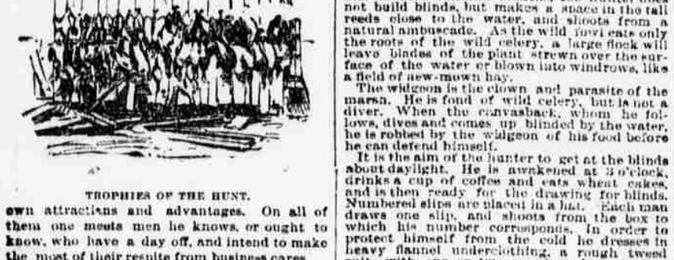
BACK BAY, VIRGINIA.

On this strip of land are situated the club houses, shooting boxes, and covers of the Ragged Island, Brock Haven, Ideal, Martin's Point, Swan Island, Currituck, and the famous Princess Anne clubs. The club grounds are from 3,000 to 4,000 acres in extent. From October until January the club houses are filled with members and visitors, who are there for a week's shooting. To reach the grounds the sportsman must travel first to Norfolk and thence by steamer to Roanoke Island and the club grounds of the Narrow Island and Currituck clubs, or by steamer direct through the canals and rivers to Currituck Sound and the grounds of the Knotts Island, Swan Island, and Martin's Point clubs. A third route is by the little narrow-gauge railroad to Virginia Beach, where conveyances can be had at the Princess Anne Hotel, and the traveller can drive down the beach. Each route has its own attractions and advantages. On all of them one meets men he knows, or ought to know, who have a day off, and intend to make the most of their respite from business cares.



TROPHIES OF THE HUNT.

At the club houses newcomers are heartily welcomed by healthy, bronzed hunters, who have already been in a battery for a week or more and are regretting the approach of the day on which they must travel toward the North. The club houses are usually two-story wooden structures, with one great sitting and smoking room with a roomy open fireplace, before which the members cluster at night and spin yarns. When the old hunter tells the young Nimrod the Munchausen story of impaling a flock of geese on the ramrod of his gun, and applies it to himself, even the most callous listener glances at the legend above the fireplace in the Princess Anne Club, which reads, "When he hits, 'tis history; when he misses, 'tis mystery."



PRINCESS ANNE CLUB.

The club houses are furnished without regard to style, but with the aim to make the members comfortable. There are plenty of blankets, plenty of soft mattresses, plenty of guns, more than enough of dogs, and a full larder. Each house has a caretaker with two or three assistants, who do all the heavier work about the house and grounds in the preparation for a day's shooting.

TRAVELLING ON THE ICE.

The Princess Anne Club house stands a half mile back from the beach on a slight rise of ground, comprising half a dozen acres. North and south for miles are white sand hills. In this oasis the club steward has planted a peach and pear orchard. Flowers and vegetables grow in abundance in his gardens. He builds his fences and smaller buildings with the wreckage and driftwood which strews the beach. His supply of firewood is drawn from the same source, the flames which roar and flash up the great wide chimney are fed with wood which was once a part of some gallant ship. From Cape Henry to Cape Hatteras one may drive without being out of sight of a wreck.

The only residents of the beach in the winter months are the life-saving crews, and in the summer a colony of fishermen take possession of the shacks which interrupt the monotony of the sand hills. These fishermen supply the New York markets with early lobsters. During the winter they found employment formerly on the oyster beds of Back Bay, but, since the inlet closed, the waters of the bay have become slightly brackish and the oysters have decreased in quality and value. Along the canals and the bay there are thousands of wild geese and brant, which feed on the grass and celery. The geese are kept in coops. Sometimes they are taken to the batteries in coops or in bags with holes cut in them through which their heads protrude. Each hunter uses from twenty-five to thirty decoys. So carefully trained are the live decoys that when the hunter appears in a "goose yard" and selects his birds they scamper into his coops or bags and become silent, although a moment before the cackling was so great as to be almost deafening. When the covers are reached the attendant drives a stake in the sand where the water is a few inches deep, so the bird may stand on bottom. The decoy is fastened to the stake by a strap tied about the leg. In order to make his fastenings more secure, sometimes a piece of sod, a foot square, cut in a marsh, is sunk six inches beneath the surface of the water and held down by driving the stake through it. This gives the appearance of resting and floating on the surface.

A BLIND IN THE ICE.

When shooting in the ice this winter the boat was sunk level with the floe. Decoys were secured by cutting holes in the ice and fastening them by a stake to the bottom. No artificial decoys can equal the trained live geese. The wonderful keenness of a wild goose's hearing is shown by the fact that long before the trained hunter is aware of the approach of a flock the decoys commence to send back responsive honks to the coming flock.

AN EARLY START.

Besides the live geese decoys the clubs own flocks of decoy ducks, which are used to lure the canvasbacks, mallards, and red heads within gunshot. Several of the clubs now have flocks of wild swans, which are used as decoys in goose and swan shooting.

The members of the club shoot from points governed altogether by the conditions of wind and weather. It requires a keen eye and a steady hand to bring down a canvasback, as the V-shaped flock cuts by a point with a quick twir-r-r, travelling at a rate of 110 or 115 miles an hour.

As the shores of the bay are tangles of reedy marsh in the autumn months, the hunter does not build blinds, but makes a space in the tall reeds close to the water, and shoots from a natural ambuscade. As the wild fowl eats only the roots of the wild celery, a large flock will leave blades of the plant strewn over the surface of the water or blown into windrows, like a field of new-mown hay.

The widgeon is the clown and parasite of the marsh. He is fond of wild celery, but is not a diver. When the canvasback, whom he follows, dives and comes up blinded by the water, he is robbed by the widgeon of his food before he can defend himself.

It is the aim of the hunter to get at the blinds about daylight. He is awakened at 3 o'clock, drinks a cup of coffee and eats wheat cakes, and is then ready for the drawing for blinds. Numbered slips are placed in a hat. Each man draws one slip, and the guns from the box to which his number corresponds. In order to protect himself from the cold he dresses in heavy flannel underclothing, a rough tweed suit, with one or two sweaters, long wading boots, and a knit hood or Tam o' Shanter cap for the head. Long, stout woollen stockings are best. Scotch yarn gloves are worn.

HOMEWARD BOUND.

No two men agree on the question of guns. Some prefer to carry only one gun; others want three. Some like the long-barrelled gun the last winter; others show no more barrel than a man will shoot only with a gun with a pistol grip, while another will have none other than a repeater. The new style hammerless gun is not necessary. A gun which cost, four years ago, $100, but can be purchased now for $40, because it is double barrelled and fires with a hammer, is equal to any for duck shooting. It is generally agreed that the best gun is one weighing from 8 to 10 pounds with an 8 to 10 gauge. The charge is heavy. A light charge barely penetrates the heavy plumage, and a duck will carry it away with him. An ounce of No. 4 shot driven home by four drachms of powder will stop the proud career of the bravest canvasback. In goose shooting a 10 to 12 gauge gun is used with a heavier charge.

A flock of geese consists of a gander, his mates, and brood. The gander and mate alight some distance from the decoy, whose duty it is to coax the flock within range. This feat is accomplished only by an immense amount of cackling, or goose talk, as it is called by the natives. The young ones are easily deceived, but the old gander warns them to be cautious by cacklings which are high and low in tone, and slow and rapid. With his neck he gesticulates, advising, threatening, and warning. He seeks to head off his brood, the members of which try to approach the live decoys, who coax and harangue them. It is only a question of patience until all approach and the hunter has a shot. From twenty-five to thirty geese is a day's sport.

Wholesale dealers of Norfolk send representatives to the clubs to buy the week's shooting.

LUNCHING IN THE MARSH.

Wild celery and duck grass grow in abundance, furnishing food for countless numbers of ducks, geese, and swans.

The climate is usually mild, with only a few days of really cold weather. Ice forms at night, but disappears in a few hours. This winter is an exception. During the recent cold snap the bay froze from shore to shore. It was possible to walk for miles on the ice. Boats were placed on runners and dragged to the air holes, where the wild fowl gathered. The thermometer fell as low as 15°. Batteries were formed by piling snow and ice about the boats. When the decoys were arranged at the proper distance, and the hunter had himself down in his boat, he could easily imagine he was shooting in Canada or Montana, and not on the shore of Virginia.

In goose shooting on the beach side of the bay, blinds are constructed and live geese decoys are used. Smart and suspicious as a wild goose is, his educated brother used as a decoy is even more wily. Some of the old ganders are as keen as a deerhound or bird dog. They seem to enjoy the luring of their brothers into a trap, and honk them down for the hunter with pleasure.

Just Like Him.

"Mom," said a boy to his mother, "where's the blacking?"

"I don't know," said the boy's mother, "unless Phillip's had it."

Philip was the boy's older brother. The blacking outfit was kept in a blacking stand in Philip's room; he had found it pretty cold in his room that morning and so he had taken the things out into the dining room and blacked his shoes there, and when he got through he had left the things there.

"Just like him," said Phillip's brother, and then, not finding the sitting room quite warm enough to suit him he gathered the things and went and blacked his shoes in the kitchen, and when he got through he left the things there.

An Affectionate Mother.

"The most affectionate mother I ever knew," said Col. Goslington, "and I believe all mothers are affectionate, is the wife of my young nephew, Claude Goslington. When their young child was sick its mother took its medicine for it. It was some sort of bitter medicine, and when it came time to take it the child said: 'I don't like that; 's bad.' 'Well, 'ou needn't take it, Reggie; mamma will take it for 'oo.' And she did, and thereafter at the appointed times she took Reggie's medicine for him regularly. Reggie got well, notwithstanding that he didn't get his medicine; but what child could stay long sick with such a mother as that?"

THE FIERCE WOLVERINE.

AN INCARNATE APPETITE, WITH A GENIUS FOR MISCHIEF.

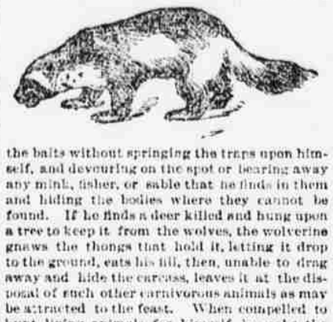
Hated by Hunters and Trappers—Strong, Greedy, and Crafty—Battle of a Wolverine and a Lynx Over a Deer's Carcass.

Who ever saw a wolverine alive in the woods? is a question as seldom answered satisfactorily in hunters' camps as the much-mooted problem, What becomes of the cast-off horns of the moose and deer? The mischief the wolverine does, and the execration in which he is held by hunters and trappers, whose traps, camps, and caches he robs and tears to pieces, are far out of proportion to the frequency with which he is seen at large. By all accounts the wolverine, carcajou, or glutton, as he is variously called, is taken all round, the craftiest, fiercest, strongest, greediest, most suspicious, and most mischievous beast of his inches and weight that the American wilderness contains.

"His father is the devil and his mother is a bear," said the French voyageurs, who held him in superstitious dread.

In appearance the wolverine is a stockily built animal from two to three feet in length, exclusive of a tail about eight inches long, and in general appearance he much resembles the bear. He is low in stature, with an arched back and broad head. His hair is long, with thick fur beneath, and in color he is brownish black, with a black muzzle, and jet black feet tipped with strong curving claws as white as ivory. In the way of animal food he is omnivorous, devouring anything he can get hold of, from birds' eggs up to the flesh of a deer or elk already killed or wounded into helplessness. Unlike most of the weasel family, of which he is a member, he is slow of movement and comparatively defective of vision. Possessing great strength, he is a formidable fighter, and rather than undertake to hunt prey for himself, he prefers by main force or by his superior cunning to deprive other animals of the booty they have secured.

His halcyon days are when he can find a line of fur hunters' traps, which often extend over a distance of thirty or forty miles. These he visits with unfailing regularity some time in advance of the lawful owners' rounds, stealing the baits without springing the traps upon himself, and devouring on the spot or bearing away any mink, fisher, or sable that he finds in them and hiding the bodies where they cannot be found. If he finds a deer killed and hung upon a tree to keep it from the wolves, the wolverine gnaws the thongs that hold it, letting it drop to the ground, eats his fill, then, unable to drag away and hide the carcass, leaves it at the disposal of such other carnivorous animals as may be attracted to the feast. When compelled to hunt living animals for himself he seeks the cubs in the dens of other animals, and the female fox, whom he digs from her burrow in the breeding season and devours, is a particular object of his attention.



In the vast northwestern wilderness of Alaska and British America, amid the dense growth of high evergreen trees that shut the winter sky from the frozen earth, the wolverine is sometimes found prowling for prey. Sombre, saturnine, and suspicious, he makes his stealthy way through the forest shadows, his little, sharp, short-sighted eyes keenly on the lookout, his black muzzle pointing and turning to left and right, snuffing for food as he plants his large, black, semi-plantigrade paws in the snow, leaving tracks that might readily be mistaken for those of a young bear. No dainty feeder he, but an incarnate hunger, out for all he can get, and prepared to take in detail all things that he can find to kill, devour, or carry off. If anything appears that excites his suspicion or which for any reason he wishes to examine carefully from a distance, he exercises the curious habit mentioned by Frederick Schwatka and other northern explorers, and sitting upright on his hindquarters, shades his eyes with one pawdurin g his deliberate inspection. The forest creatures of his kin, the ermine, sable, and fisher, give him a wide berth. The fox found by him at dinner beats a hasty retreat, bearing with him the remains of his meal, bird or rabbit, as he unravels distance from his pursuer. The lynx is a visitor in long, graceful leaps. If the carcass at which he has been gnawing is too heavy to carry away, the fox reluctantly gives place to the wolverine and lurks about waiting for him to satisfy his long-winded appetite and depart. If impelled by the cravings of hunger the venturesome fox approach the covered repast, a menacing growl from the heavy animal fiercely tearing away at it and a glance from his fiery eyes sends him skipping away to a safe distance.

With the wolf, fearless and the wildest that the wolverine must wage battle for his booty, he does not hesitate to attack any one of these animals, fighting fiercely and silently, or with a low, hissing growl, and settling down to work with a deadly persistency that usually proves too much for the fellow at the other end of his bucket if they can end the contest by a retreat. With the wolf, a strong and wary fighter himself, superiority in weight counts, and the issue of a fight is apt to depend on the size and courage of the particular wolf encountered.

"The last time I saw a wolverine was two autumns ago," said Tarb Tanderwood, a prospector, hunter, and trapper. "I was out one morning after a light snowfall looking to my traps, when I saw the tracks of a wounded deer, and presently they were joined by those of a lynx which had found and was following the trail. I kept on the heels of the two to see what there was in it for me. I hadn't gone more than a mile before I heard the sounds of crashing and plunging in the undergrowth and saw snow flying ahead where the animals were struggling. The lynx had come up with the deer and fastened in it, but the wounded deer had fastened to its throat. The struggle was a short one, for when I got to where I could get a full view the deer was already dead and the lynx was sucking its blood. I was trying to get nearer so as to get a fair shot at the lynx when I saw coming through the woods from another direction a chunky dark animal that I at first took to be a small bear, but I quickly saw it was a wolverine. He wasn't looking at anything but the deer, so I let him come on and waited to see what would happen.

"The lynx was so busy at the throat of the deer that he didn't see the wolverine until it had got almost upon him. Then he sprang into the air with a screech and whirled half round so as to face the newcomer, and stood between him and the deer, snarling and spitting. At that the wolverine's long hair rose, making him look twice as big as before, and I swan if I was I could see his white teeth show. He didn't waste any time in demonstrations, but pushed straight for the lynx, who was upon the wolverine's back in an instant, and they had it hot and heavy for some minutes. The lynx was on top and all around and over the wolverine as they tumbled about, clawing, biting, and snarling, until presently they got locked in together, and after a minute of downright close fighting the lynx broke away and leaped back about three feet, where he made a stand, still guarding the deer and looking vicious.

"Just as before the wolverine came straight at him. There was another round of hard fighting over and about the deer, ending in a clinch, and again the lynx, after a minute or two of this close work, tried to break away, but this time it was not so easy for him to get clear. When at last he tore loose he sprang to a tree and ran up its trunk to the forks of its lower branches, where he stood looking angrily at the wolverine. The wolverine, after watching his enemy in his retreat and seeing that the lynx did not seem inclined to renew the fight, walked round the deer, keeping his face all the time toward the lynx, and fell to tearing at the haunch of the carcass. From time to time he lifted his head from the deer to growl and show his teeth at the lynx. The lynx was in a very bad temper that grew worse and worse at the sight of the enjoyment of the wolverine over his stolen meal. I made up my mind that the fight was not over yet.

"Soon the lynx ran down from the tree and up another, and crept out upon a big limb, so that he was almost directly over the wolverine. The shaggy glutton kept on eating, and I was beginning to think that the lynx would sit there and scold until the wolverine had satisfied his appetite. But at last hunger or anger got the better of the lynx's prudence, and just as the wolverine had torn off a particularly long strip of meat and was starting in to munch it he came down like a gray meteor upon the wolverine with such force and suddenness that he knocked him from his feet and sprawling, and, with a movement like a human lightning and the wolverine on his back in the snow.

"It looked all the lynx's way this time, and he worked to improve his advantage. He had the wolverine by the throat, his fore claws set in on each side of its neck and his hind claws tearing at his belly, but the fight went right along, and soon I could see that the wolverine, grappling with its strong claws, was holding his enemy so close to him that the terrible hind claws could no longer tear, and that his dark hairy and shoulder fur were shaddy enough to put into view as his black muzzle climbed round the lynx's throat to get the hold it wanted. By main strength it turned the lynx until the gray and the black lay in a heap on the snow. With the same deliberate, deadly strength, all the time holding the lynx by the throat with a grip that never relaxed, the wolverine came to his feet. With a desperate effort the lynx gained his feet, and the two animals faced each other, neck to neck, the wolverine's hold still unbroken. As the lynx with a last effort sprang back, dragging the wolverine with him, the shoulder and antlers of the deer concealed the end of the struggle from my view.

"The next thing I saw of the two was the wolverine dragging the body of the lynx, limp and lifeless, away from the deer. In an open space about ten feet distant he let go of his conquered enemy, and stood watching it a minute or two, then set his teeth into its neck and shook it. Apparently satisfied that it was surely dead, he dragged the body further away into a clump of bushes, and then went back to the deer and began again on the haunch, as if there had been no interruption to his meal. With almost any other animal, after he had made so good a fight, I should have spared him, but I felt sure this was the wolverine that for a fortnight past had been robbing my traps, and that he deserved no mercy at my hands. So I fired and bowled him over dead with a shot behind the shoulder. He had been torn by the lynx in numerous places but his long hair and thick fur had saved him from any severe wounds, and if left alone by me he would probably have looked upon his fight as little more than a grace before meat."

HIGHEST AIR LEVEL EVER REACHED.

A Scientific Balloon Voyage Into the Extreme Upper Regions—A Height of 31,490 Feet Attained—Interesting Records.

From the London Daily News.

The last and most important aeronautic voyage made by Dr. A. Berson in the balloon Phoenix on the 4th December last year is described by that gentleman in the "Journal of Aeronautics and Atmospheric Physics."

On the evening of the 3d December there was a stormy east wind, which made the possibility of the journey doubtful, but it fell during the night, and at 5 o'clock next morning Lieuts. Gross and Marker proceeded, by the light of an electric lamp, to fill the Phoenix with 2,000 cubic metres of hydrogen gas. Dr. Berson somewhat altered his preparations to suit the special circumstances and aims of his aerial trip. He left the heavy anchor behind, and stretched out the long Schleppgurt grappling strap on the ground in the direction of wind before commencing his tour. The various instruments and baskets of utensils were hung up in such a manner as to facilitate the government of the balloon and the conscientious recording of scientific observations, even during the exhaustion produced in the human body when at a high altitude. At 10:28 the command to "let loose" was given. In a quarter of an hour the balloon had already arrived at a height of 2,000 metres. Brauefurt, the place where it was filled, was sailed over in a northwesterly direction. The whole of the beautiful Harz Mountains lay on the horizon below the voyager. The air in general was foggy, and thick decks of small clouds hid the earth now and then. At first the temperature rose. At a height of 1,500 metres it was more than 5° Centigrade above zero. Dr. Berson made double notes of the readings of the instruments, cast a glance at the balloon and its ropes, looked down at the earth and threw out two sacks of ballast. An hour after the start he had risen higher than 5,000 metres, and the temperature sank to 18° below zero, and the air became very dry. The sun rays were weak. When 4,200 metres height was reached the aeronaut felt the first slight increase of his heart's action after lifting the heavy sand bags. At 11:49 A. M. he touched the height of 6,000 metres, and the temperature sank to 25.5° below zero. He felt a little palpitation of the heart and slight general discomfort, but was otherwise well. At 12 o'clock, one hour and a half after the start, he began, at a height of 6,750 metres and a temperature of 30° below zero, to breathe artificial oxygen from the bags he had with him, and with excellent effect. At 12:25 the bold aeronaut had outpassed 8,000 metres, at a temperature of 35° below zero. He was now higher than he had been in the preceding May, when his highest point had been 7,900 metres, and this time he felt much better than then. He now never dared to cease breathing the bags of oxygen except for a few seconds at a time, and during those brief pauses he felt dizzy and dangerously weak. But while continuing the artificial breathing he constantly, and with relative ease, fulfilled all necessary work. Only once did his eyes close in spite of himself, but the next moment he roused himself, re-colding at his own negligence; his voice in the rarefied air sounded strangely muffled. When at the height of 7,700 metres he had already risen higher than Glaisher, when the latter aeronaut took his last note of the temperature. At the height of 8,200 metres Dr. Berson thought of the two French scientists who had died at that height. At about 8,300 metres Berson reached the greatest height arrived at by Glaisher on Sept. 5, 1862, when the latter fainted away, only to awake after his companions had stopped the balloon from rising any higher. But Dr. Berson, after momentary examination of his own strength and his provision of ballast, ventured to rise higher. The temperature had already sunk to 22° below zero (Centigrade). At the height of 9,000 metres his balloon passed through and above the thin stratum of high cirrus clouds which he had noticed high in the sky at his start. The veil-like stratum consisted not of ice crystals, but of well-formed small snow flakes. At 12:45 A. M., two and a half hours after the start, the barometer indicated only 231 millimetres, which corresponds with a sea height of 9,600 metres, and a true height of 9,150 metres. The thermometer stood at 47.9° below zero. Even the quicksilver in the barometer had cooled to 29°, and the ray thermometer, in full sunshine, indicated only 23.8°. The ball now soon stopped. There were only six large and one small sacks of ballast left, which were necessary for descending and landing. The balloon stood above the thin snow clouds in a clear sky, which stretched in unity like a floor. Dr. Berson felt so well that he could certainly have risen another 1,000 metres. But he could not have done so without risking the whole of his successful journey. At this immense height, 9,150 metres, he felt much better than a short time before. He found it necessary to pull the valve now and then, and the Phoenix gradually descended till at the height of 7,500 metres it stopped, and again began to rise. Another pull at the valve caused it to redescend. At the height of 8,300 metres it sailed over a river with mighty curves; it was the Elbe, at the part, as was afterward found, near Dömitz.

But now the terrible cold began to have effect. Dr. Berson, clothed as he was in thick furs, began to shake in every limb so violently that sometimes he was obliged to hold on to the ring of the boat. Meanwhile the balloon sank the balloon sank and sank, and during the whole descent only one sack of ballast was thrown out at the height of 3,500 metres to moderate the rapidity. A cauwhile a close stratum of heavy clouds hid hidden the earth, and prevented any ascertaining of the balloon's position. The slow descent, however, allowed of another set of observations being taken, and now the highest temperature, about 6° above zero, was found at the height of 1,950 metres. Thence down to the earth the descent was a rapid one. Hour after Herr Berson had been at the greatest height of his trip two of his fingers were frozen, but he brought them to life again by energetic friction. In the enormous cold the barograph had stopped for a while. In the afternoon, at 3 o'clock, the northern sky showed unmistakable signs of "water," and Dr. Berson decided that he must descend more rapidly. After a few more gentle ups and downs, he could distinguish the noise and steam whistles of some large town. When 250 metres high there appeared at last below him the gray earth, covered by a cloudy sky. Now, with the drag rope, the balloon passed over a lake, and present by land, with the help of some countrymen who came up, at 3:45 P. M., on a stubble field at Sehnde would, in the west of Kiel, on the very evening when the German Emperor, the founder of the Phoenix, happened to be staying in that city.

The ascent of the balloon had taken two hours and twenty minutes; the descent full three hours. The most important results were as follows: 1. The arrival at a greater height than was ever reached before; 2. The ascertaining of an unusually low temperature at that height, and a much greater lowering of the temperature between 1,500 metres and 9,200 metres than was ever before accepted for the winter; 3. A change of temperature mornings and evenings till the height of 1,500 metres; 4. Relatively very weak insulation even at the greatest height; 5. Humidity in the highest regions, and fine mist in the sky to the enormous height of more than 10,000 metres; 6. Snow-flake structure of the cirrus clouds at 9,000 metres; 7. Tremendous increase of the swiftness of the wind upward for, with almost perfect calm on the surface of the earth, more than 310 kilometres were made in 5 hours 17 minutes, which gives a medium swiftness of 16½ metres per second.

OVERBOARD INTO A WINTRY SEA.

A Hardy Manxman Who Was Not Much Alarmed When His Ship Left Him Behind.

When the conversation fell upon the Eibe and the Gascogne and the narrow chance of escaping alive from a wreck in the wintry sea the man from a far northern British province was moved to tell the story of his piano tuner. The piano tuner earns his bread by travelling from point to point in the far northern province and tuning the few pianos owned in those parts. Something in his hearty manner and strong figure led one of his patrons to ask a few questions concerning his life, and the piano tuner answered in effect thus:

"I'm a Manxman, and I have inherited a rugged constitution. I seldom wear gloves, even in zero winters, and much of the time I go without an overcoat. For many years I followed the sea, and I had one adventure that few would have lived to tell of. It was a midnight of December when I was ordered aloft to stow the main royal, and before I knew what I was about I fell from the yardarm into the sea.

"No one on deck had noticed my fall, and apparently no one had heard my cry, for the ship kept right on. There I was, with heavy boots and a heavy coat, alone amid the waves of the Atlantic. You may not believe me, but I did not feel greatly alarmed. I managed to get out of my boots and coat, and then I began to swim to keep myself afloat. Somehow I felt that I should be saved. We had passed a vessel about sunset, and I thought she'd come along and pick me up. I had been a good swimmer all my life, and I kept afloat till daybreak, when that other vessel did come along and fish me out, four hours after I fell in. We got into New York three days after my ship arrived, and when I came ashore, as the lay at her wharf, my mates took me for a ghost."

HUNTING THE BUFFALO.

REMINISCENCES OF EARLY DAYS ON THE PLAINS OF KANSAS.

A Hunter's Peril in the Midst of an Enormous Herd—Amazing Number of Buffaloes Before Their Slaughter Began.

Thirty years ago, being about to engage in the ranching business, I sought a location on the plains of Kansas. With many wagons loaded with lumber, household goods, provisions, and camp supplies of every nature and a considerable retinue, I left the terminus of the only railway then in operation west of the Missouri River and plunged into the unsettled solitudes. The road taken was that travelled by many of the wagon trains supplying Uncle Sam's frontier posts, and while the earlier part of the way was through sparse settlements it was but a day or two before the occasional settler's cabin was a rare sight. These hardy pioneers had assumed the risk of Indian raids and the lifting of their horses by the industrious chevaliers who precede settled industries upon the frontier, in order to reap the harvest reasonably sure from the sale of grain, hay, and small truck to the wagon trains employed in the Government service. Except for such infrequent settlements, the broad valley of the great river up which the military trail wound its way was wholly unoccupied after leaving St. Mary's Mission, and, in the early days of May, presented all the characteristic beauties of the undisturbed prairie, fringed with belts of timber skirting the deeply sunken river and its tributaries. Now and then a herd of antelope would appear and delude the verdant members of the party into a fruitless chase.

In the party was one who had spent many years on the frontier and upon the plains, mostly engaged in constructing buildings at the military posts. This life had given Dick a valuable, if not a singular, experience, and he was well up in prairie craft and all the signs and indications of recent or remote presence of either Indians or game. He was especially expert with a rifle and an adept in buffalo hunting. This greatly enhanced his value in our eyes. During the latter part of the journey we had seen frequent signs of the recent presence of the buffalo, but were not favored with a sight of the great game until several days after reaching the location selected for our ranching operations. Possibly a week later the word was given, early one morning, that dark, moving masses were in sight at the northwest, and these the field glass enabled us to determine were the long-wished-for buffalo, even before Dick came forward with a confirmation of the supposition that such was the fact.

Mounting our horses and equipped with rifles, Dick, myself, and a third man were soon among the ravines and brakes which afford the cover so eagerly sought by the buffalo hunter unless he is prepared to course them over hill, ravine, and plain, a somewhat hazardous undertaking for the amateur, as I afterward found to my discomfort. Dick and I dismounted, and, leaving our horses in a ravine in charge of the third man and keeping well to the leeward of the keen-scented game, we crawled up a small ravine that afforded the desired cover while heading on the open plain, and fairly in the midst of the quarry. While the buffalo were unable to see us, they were soon apprised of our presence by their keen scent, although we had taken the precaution to select a ravine down which the wind blew from instead toward the herd. But we were now so situated that Dick at least was prepared to give a good account of himself, especially if we could get the buffalo to stand. He knew well as the elk is disposed to stand and be shot down while he is curiously seeking to know what is the matter, so long as the hunter manages to keep out of sight. If one of the leaders, especially an aged cow, be shot at first and killed, the others will crowd around to ascertain the matter with her, and the plain may be strewn with their carcasses in great numbers.

In this, my first attempt to hunt the buffalo, we failed to get a stand, as about the time Dick brought down a fine cow and I had wounded a stunning bull the animals were down the ravine caught sight of us and the signal was given, and the whole herd was instantly in headlong retreat to the very broken lands at the northwest. Sending the groom to the ranch for a wagon and assistance in dressing Dick's cow, we were soon spurring over the country in an effort to get up with the herd and try our marksmanship on horseback, in which endeavor we each bagged a beast; but my horse being as little accustomed to such sport as the rider, protested so effectually that I soon found myself on the ground at his side.

I had, however, managed to retain my hold upon the bridle and to light upon my feet in the midst of the great throng into which my eager pursuit of the selected animal had carried me. This vast throng, parting a few rods from where stood horse and hunter, rushed past on either side, and so near that at first I wished I was in any other part of the world. No more inspiriting sight, even if a trifle uncomfortable, can be imagined than twenty, thirty, perhaps a hundred thousand, great beasts thundering past in their reckless flight, causing the very earth to tremble and the air to vibrate as though with the impact from some mighty cataract. Thrice afterward was it my fortune to stand thus in the centre of such a deadly rushing multitude of panic-stricken animals, and once I saw thousands go to their death down the sheer precipice over which the pushing and massive rear forced those in front of them. In this, my first experience with the buffalo, I neither mounted my restive horse nor thought of aught else than the amazing grandeur of the scene after I became satisfied that I was in no probable danger, as the buffaloes kept as far from me as their fellows would let them. For more than a half hour this seemingly endless phalanx rushed past, and the rear was brought up by a straggling retinue of crippled and aged animals. Disabled beasts are the most pugnacious of the herd, and being unable to flee rapidly turn at bay. When they appeared, and the way was open, I was not long in mounting and giving them the freedom of the roads.

The ranch proved to be located in the centre of the buffalo range, and during a large part of successive years we were surrounded by great herds that were little hunted except by the Indians. The buffaloes usually avoid the immediate vicinity of habitations; they do not keep far away at all times, especially when little hunted, and they frequently came so near our place that I have shot them from the door. This, however, was never done after the whites began killing them on their hides. The slaughter for hides began about 1873.

For weeks at a time I have seen the plains black with buffaloes as far as the eye could reach. We never wearied of watching their movements, which, when understood, seemed as symmetrical as the evolutions of an army. In the summer and autumn, or until the grass became scant, the buffaloes congregated in immense herds, often numbering hundreds of thousands. I have ridden for nearly a hundred miles through such a mass, although this was something out of the regular order, when they would simply part for a few hundred yards from the road and resume grazing, or, if extended over from ten to twenty miles, however, were not uncommon. When hunted, but little the diurnal movements of such herds on a given range were most regular until the grass became scanty.

When the evening shades began to fall they would move from the lower or valley lands, nightfall finding them on the higher slopes and swells of the prairie, where every moving object could be better seen by the bulls that ever guarded the herd. While their night camps appeared to be broken up into separate contingents, an alarm sounded at any part of the time would bring every bison within twenty miles instantly to his feet, ready for battle or the headlong rush that would trample an army into the earth if there was not room for the current to part and pass. Jay and pigeon the males were on guard on the borders of the herd, and, to a novice, it would appear that here was a race of only one sex; but in the centre of this dark mass, as far removed from danger as possible, were the mothers and young. Like so much that is animate, the buffalo cow is devoted to her young, and ailing being relentlessly driven forth to fall a prey to the bands of wolves always hanging upon the flanks of the herd.

When undisturbed the herd moved from its bed ground at earliest dawn and grazed toward the water courses. The bulls were always in the van and in the rear and on the flanks ready to battle with the wolves or give warning of man's approach, and possibly the signal for a wild stampede that once begun stopped for nothing. And if the van came to a precipice or bluff unexpectedly and there was no time to turn, the foremost ranks were pushed over the brink by the great mass in the rear until the declivity was bridged by carcasses that afforded a safe road for the remainder of the herd. Equipped with lungs of vast volume, buffaloes sustain headlong flights for hours, such lungs enabling them to scale long and steep ascents with nearly as great speed as they move upon the level plain. The most enduring horse is no match for them in a prolonged race up long inclines or over a broken country. When pressed too closely, they make a point of stamping their feet, and, whirling about, strike pursuing horse and rider to the ground and then attempt to finish them by trampling. Although, when not panic-stricken, fierce and pugnacious in the feral condition, the young are easily domesticated, becoming so tame and familiar as to annoy their owners, by every open door into the habitation to enter the house, where their investigations are not balked by the necessity of mounting stairs.

Even when grass was abundant and calves still needed protection, the great herds, if much hunted, would break up into small bands, as they always did when grass became scarce. The sportsman had the most enjoyment in pursuit of these bands, as they were unusually wary and difficult to approach.

One winter morning, when the first snow covered the ground, I mounted a deer young mare and, with no expectation of seeing buffaloes, rode up the creek to see how the cattle were faring. The rifle I carried had but three cartridges in the chamber, but as fortune would have it, a revolver was in the holster and a handful of ammunition in the pocket. The cattle were found to be in good shape, and I was returning to the ranch when, coming around the point of a bluff into the narrow valley of one of the creek's lesser tributaries, three large buffaloes were seen hastily shoving aside the snow that they might reach the grass. Turning back a few rods, under cover of the bluff, I fastened the mare to a willow, and, taking the rifle and keeping under cover until within fair range of the game, opened fire, killing one and wounding the others, both of whom started up the little valley in the direction of the broken lands of the western hills. Running to the mare, and dropping the empty rifle, I was in almost instant pursuit, and, by avoiding the winding valley, the speedy mare, after a few miles' run, brought me upon the flank of the larger beast. With pistol poised I was about to fire when the enormous fellow, with his shaggy crest lowered, whirled to the left, and so quick and well-timed was the movement that horse and rider went down before the blow. Finding myself prone upon my back and the mad brute, with eyes aflame and blood pouring from his nostrils, rushing at me, or rather actually about to trample me into the ground—his hoof marks in the snow were afterward found to be less than a foot apart, the impression left in the snow by my form—I had presence of mind enough to fire into his throat just as he was about to give me the finishing stroke. When I fired he was so near that the blood from his former wound bespattered my clothing and the pistol almost touched his neck. Under circumstances so favorable for a good shot even indifferent marksmanship sufficed, and when the crack of the pistol was heard my assailant staggered, hung his head, and appeared disconcerted for a moment. I made all haste to regain my feet, get as far from him as possible, and then to remount the mare, which stood at a safe distance an interested spectator. Fortunately, the mare had been raised as a pet and would not desert her rider, whom she was accustomed to follow whenever he dismounted. Once mounted, I circled around the wounded animal at such distance as the mare decided to be entirely safe, no amount of urging or spurring inducing her to go within thirty yards of our big friend, who made several ineffective lunges in our direction. As the game was circled, shot after shot was fired from the revolver, which proved a very poor weapon, its powers of penetration being unequal to the resistance offered by the thick hide and winter coat, and it was a full half hour before the loss of blood brought the buffalo to his knees, and still another quarter before I ventured to approach him on foot and end his sufferings by a shot, at short range, in a vulnerable part.

This proved to be the largest buffalo ever killed in our region, so far as either record or tradition relates, and the Osages, then encamped in the vicinity, pronounced it the largest ever seen, the skin measuring 14 feet and 7 inches from tip to tip, being more than an inch thick over the frontal bone, and weighing over 200 pounds, while the animal was estimated to weigh more than 3,000 pounds.

C. WOOD DAVIS.

WILD BEASTS WITH PREJUDICES.

Wolves, Panthers, and Bears Sensitive About Fur Overcoats.

SCRANTON, Feb. 13.—"A bear or a panther can't stand the sight of a wolfskin or a