

How Canada Acquires Her Buffaloes

THE extraordinary difficulties encountered in rounding up the last great herd of buffaloes is told by C. A. Carter in Munssey's magazine.

By virtue of the shrewd public spirit of the Canadian government, and through the United States government's failure to seize a proffered opportunity, a splendid herd of 730 bison, the last wild survivors of the species, is now the property of the Dominion. The United States government might have kept these magnificent animals on American soil, where sentiment demanded that they should remain. But they are gone now, and the only consolation left to those patriotic citizens who mourn their loss is that the Canadians had to earn their buffalo before they got them.

In order to move the monarchs of the prairie from Montana, where they were bred, to uttermost Alberta, it was necessary to ship them by rail. Before they could be shipped they had to be rounded up, of course, and corralled. Yet "rounding up" and "corral" are not precisely the words to use in this connection, for they are associated with the driving of domestic cattle, whose spirit has been broken by ages of submission to man's dominion. Besides, they fail to convey an conception of the two years of desperate endeavor by the flower of Montana's cowboys, and of the heroic resistance offered by those true Americans, the buffalo. It was more like a war of extermination, in which many a brave son died fighting with his last breath and in which the survivors suffered what to them was worse than death—removal from their native pastures.

To whatever it may be likened, this last great series of buffalo-hunts was an event which has no parallel in history, and which is not likely to be repeated.

I must begin at the beginning of the story. In 1884, Michel Pablo, of Missoula, Montana, and a neighbor, C. A. Allard, bought 13 young buffalo from a Pend d'Oreille Indian, the progeny of four calves which the Indian had captured a few years before. Nine years later, Pablo and Allard added to their growing herd 26 head purchased from Buffalo Jones. Upon Allard's death, soon after, Pablo became sole owner. The buffalo were allowed to run wild in the Bitter Root mountains, on the Flathead Indian reservation in Montana. Pablo's only care was to protect them from hunters and to prevent them from straying. He sold a few head occasionally, but looked to the future for a profit on his investment.

In 1906, it was announced that the Flathead reservation was to be thrown open to settlement. As this meant that he was to be deprived of his range, Pablo realized that he must dispose of his buffalo. He hurried to Washington with a proposal to sell the entire herd to the government. President Roosevelt approved the offer, and Congress decided to make the necessary appropriation, and that was the end of the matter.

Hearing of this turn of affairs, Alexander Ayotte, Canadian commissioner of immigration, suggested to Howard Douglas, commissioner of Dominion parks, that here was a chance to obtain some highly desirable stock for Canada's national parks. The matter was laid before the minister of the interior, Frank Oliver; parliament promptly granted money for the purchase, and Douglas was instructed to take the first train for Montana and buy the buffalo. A contract was made for the entire herd at \$200 a head, and Douglas paid \$10,000 down to bind the bargain. Pablo thought he had 300 of the animals, but as he wasn't sure about it, he would only sign a contract to deliver 250 head or the entire herd, whatever the number might be.

One day early in May, 1907, Commissioner Douglas appeared at Missoula, to claim his herd of buffalo. He was attended by a retinue of enthusiastic Canadian newspaper correspondents and other loyal subjects of King Edward, who had invited themselves up to see the fun. These volunteer spectators imagined that all there was to do was to go and get the buffalo. Literally speaking, this was true, but if they had dreamed how much was involved in the getting, they would have prepared for a longer stay than any of them contemplated.

The first round-up was the easiest of the series of five great hunts which does not imply that it was a simple matter. Pablo, who knew the country and thought he knew the buffalo, managed it, with the aid of 20 cowboys.

It did not take long to disclose the fact that the herd was very much larger than his owner had supposed. By two weeks of hard riding from dawn to dark, Pablo and his cowboys managed to get 200 buffalo into a corral at Ravalli, Montana. The corral was enclosed by a fence nine feet high, made of two-inch planks spiked to posts set eight feet apart. It was a good fence (but the buffalo did not treat it with much respect. One old bull, who chanced to take exception to the conduct of a cowboy on the other side of it, charged through the fence as if it had not been there. Another, to show his contempt for such a flimsy affair, inserted his horns under a plank, and, ripping it off with a single toss of his head, threw it over his back a dozen feet to the rear. Still another made a swipe at a panel of fence, and cut such an extraordinary slash with one horn that Commissioner Douglas noticed it at the first opportunity. It was an inch and three-quarters deep and three feet eight inches long.

Clearly, such animals as these could not be shipped loose in an ordinary stock car; so it was arranged to drop a rope around the neck of each buffalo as it passed up the loading chute, and to lash the animal securely to the car as soon as it could be got inside. Arrangements being completed the loading began. All the Canadians, the entire population of Ravalli and all the railroad men who happened to be in town at the time, gathered to see the performance.

After nearly an hour of hard work by the full force of cowboys, a bull was finally headed up the chute. At the right instant, a man dropped a noose over the animal's neck. At the touch of the rope the bull made a spring which landed him in the car; but, quick as a flash, on finding himself in a trap, he whirled about and came out again. There was the usual stock-yard arrangement of two heavy gates about eight feet long, made of two-inch planks bolted together, which were swung out on either side to make a passage from the corral across the loading platform to the car. As he came out, the bull caught the left-hand gate on his horns, tore it from its hinges and started diagonally across the platform to jump back among his fellows in the corral, instead of going down the chute.

Commissioner Douglas, Commissioner Ayotte and Mr. McMullen, the livestock agent of the Canadian Pacific Railway, had chosen a position on the top of the fence beside that particular gate as a sort of stage-box from which to see everything that happened. They were almost touching the gate when the bull ripped it loose and prepared to spring toward them, with the timbers hanging on his horns. There was no time to climb out of the charging animal's way. They could not do anything but just let themselves drop into the corral, nine feet below.

The three men hit the ground in a heap, right among the buffalo, while the bull, still carrying the gate on his horns, leaped over them. All were stunned momentarily by the fall, and McMullen broke an arm. The men spectators yelled, the women screamed and the uproar so disconcerted the buffalo that none had the presence of mind to seize the opportunity of going their helpless enemies, who were quickly rescued. All three were firmly convinced that the yelling alone saved their lives.

After McMullen had been cared for and the excitement had subsided, the spectators once more took their places and the attempt at loading was renewed. No one wanted a seat on the fence this time, but the car-roof was well filled. Commissioner Ayotte, a dignified Canadian Frenchman, stationed himself on the opposite side of the car from the corral, and peered through the cracks.

Thirty minutes of strenuous endeavor induced another bull to venture into the chute. Like the first, the instant the felt rope touched his neck he sprang forward as if shot out of a gun. The cowboys had learned wisdom now, so a firm had been taken around a post and a dozen men held the loose end determined to keep the bull inside the car if they ever got him there. Before they could take up the slack, however, the bull made a leap at the farther side of the car, went through it as if it were made of paper, and hung there with half his body outside. But for the rope, he would have gone clear through.

When he saw the bull coming straight at him, Mr. Ayotte started to step back, but he was not quick enough to escape altogether. He received enough of the force of the concussion to make him stagger. The bull had struck the car with such terrific violence that he nearly knocked it off the tracks. All the spectators on the roof were thrown down and some fell off the car. One, a half-breed Indian, landed fairly on Ayotte's head as the half-stunned commissioner tottered backward.

The damaged car was removed, another was put in its place, and the task was resumed. The next bull that went up the chute charged through the car, striking against its side

with such violence that he broke his neck and fell dead.

It took an hour and thirty minutes to get the first buffalo—a fine young bull—housed in a car and safely anchored with a rope passed around his neck and secured to uprights on each side. But the other end of the bull was still free, and he proceeded to get it into action without delay. There was a dark brown flash as a heavy heel swung back, and a crash as a plank was ripped off the side of the car. Crack, crack, crack, went those heels, like the reports from a machine gun sending a shower of splinters on each side until nothing was left within reach.

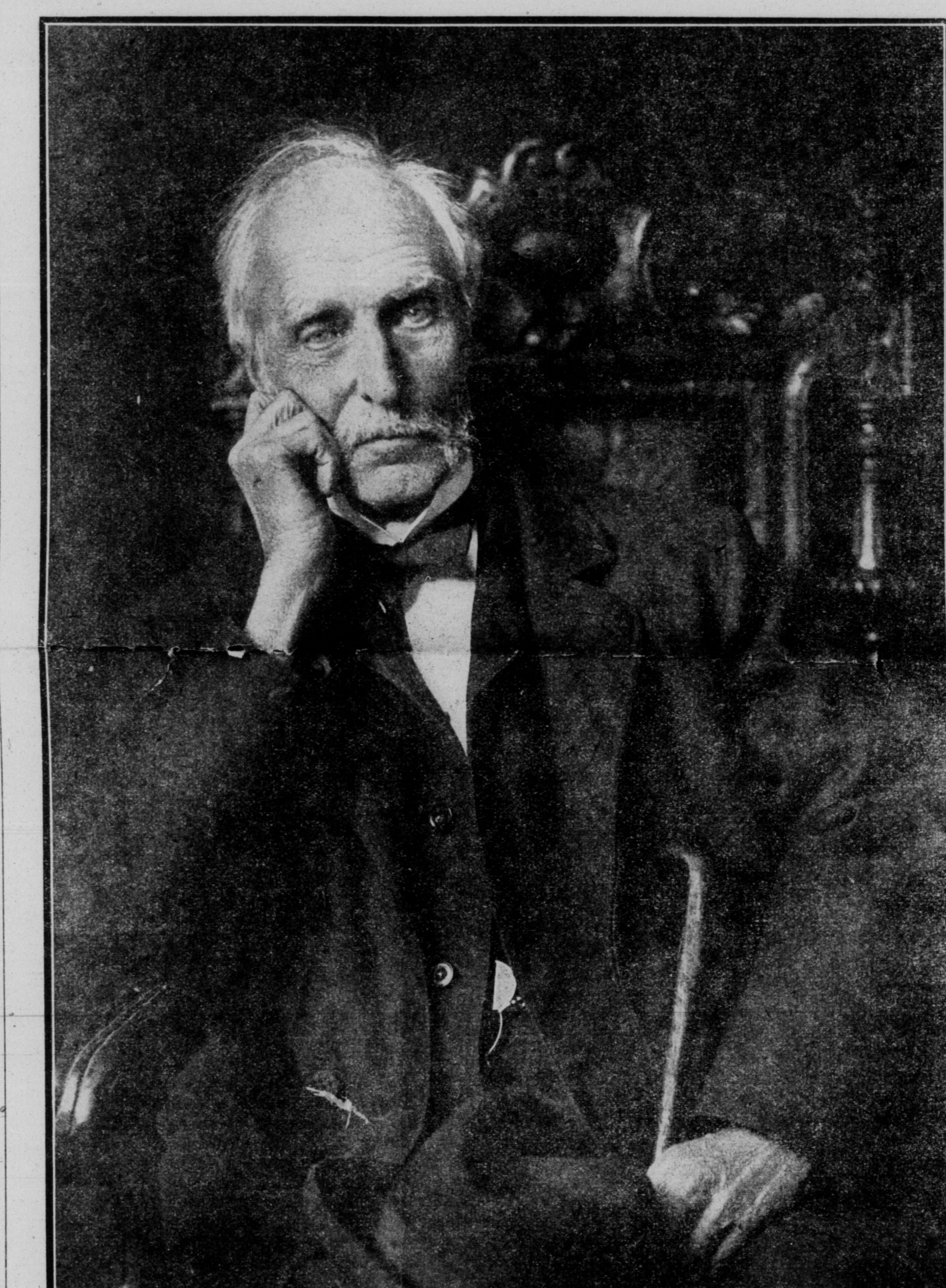
As soon as it could be done, the bull was taken out of the car into which he had been forced with so much labor. Ultimately he was secured in another car, with two-inch planks lashed inside, so that he could not get room to swing his heels. In this way every buffalo had to be secured. Eight big bulls or ten cows with calves were all that could be put into a car, and it required from half an hour to an hour and a half to load each buffalo.

One magnificent bull, the monarch of the herd, 25 years old, was resolved not to go to Canada. He was finally driven into the chute, and a rope was placed around his neck; but he was so powerful that not enough men could get hold of the rope to drag him into the car. Every trick that the ingenuity of the cowboys could suggest was tried. His heels were tickled, and tin cans were jangled behind him, with the idea that he would kick and be thrown off his balance, so that he might be jerked a few inches; but he scorned such perilous devices.

Finally he lay down in the chute and refused to get up. Finding that he meant to resist to the death, the cowboys were tickled, and tin cans were jangled behind him, with the idea that he would kick and be thrown off his balance, so that he might be jerked a few inches; but he scorned such perilous devices.

Altogether, a month of hard work was required to get the first shipment of 199 head started for Canada. A second shipment of 204 head was made in September of the same year, at an expenditure of six weeks' toil and trouble, and enriched by quite as many spectacular incidents as had marked the first round-up.

It was then found that about three hundred buffalo still



MR. GOLDWIN SMITH

remained on the range. Elaborate plans were laid to finish shipping these in the autumn of 1908. Pablo himself selected a horse-shoe bend in the Pend d'Oreille river in which to corral the buffalo, where escape would be impossible. The river at this point was 225 feet wide and 19 feet deep. Encircling the bend on the opposite side of the stream was a perpendicular bank, no where less than 50 feet high, apparently impossible for any four-footed creature to climb.

By building a fence across the neck of the bend, a corral of several acres was made. The fence was to be buffalo-proof. It was built of logs eight inches in diameter at the small end, laid one above another, making a solid wall nine feet high. This wall was strengthened on each side with posts six feet apart, with their ends set four feet in the ground and their tops lashed together with wire.

Opposite the corral was a chute which led down the slope from the buffalo range to the river. Wing fences were built along the sides of the coulee for 12 miles on one side and seven miles on the other. The fences were wide apart at their outer ends, drawing together like a funnel at the river, across which booms of logs were stretched, so that the buffalo could not swim around the corral and escape. All this required an immense amount of labor but Pablo wanted to have a pen that could be counted on to hold his buffalo.

After six weeks of hard work, the entire bunch of more than 300 head was finally encircled and headed toward the corral. Two-thirds of them broke away and escaped before they could be coupled up between the wing fences. The rest headed down the coulee, swam the river and entered the enclosure. At 4 o'clock one afternoon there were 114 buffalo in the corral. To secure them, it was only necessary to swing a boom down the river in deep water, so they could not swim back to the coulee. Pablo and his weary men slept the sleep of triumph that night.

Next morning there was not a buffalo in the corral. All of them had swum the river to the perpendicular clay bank and made a trail diagonally up its face, cutting down the clay with their forefeet a little at a time, taking away a tumble into the water in the process, until at last they had as near a 12 per cent grade to the top as any engineer could have built.

It was too late in the season to make any further attempts at shipping that year, so the discomfited cowboys rode home with nothing but a herd of worn-out, broken-down horses to show for their six weeks' toil. In the following spring, however, Charles Allard, a son of Pablo's old partner, a splendid

horseman and one of the best cowboys in the west, offered to "sweep the range" for a matter of \$2,000. A bargain was made on that basis, and on May 9, he started out with a band of picked men.

For three days the gang rode the range, cautiously driving small bunches of buffalo together, taking special pains not to stampede them. As they were driven in the opposite direction to that which they had taken in previous round-ups the buffalo went readily enough. At the end of three days, a herd of 340 had been assembled within an area of five square miles.

Next day it was planned to turn them and begin the 60-mile drive toward Ravalli. According to a carefully arranged scheme, the cowboys closed in on all sides at a certain hour to start the turning movement toward a big draw leading down the mountainside of the Pend d'Oreille river. It was fearful riding over extremely rough country. Horse after horse dropped exhausted, but the remuda was kept close up, and the men were remounted with but little delay.

One at a time by twos, threes and half-dozen, the buffalo bolted and escaped so that by nightfall only 103 were driven into a corral 20 miles from Ravalli. All the horses were used up, and the men were equally exhausted, so there was no choice but to rest; and during the night, the buffalo, which were not even winded, escaped.

None of driving these "outlaws," as they were called; to the railroad was now abandoned. Instead, it was planned to drive them in small parties into a corral 35 miles from Ravalli and to haul them, one at a time, in cage wagons to the station.

Another start was promptly made, with an outfit of 48 horses and 18 men, the best cowboys in Montana. After two weeks' riding, reinforcements of ten men and 50 horses were procured. Every day, Sundays included, the heart-breaking task proceeded, the men often starting out at 4 o'clock in the morning and not getting back to camp until night. Every day men were thrown, bruised and battered. Pablo's favorite horse broke a leg; another wrenched its back so that it had to be killed, and still others were done for in various ways. For continuous, grilling work, it was a round-up without a parallel in the history of the range. Yet many a day the gang returned without a hoof. The most successful day's work brought in 20 head.

New Map of the World

ON a proposition made several years ago by Albrecht Penck, professor of geography in the University of Berlin, and adopted by the Geneva conference two years ago, a new map of the world is to be made. This proposition was more recently discussed at an international conference held in London, at which all the great European nations, the United States, Canada, Egypt, India, and Japan were represented, and the plans were brought to a point where it is only necessary to take practical steps to put them into effect. Great Britain has undertaken to construct a sample sheet on the plans adopted as a specimen and working model.

This new map of the world will be what is known as a hypsometric map, and the contour lines will be drawn in brown at intervals of 100 metres or in decimal multiples or submultiples of that measure. The interval of 100 metres will be used up to a certain altitude, beyond which the interval for a further altitude will be 200 metres, the interval increasing at certain stages up to 7,000 metres and above. The spaces between will be tinted in green for the lower altitudes, and then in different shades of brown, increasing in darkness of color to a certain altitude, where the brown will merge into other tints. Altitudes above 7,000 metres will be left white. The sea will be shown by blue tints, increasing in darkness according to depth. All other waters will likewise be in blue, special symbols being used to indicate rivers, perennial, non-perennial, and unstreamed, the navigability of rivers, obstructions of various kinds, salt and fresh marshes, swamps, and mountains. There will also be special characters to indicate main and secondary roads; for railways, built, projected, and in course of construction; telegraphs, post-offices, boundaries (both international and provincial), and towns both great and small.

The sheet for each country will be entirely independent, and the projection adopted will permit every sheet to fit exactly together with each of the four sheets adjoining its four sides. These conditions are made possible by adopting what is known as a modified polyconic projection, which is not a sphere, but a plane instead of a spherical surface. Each sheet, therefore, will be independent as far as it goes, and it will not be necessary for any one to have the entire map unless it is desired. All the sheets of the United States pasted together, not including Alaska, will make a map about eighteen feet east and west by about twelve feet north and south.

There is no uniformity whatever in existing maps of the world, and the advantage of having a map of the entire world upon a uniform scale and a uniform base for geology, as well as topography, is a thing to be appreciated.

The expense of the map is being paid by the respective governments, by geographical societies, and other official and unofficial organizations, and each government will adopt its own plan of distributing the results of its work to the public.

THE COLDEST CITY ON EARTH

THE coldest inhabited place in the world is undoubtedly Verkhoyansk, in northeastern Siberia, with a mean annual temperature of less than three degrees above zero, Fahrenheit, and a winter minimum of eighty-five below. Verkhoyansk is in north latitude sixty-seven degrees, on the great Arctic plain, scarcely more than one hundred and fifty feet above the level of the sea. Probably there would be no town there if it were not necessary to Russian governmental purposes to have an administrative centre for a region where many thrifty Yakuts, the fur-trading "Jews of Siberia," carry on their operations.

All its inhabitants, save a few officials and other Russians, are Yakuts. This does not prevent its being a place of some importance, for the Yakuts are the most progressive people in northern Siberia, excelling the Russians themselves in enterprise and adaptability to Siberian conditions of existence.

The average temperature of the winter in Verkhoyansk is fifty-three degrees below zero, Fahrenheit. The rivers freeze to the bottom, and the small trees have been known to snap and split from the force of the frost.

Yet, with all this, Verkhoyansk is, it is claimed, not a disagreeable place of residence, and is preferred by the Russian officials to many more southern and warmer posts. Its atmosphere in winter is always clear, and for the little time that the sun is above the horizon its beams are unobstructed. The air is still, too; no blizzards or drifting snow-storms make life a burden to the inhabitants.

The Siberian dress completes the comfort of the citizens of this Arctic city. It consists of two suits of fur, an outer and an inner suit. The inner suit is worn fur side inward, the outer fur side outward. With his hood down, and just enough space left to see out of and to breathe through, the Verkhoyansker is vastly more comfortable in a temperature of eighty below than many an American, in his cloth overcoat, in a temperature of five above zero.

The winter, indeed, is more enjoyable than the summer, which is hotter than might be expected. The average temperature of July in Verkhoyansk is fifty-nine above zero, and very hot days are not uncommon. The earth becomes green and vegetation thrives, though only the surface of the ground is thawed. At Yakutsk, which is farther south than Verkhoyansk, but not much warmer in winter, the mercury rises in July to one hundred degrees.

THE CHARM OF KISSING

ONCE more the warning goes out that kissing is dangerous. This time it is voiced by Miss Ellen M. la Motte, the ranking officer in Dr. Bosley's corps of fair and accomplished nurses. The contact of lip and lip, says Miss la Motte, accords an ideal opportunity for the voyaging of pathogenic organisms. Most of these germs, when they enter the body at all, do so by way of the mouth. Of this sort are the germs of diphtheria, tuberculosis, meningitis, influenza, the simple cold and all the familiar juvenile plagues. Therefore, it is thoughtless and often cruel to kiss, and sometimes suicidal to be kissed.

This speaks science, and its mandate should be observed as to babies and by invalids. But the great majority of folks will, no doubt, keep on kissing. We have often wondered at the enormous popularity of the exercise. Why do people kiss? The act itself is ridiculous as a spectacle and unsatisfying as an amusement. Its sole physical accompaniment is a feeling of suffocation, and on the psychic side it is frequently embarrassing, particularly if an unexpected audience reveals itself, say, by satiric whoops and catcalls. It has none of the charms and other pleasures, such as self-giving, eating, and automobiling, for example. Kissing will never build up the anemic nor soothe the neurotic.

But still it thrives, and no jeremiads on its perils will ever work its abolition. The man who makes a practice of kissing the fair sex is a man attracted rather than repelled by danger. He knows that every kiss he steals is full of fearful hazards. The girl herself, however, is not to blame; she may choose to regard his idle favor as an offer of marriage and accept him before he can escape. Yet again, her father or brothers, detecting him with his arm around her neck and his eyes gazing into her forehead, may rush in and hail him as a relative, touching him for small loans, calling him by his first name and seizing offensively upon all other familiarities which relatives-in-law affect. Finally, the mother of the girl may knit him pulse-warmers and send him amateur remedies for his rheumatism and red nose, and her little sisters may giggle every time they see him.

A SPIDER'S ODD ADVENTURE

THERE was once a spider that went through at least two battles and took a long journey by sea and land, all without mishap. The first time this particular spider came into notice was just before the fight at Athara, in Upper Egypt. It had taken up its quarters in the ventilator of the helmet of a British officer. It was an energetic spider, coming out at night to feed, and, after having its supper of flies, returning to its hiding-place. The officer left it unmolested, and when he went into the Athara fight it was still in his helmet. Men were killed all about this officer, but he and his spider were unhurt. At Omdurman the officer commanded a battery, and once more his spider went into action.

When the African troubles were over, the British officer packed articles to be sent home, and among them the helmet that had seen action. Inside that helmet was the spider. Not until too late did the officer remember that he had sent his little friend on a long voyage without stocking its larder, but nothing could now be done to help it.

When the British officer reached London, it was with some compunction that he opened the helmet-box, expecting to find the dead body of the spider. He was, however, rejoiced to find his friend alive and vigorous, and not even lonely. Upon the way the occupants of the helmet had increased in number, for now two young spiders shared the strange retreat.

THE AGE OF NIAGARA

SO the question: "How old are the Niagara Falls?" geologists have returned replies varying by tens of thousands of years. At first it was estimated that the Niagara River came into existence, through changes in the level of the land around the Great Lakes, about fifty-five thousand years ago. Later this was reduced to only twelve thousand years. Lyell increased the estimate again to thirty-five thousand years, and still later other scientists lowered it to about five thousand years. At one period, many thousands of years ago, the height of the falls was four hundred and twenty feet.