Remedy for the Scarcity of Labor

By Clive Phillipps-Wolley.

Let it be admitted that British Columbia wants domestic help, farm labor and cheaper workers in those employments which require only a modicum of skill, and that the price which British Columbia is prepared to pay for such labor, though cheap to us, would mean happiness, health and comfort, compared to an existence in London on 9 cents a day.

Let it be admitted that the writers in the English press are accurate in their statements that in London alone there are over a million white people obliged to exist on 9 cents a day.

Of these some are said to be incapable of work, either from are or infirmity: some are said to be determined not to work; whilst the others are able and willing to work if they can get work to do.

These are surely the people we want. England wants their room, we want their company.

Of them a recent writer says that if they can get no work, they live in misery upon the borders of starvation: if they get work they receive for it wages barely sufficient to keep them fit to work especially when others (wife or children) are dependent upon them, whilst in any case, the prospect of saving enough to provide for old age is remote, the opportunity for any enjoyment infinitesimal, and all hope of betterment for themselves or children vain.

This is the condition with which we have to compare farm labor in British Columbia or domestic service at say $15 a month and board. Fifteen dollars a month and board may not seem much in comparison to the wages now paid, but it is really about all we can afford to pay for such labor: it is, I am assured, as much as is paid in October to-day, and it is obvious that it would be luxury compared to the state of life set out above.

I shall be asked why, if this state of things exists, the poor and willing laborers of England do not flock hither. I answer because they are strangely ignorant as a class, of everything outside England. That is typical of the English, and it is typical of misery of all sorts that it begets an apathy which makes all sufferers averse to making any effort. For these reasons principally, those who might be happy and useful out here, remain to be miserable and a burden at home.

Of course want of funds to transport themselves from one side of the world to the other is another reason why these people stay. They do not see how the thing can be done, and therefore do not attempt to do it.

Now, all these conditions are remediable. We can at least help to remedy them, and it is not only our duty as human beings, as Britons, and as Christians to do so, but it is to our own interest to do it.

As far as this province is concerned let us begin by seeing whether these pamphlets which were circulated amongst the English emigration offices still contain the paragraphs to which I called public attention some years ago, paragraphs stating in effect that most of the openings for cheap labor were filled by Chinese.

If so let those pamphlets be withdrawn, and rewritten to the effect that British Columbia realizes as a fundamental truth that white men will not work alongside of, or in competition with Chinamen, and that in consequence British Columbia has done her best to get rid of Oriental labor and seeks white labor to take its place.

Let the government here send circulars to the taxpayers asking them what labor they want and how much they are prepared to pay for it, and then having some basis of knowledge upon which to act let the government formulate a scheme of its own, or adopt one of the schemes elsewhere suggested for getting the people what the people and the province need, and let the people make it abundantly plain to those who paid to serve them, that promises of future action will not suffice, but that the price of the voters of British Columbia is immediate action in this matter.

If you want arguments to enforce your demands, here are a few based upon common sense, in plain words, which plain men can understand, and they touch almost all the great questions of to-day here and at home.

If we want Imperial unity, it is best to import our own people, who will naturally unite with us, and with the mother country more readily than aliens: if we want a Christian, law-abiding people, we are most likely to get such people from a country of Christian faith and British law: if we want to control eventually the sea-borne trade of ocean at our feet, our best chance of doing so lies in importing those who make natural shipwrights, seamen, and traders; if we want to become the strongest of the young nations of the world, it is surely wise to breed from the best stock: if England wants markets she will do well to ship her surplus population to a portion of the British Empire, to grow here instead of starving there since British born and British bred people are likely to be more in favor of British goods than any other people, and whilst the yare growing here, they will be making money here with which to pay for the goods produced in the land they came from: if we want to contribute to the defence of Empire (that is to our own self-defence) we can do it best by increasing that Empire's power, by breeding here under the most favorable condition of climate and life, men from the seed which is being wasted at home; if we want to keep out the Chinamen, the easiest way to do it is by filling this country with white men, and if indeed any of us love God and would sweeten our lives with charity, we can best do so by helping to empty London's slums into the wide sunlit spaces of this our heritage. Are not these reasons good enough? If not it would be easy to find more. And now before outlining any of the schemes suggested, for bringing in the surplus population of England, I want to say one word to the labor unions (178 of them in this country) who have, I believe, generally been opposed to me in my political campaigns, but for whom I bear no ill will in spite of the beatings they have given me, because I always remember that unionism was caused in the first instance by oppression, that "the largest and best organized unions have not only done much to better the condition of man, but to diminish labor conflicts "and that on the best authority the fourteen greatest trade unions in England spent £7,331,-952 in relieving necessity in the same period during which they spent only £462,818 upon strikes."

This is a noble record, and from such men if I can only make my case plain I look with confidence for help in the movement I propose. Their pride should be that they "have bettered the condition of man," and I am asking them to put all their strength into an effort to better the condition of men of their ow nrace, by insisting upon the importation into this country of white men now starving, to fill places which the people now in the country do not want, at prices which can reasonably be paid.

No one can honestly contend that white men now in the country want the cheaper forms of farm work: no one will contend that the daughters of our skilled labor will take places as domestic servants, and I think that no one will contend that a country will continue to attract capital or to prosper, in which such labor is not obtainable.

If capital is not attracted, our industries will not be developed, if the industries are not developed, the country cannot prosper, and if the country does not prosper there will soon be no one to pay the present high wages to any one.

Again I know that white labor hates Oriental labor, and because I care more for the race than for the individual, I have been in this matter on the side of white labor. I am so still, and shall be until I am convinced that the only motive of the cry against the Oriental is pure selfishness on the part of the few in possession; but I want to call white labor's attention to the condition of Hawaii, and he lesson it teaches. An American writer in the New York Times described some time ago what he called the "peaceful conquest of the Hawaiian islands by the Japanese." According to him the number of Japs in those islands is between 70,000 and 80,000. The Japs control all business, and as they breed and get the vote, will practically own Hawaii.

Another writer speaking of the fears entertained by Australia with regard to Japanese colonization, says: "If the island and continent was effectively occupied by a white population of say 20,000,000 there would be little or no room for the most intelligent and enterprising of Asiatic emigrants," and I would add that the same applies to British Columbia, but if we are not to have a reasonably large white population, it behoves us to remember that propinquity of this strong and growing race in the Pacific: to remember that as a fisherman, an agricultural laborer, and in many other respects he is very nearly our match: that he holds the door of Asia, and that if we want Asia's trade we cannot afford to offend his national pride by always barring his people out; that he is Britain's ally, and British Columbia is only a portion of the Dominion of Canada, which might be sacrificed for the financial benefit of the whole, and that our wisest policy is to fill up our country with our own people, so that our waste places may tempt no other nation, and so that our voting power may have influence in the councils of the east, to obtain that consideration to which our wealth entitles us.

As to the schemes recently suggested in the English press, it may be as well to point out that there are and have been two sources from which emigration proceeds in the Old Country, the great private benevolent societies, and the state.

The benevolent societies have done, I believe, most of the work in the past and are still busy at this most practical form of charity combined with Empire building, but the opinion seems to be growing in England, that the management of emigration is essentially a business of the state, and should be handled by the state on a much larger scale and more workmanlike basis than any hitherto dreamed of, moreover the trend of opinion is certainly rather in favor of compulsory emigration than of voluntary or state-aided emigration.

The position is summed up thus. When the unemployed come to the state demanding work, the answer should be, "Your demand is just but in this part of your empire there is no work to give you. However, there is a demand for such labor as yours in another part of your empire, and if you like to enter into a bond with us, we will put you in a position there to earn a living."

Writers like Mr. Ball Acton, whose letter I have used as I believe he would wish that it should be used, maintain that (1) people who apply for public charity and maintenance, or (2) who are unable to properly feed and clothe their children should be subject to emigration by the state and there can be no doubt but that the emigration of these people would greatly relieve the poor rates at home, greatly benefit the people emigrated, greatly benefit the country to which they were sent, and relieve the bitterness of the competition amongst the poor they leave behind.

It would pay the Old Country as a matter of pure business to defray the shipment of these people to the new lands and to maintain them in those new lands until such time as they had learned to shift for themselves, instead of maintaining them for life as paupers at home.

I do not propose to enter into the legal aspects of the case, but I have gathered from what I have read, that there is already power to emigrate such people compulsorily and that the authorities most concerned are favorably disposed to any measure necessary to widen such powers.

All writers upon the subject agree in realizing that some time may be required in which to teach the emigrated the methods of their new home, and suggestions have been made that the colonies which receive them, should provide farms of instruction upon which the new comers might learn the work by which they will have to earn their wages, but as the most complete of all the schemes put forward is that of Sir C. Kinlock Cooke, I will set that out shortly (as it concerns child emigration) not as the only scheme but as typical of those which seem to promise success, and I am the more anxious to do this, as the originator of the scheme has always the Dominion in view, as he always had its welfare at heart.

Those with whom Sir C. Kinlock Cooke proposed to deal are called by him state children, and defined as (1) those brought up in industrial schools to save them from injurious surroundings, and (2) orphans and deserted children educated and provided for out of local rates.

Both classes are paid for by the public, and those who pay for them would relieve themselves of a burden, benefit those they pay for, benefit the country they send them to, and the country they send them from, by shipping them to the colonies, and bearing some portion of the expense of starting them in their new lives.

The scheme has all the ear-marks of success, since it offers material advantage to all parties concerned, and seems to promise self-support. After making handsome allowances for the physically unfit, and those under age, the originator of this scheme, calculates that there are at present in England some 15,000 state children of, or over the age of ten, fit for emigration, and that an annual stream of such emigrants might be maintained for the benefit of the colonies. Here is his own outline of his scheme cut from the pages of the Morning Post:

Proposed Scheme of Emigration.

The new system of emigration which I propose for consideration, on the one side by the Dominion government or by any colonial government and on the other by the Home Office and local county councils and boards of guardians, may be thus briefly outlined:

The Dominion government or the government of any colony to undertake:

To provide one or more agricultural homes or farms where the children would be educated, brought up, and trained under direct government supervision for work in the colony; and to place out the children in suitable situations.

To pass such local acts as may be required to meet the new circumstances, and to draw up rules and regulations (approved by the Home Office and the local government board) for observance in the administration of the homes.

To institute an adequate system of government inspection until the child reaches the age of eighteen.

The authorities here to undertake:

To hand over the children, where possible, at the age of ten years.

To allow representatives of the colonial governments to select the childrn.

To pay each colonial government in a manner hereafter to be arranged—

A sum of money, annually or otherwise, equal to the sum paid for bringing up the children here, the amount not to exceed in any one case the expenditure for for pears.

An agreed sum, annually or otherwise, for the cost of inspecting each child until the child reaches the age of eighteen.

It will be observed that the colony is allowed in this scheme to choose its emigrants; that the Mother Country pays for everything until the children are handed over at the farm in the colony; that the Mother Country pays for the home, maintenance, and training staff, by a payment equal to the amount she would have had to expend had the children remained and been placed out in England, such contribution not to exceed in any one case the cost for four years. The only direct expense proposed to be charged upon Canada is the initial outlay in providing farm lands and buildings, for the educational farm. In return Canada would get (or British Columbia if she is wide awake) a continuous stream of selected children, partly disciplined and taught, who, if they were anything like other young transplanted Britons, under competent Canadian management, would soon make their educational farm self-supporting.

It must be understood that the foregoing is only a scheme put forward by an individual whose suggestions carry weight at home and not a scheme already adopted by the English government, but at any rate it seems that a policy not unlike this will eventually be adopted, and my suggestion is that as such a movement is on foot and in favor with the people of Great Britain, the government of British Columbia should take the opportunity afforded and enter into negotiations directly, if it be lawful, and through the Dominion government, if direct negotiation is not possible, having for their object an experiment in imported state children or others of England's unemployed.

Decent farm boys of fourteen and house girls of sixteen or eighteen will not be a drug in the market in British Columbia and no government, Conservative or Liberal would be foolish enough to stand in the way of an addition to the wealth-earning, tax-paying citizens of the Dominion.

The writer humbly submits that having given a fairly full sketch of a practical scheme, professional politicians might attend to the details. Many of us admire those who have the courage to raise taxes, but we want some return in work for the taxes we pay. Here is an object worth working for.

SOME CAUSES OF EARTHQUAKES.

Professor John Milne, F. F. S., says according to Engineering, that the origins of the large earthquakes of 1905 (159 were recorded at his observatory at Shide) were almost all confined to a circle passing from Central America through the Azores, the Alpine, Balkin and Himalayan ranges, into the East Indian Archipelago. Whether the Calabrian earthquake of September 8 was in any way connected with the relief of volcanic stress which commenced with the Vesuvius eruptions of May, 1905, and culminated in April, 1906, is a matter of conjecture. The fifty-seven large earthquakes of last year were just the average number. As regards time and space, seismic frequency was greatest on the west side of the Pacific in summer, and on the eastern side in winter; seasonal alternations in the ocean currents, the measured oscillations of sea-level, and changes in the direction of barometric gradients, were probably interrelated to these phenomena. The period over which after-shocks extended seemed to be proportional to the intensity of the parent shock. Valleys opened out at night and closed on bright days, probably owing to the general warping of the district under solar radiation and to a diminution of the under-ground drainage. When the sides of a valley covered with vegetation lost water by evaporation, the load on the sides decreased, while at night-time the load on the bottom was increased; at night the valley sagged downward, and when the streams were in flood the sides of the bounding valley approached each other in a marked way. With the aid of astronomical levels, Mr. Morgan Hobbes has observed such a movement amounting to 18 seconds of arc, while the average variation between two of the three successive readings taken in the course of a day ranged up to 7 seconds. Commenting on the changes in latitude and the movements of our polar axis (Albrecht's figure), Professor Milne states that he would not say that earthquakes caused the polar movements, or vice versa; an analysis has been made by studying periods where the change in the direction of the pole deflection was rapid.

TOOLE'S ONE-ACT PLAY.

Exchange.

Here is a good story of the late Mr. Toole that will be new to many of our readers:

"What I want is a bright, short play," said Toole to the amateur, who had brought him a six-act drama.

"How do you mean short, bright drama?" asked the author. Can you give me an idea?"

"Oh, yes," said Toole. "Here's one. It's direct and leaves much to the imagination.

"It is in one act.

"When the curtain goes up two persons are discovered on a sofa, one a pretty young woman, the other a nice-looking young fellow. They embrace; neither of them says a word. Then a door opens at the back and a commercial traveler enters. He wears an overcoat and carries an umbrella. You can tell at once by his manner that he is the husband of the young woman. At least, that would be the inference of every intelligent playgoer.

The husband takes off his coat, draws from his pocket a heavy Colt's revolver, and in the midst of the silent embrace of hero and heroine fires.

"The young woman falls dead.

"He fires again, and the young man is similarly disposed of. Then the murderer comes forward, puts on a pair of eyeglasses and proceeds to contemplate his sanguinary work. 'Great heavens!' he exclaims, 'I am on the wrong floor.'"

A Review of The Methodist Conference

By Rev. T. H. Wright.

Fifteen days was the time occupied by the sessions of the General Conference of the Methodist church in the city of Montreal. The sessions closed on the evening of September 27th at 10 o'clock.

Many of the business men had left for home, so that the closing sessions were marked by a very slim attendance of delegates. Pressure of business prevented many from remaining until the close of the conference.

Much business of importance was transacted, especially is this true concerning the missionary work of the church. In future the work will be divided under two heads—foreign work and home missions. Each department will have a secretary. The Rev. Alex. Sutherland, D.D., will be the secretary for the foreign missionary work of the church, and the Rev. James Allan, M.A., is the newly elected secretary for home missions. Hitherto the general secretary has controlled the entire missionary work of the church, home and foreign, and has kept the executive, administrative and financial work in his own hands. On account of great expasion the work is divided into two great branches—home and foreign.

The home work will consist of: (1) Work among English-speaking people in Canada; (2) Work among foreign immigrants in Canada; (3) The French work.

Foreign missions will comprise: (1) Work in foreign countries; (2) Work among Chinese and Japanese in Canada; (3) The Indian work.

Each secretary will be aided by an assistant and there will be a layman as honorary treasurer, with an assistant treasurer to do the clerical work of the entire funds, $400,000 being raised last year for missions.

What the Conference approved and what it rejected will be of interest to our many readers throughout British Columbia.

The conference did not change the time limit. It remains unchanged, four years being the limit, except in Japan

It also rejected the resolution to give women a place on all the courts of the church, so that women cannot be stewards of the church or delegates to conference or district meetings.

The superannuation fund is somewhat changed, granting a slight increase in the annuity to those who have rendered thirty-six years of service and upwards to the church. The increase is twelve or thirteen dollars for each additional year of service.

The Educational Society also underwent considerable change. The change amounts practically to a reorganization of the educational work of the church.

Students will be assisted in their college work by grants and loans, and an effort will be made to give poor students work on missions during college vacation. Students thus employed will receive a grant from the Missionary Society for their services. A new board of education is appointed with Rev. T. Potts as general secretary of education. Principal Sipprell will represent British Columbia on the board and Principal Riddell the province of Alberta.

Church union remains as at present. The work of the joint committee on union was approved, and a circular will be issued in December setting forth the work accomplished thus far so as to inform the members of the local churches as to what has already been done, so that the churches will be in a position to vote intelligently at the final meeting authorizing the step, i.e., the union of the Presbyterian, Congregational, Methodist and possibly the Anglican and Baptist churches of Canada. From letters which have appeared in the church papers on the subject there will be considerable opposition to the step, as the doctrinal basis does not commend itself to many of the leading workers in the church.

Probationers for the ministry will now spend an additional year in college and give one less to circuit work, by the new legislation.

A commission is appointed consisting of ten ministers and ten laymen to consider the whole question of revising the rules of the church and report to next general conference four years hence.

It was also decided to begin the publication of a western Methodist paper in the city of Winnipeg. At present the only official church papers are "The Wesleyan, published in Halifax, and The Christian Guardian in Toronto.

Two assistant secretaries will be appointed for Epworth League and Sunday school work in addition to Rev. Dr Crews, the general secretary, one of those assistants residing west of Lake Superior.

The deaconess movement is officially taken into the church and provision is made for a constitution.

The invitation of British Columbia conference to hold the next session of the general conference in the city of Victoria is accepted providing satisfactory and reasonable rates for transportation can be secured.

Success is stamped on every department of church work and the next four years will witness great changes in the work of Methodism.

The Buffalo's Battle for Existence

Ernest Thompson Seton, in Scribner's October Number.

Largest, and at one time most important of all America's big game, the bison or buffalo was the first to be discovered by the explorers of the sixteenth century.

In 1521, Cortez, the Spanish conqueror of Mexico, reached Montezuma's capital, the city of Mexico, and there, in the menagerie, saw the first American bison to be viewed by European eyes.

The earliest history of the bison in eastern North America was made somewhere near Washington, District of Columbia, in 1612, by the Englishman, Samuel Argall, afterward deputy-governor of Virginia, and narrated as follows:

"As soon as I had upladen this corne, I set my men to the felling of timber, for the building of a Frigat, which I had left half finished at Point COmfort, the 19th of March: and returned myself with the ship into Pembroke river, and so discovered to the head of it, which is about 65 leagues into the land and navigable for any ship. And then marching into the countrie, I found great store of cattle as big as kine, of which the Indians that were my guides killed a couple, which we found to be very good and wholesome meat, and are very easy to be killed, in regard they are heavy, slow and not so wild as other beasts of the wilderness."

The total area inhabited by the buffalo was about 3,000,000 square miles. Of this, the open plains were one half. According to figures supplied me by A. F. Potter, of the forest service, the ranges of the Dakotas, Montana, Wyoming, Nebraska, Kansas, Colorado, Texas and Oklahoma (a total of about 750,000 square miles, or half of the plains) were according to the census of 1900, carrying 24,000,000 head of cattle and horses and about 6,000,000 head of sheep. This means that when fully stocked they might sustain a number of buffalo at least equal to the number of cattle and horses. The buffalo had to divide their heritage with numerous herds of mustang, autelope and wapiti; on the other hand, a buffalo could find a living where a range animal would starve, many of the richest bottom-lands are now fenced in, and we have taken no account of the 6,000,000 sheep. Therefore we are safe in placing at 40,000,000 the buffalo formerly living on the entire plains area.

Their prairie range was a third as large, but it was vastly more fertile; indeed, the stockmen reckon one prairie acre equal to four acres on the plains. Doubtless, therefore, the prairies sustained nearly as many head as the plains; we may safely set their population at 30,000,000. The forest region was the lowest in the rate of population; for its 1,000,000 square miles we should not allow more than 5,000,000 buffalo. These figures would make the primitive number of buffalo 75,000,000.

Many other calculations based on different data give similar or slightly lower totals. From these facts it will appear very safe to put the primitive buffalo at 50,000,000 to 60,000,000.

Allen estimates the destruction by Indians at 2,000,000 annually in the early '40s. Baird puts it at 3,500,000 annually at 3,500,000 annually in the '50s. Other destructive scourers native to the plains added at least half as many more to the number, so that 3,000,000 a year may have been reached as a total of loss in the '30s. To stand such a drain the herds, according to their rate of increase, must have been at least ten times as many. But they could not stand it, and were plainly diminishing; therefore they must already have fallen below 40,000,000 in the early part of the nineteenth century. Nevertheless, they could not have been much less than that or they would have vanished far faster than they did.

Col. Dodge tells of the 4,000,000 head that he saw on the Arkansas in May, 1871, moving northward, at Beaver Creek, 100 miles south of Glendive. James McNaney says that the buffalo began to arrive from the north in the middle of October (1882) and about the 1st of December an immense herd came; by Christmas all had gone southward, but a few days later another great herd came from the north and followed the rest.

The primitive Indian was far from being the greatest enemy of the buffalo; armed only with bow and arrow or lance, and without the aid of a horse, he could scarcely count on the buffalo for regular support. In winter, when the snow was deep, he could pursue them on snowshoes and slay them easily enough. But there was rarely sufficient snow for this; all the circumstances precluded the possibility of great destruction, and the opportunities for such slaughter were confined to the north. On rare occasions the tribe could unite and form a buffalo pound. But there was usually a sufficiency of small game, and I doubt not that before the coming of the horse and the rifle the red man did little harm to the great bison herds. These two principal aids arrived together on the buffalo range about the close of the eighteenth century. They marked the beginning of the epoch of extirpatory slaughter by man.

By far the worst destroyer in ancient days was treacherous ice in the spring. All winter the buffalo herds of the north had been fearlessly crossing and recrossing the ice-bound rivers. Springtime comes with the impulse to wander farther north, the herds are more compacted now, they slowly travel on their route, river after river is crossed at first. But a change sets in; the ice grows rotten. To all appearance it is the same, but it will no longer bear the widely extended herd. The van goes crashing through to death, and thousands more are pushed in by the oncoming hordes behind.

It was only during the migrations that the very large herds were seen. Bands of a few thousands were found at all seasons, but the millions came together only on some great impulse.

Let us follow one of these herds moving northward to its summer home from the sheltered bottom-land along the Missouri in central Dakota, where it wintered.

Before there is yet any visible spring in the land the spirit of unrest comes on them. It may be, the final touch is a warm, sunny say. The old cow, with a "bunch" of fifty to one hundred followers turns her nose northward. Their reunting spreads an epidemic of unrest and from every valley a long black string pours forth. As they top the upland others and yet others come to view. The general move is northward but their disposition is to condense into one herd. As night comes down black and chill, they leave the exposed ridges and shelter in the hollows. Cold weather and more snow may follow, but the impulse to travel is in possession now. Once it is given command, it changes not in force or direction till the remembered pastures are reached. Rivers may cross their path; if frozen, they are unnoticed; if open, the yare swum; if covered with rotten ice, the ice is broken by the weight of the herd and some are drowned, but the rest swim through and continue their march. An onset of hunters may swerve them for a time, but it does not change their main trend.

For three or four weeks this continues, and the blackening horde comes swarming down the long level prairie of the Red River valley. Now they are nearing their familiar summer haunts, and the band which originally united to form the herd begin to quit the main body. Again the old leader cow sets the example, and stringing after her come many cows and yearlings, mostly relatives by blood, and finally a dozen bulls, that are mostly relatives by marriage.

In a broad sense it will be seen that this small herd is a family, or, rather, clan. Their leader is an old cow—there is abundance of evidence for this—and doubtless the grandmother of many of them, as Long says "cows are often seen accompanied by the calves of three seasons." The males remain with the females and take an active interest in the young. Animals know and stay with their personal acquaintance, they resent the approach of strangers; migrants work back to their birthplace; whenever a local band of buffalo was wiped out their pasturage remained vacant for years, so it is unlikely that this group is finally scattered during the annual herding.

The evidence of common range cattle sustains the idea. For, in spite of the annual round-ups, which correspond to the annual herding of the buffalo, we usually find the same little bunch of cattle (easily distinguished by the marks) in the same feeding grounds season after season. Finally, the bison species is polygamous, or probably promiscuous, so that those living together are sure to be much interrelated—that is, a clan. The blood tie and clan feeling of the group, therefore, I think, is well established, but because they have been questioned I was glad, long after the above was written, to find them strongly maintained in detail by an undoubted authority, Buffalo Jones.

So far as I can learn this band does not further disintegrate; it rambles about, in a radius of perhaps ten miles from the favorite drinking place, and wherever it goes, it is followed by one or two ever-watchful grey wolves.

The cowbirds (Molothrus ater) are well known members of the Starling family. They are peculiar in this, they never pair, make a nest or bring up their own young. Free love is the order of their day and when the female is ready to lay she searches for the nest of some small bird and in it abandons her offsprings to a foundling's chances with a strange, foster-mother. Then, back she hikes to the merry group that live and revel around the buffalo herd. Sometimes the cowbirds walk sedately behind their grazing monster, sometimes they flit over, snapping at the flies, and as often they sit in a line along the ridge pole of his spine. Their attachment to the buffalo was so obvious that an Indian myth tells of their nesting in the wool between the horns of a big bull. Rather a fearsome home site one would think, during a combat of the bull with some huge bull. But there are some foundations for this myth. First, they do not nest elsewhere. Furthermore, I am told by old-timers that skulls of buffalo still clad in their black shock of hair were often used by little birds as nesting-places. In the park at Silver Heights, Winnipeg, is a herd of a dozen buffalo. All summer they are followed by the usual flock of cowbirds which fly southward when cold weather arrives. But the autumn of 1900 came and there was one that stayed when the others flew. All through that Manitoba winter he remained with the buffalo, and especially with the biggest bull of the herd. Its food was the buffalo's food; by day it flitted near or warmed its toes in the wool of his back. By night it snuggled in a sort of nesting hollow it had made in the wool just back of his horns. He was its protector from famine, frost, animal and human foes, for he was so fierce that none dared to go near him even to inspect more closely the cowbird that had committed itself to his charge. This incident is attested by Dr. S. J. Thompson, the veterinary of the province, and George Grieve, the taxidermist, as well as by the keeper, Mr. Prescott.

Mr. Grieve tells me that he thinks the bird was wounded and unable to fly when its kinsfolk went south and so made the best of the situation; and not so very bad it proved, for he came out fat and fit in the spring. It is interesting to note that upon their ranges the Red River valley buffalo were accompanied by the cowbird and the Saskatchewan buffalo by the white-winged buffalo bird.

As summer grows warm the buffalo shed their coats in great broad flakes or wads of mothy-looking felt; the latter half of their bodies becomes positively naked. And now the mosquito millions are turned loose. I suppose that even a rhinocerous would be annoyed by these long-beaked stingers of the lush wet plains, and the buffalo with their naked rears are driven to accept any promise of relief. A high knoll in a strong wind is said to be good "medicine for the flies." But such a combination is not always available and besides, it prevents feeding. A much more convenient remedy is a supplementary coat of mud. This they get by rolling hog-like in the muddy hollows that still dot the plains—hollows which the ignorant call fairy-rings, but which were always known to the hunters as "wallows."

About the beginning of the nineteenth century the buffalo were cleared out of all the country east of the Mississippi.

In 1832, according to Catlin, 150,000 to 200,000 robes were marketed each year, which means a slaughter of 2,000,000 or perhaps 3,000,000 buffalo by the plains Indians. The destruction and waste was alreay so great that Catlin prophesied the speedy extinction of the bison. The drain was obviously greater than the natural increase and already vast herds were visibly shrinking. About 1834 or 1835 they began to diminish very rapidly on the west slope of the Rockies as Fremont records. But the east slop was the great buffalo range. Concerning these two areas this famous explorer writes:

"The extraordinary abundance of the buffalo on the east side of the Rocky Mountains, and their extraordinary diminution, will be made clearly evident from the following statement. At any time between the years 1824 and 1836, a traveler might start from any given point south or north in the Rocky Mountain range, journeying by the most direct route to the Missouri river; and, during the whole distance, his road would be always among large bands of buffalo, which would never be out of his view until he arrived almost within sight of the abodes of civilization.

"At this time (1842) the buffalo occupy but a very little limited space, principally along the eastern base of the Rocky Mountains, sometimes extending their southern extremity to a considerable distance into the plains between the Platte and Arkansas rivers and along the eastern frontier of New Mexico, as far south as Texas."

Fremont reckoned the annual market of buffalo robes as 90,000; but robes were collected only during the four winter months; and not more than a third of those killed at the season were skinned, while half of the robes were used at home. Therefore 90,000 robes represented a slaughter of 1,620,000 of buffalo. BJut the rate of killing was so much higher in summer that we may calculate the annual kill at 2,000,000 or 2,500,000 a year during these palmy buffalo days. The herds shrank fast. The buffalo Indians had been decreased by smallpox, but the white consumers more than made up the shortage.

In 1842 Fremont found distress among the Indians along the Platte on account of failure of the buffalo. In 1852 the buffalo was so far from the Red river country that Ross considered hunting it a thing of the past. In 1867, the Union Pacific railway reached Cheyenne, penetrated the heart of the Buffalo country, carrying unnumbered destroyers with it, and split the remaining buffalo range in two; thenceforth it was customary to speak of the "south herd" and the "north herd," each of which appeared to recognize a boundary in those sinister lines of steel.

In 1871, the Santa Fe railway crossed Kansas, the favorite summer ground of the southern herd, now reduced to about 4,000,000, according to Hornaday, and then began the great slaughter by the white skin-hunters. Taking as a basis the railway statistics of shipments and Colonel Dodge's observations, Mr. Hornaday has calculated the slaughter of the herd as follows:

1872	1,491,489
1873	1,508,058
1874	158,583
Total	3,158,730
Killed by the Indians, same period	390,000
Killed by settlers and Indians	150,000
Total	3,698,730

These are the lowest estimates that I know of. Colonel Jones' figures are about double these. That was the end of the southern herd.

A few scattered bands lingered in out-of-the-way places, but were relentlessly hunted down. The last considerable herd that I can learn about was in 1886, described to me seven years afterwards by Charles Norris, cowboy, of Clayton, New Mexico.

The very last individuals that I have knowledge of were four found and killed in 1889, near Buffalo Springs, Texas. The account of it I got from W. Allen, cowboy, also of Clayton, New Mexico, four years after the event.

This ended the last of the Southern stragglers.

The great northern herd was still in existence after the bulk of the southern was wiped out. A colder winter and hostile Indians were their chief protectors. Hornaday calculated the northern herd at about 1,500,000; most authors put it much higher. The Indians, he reckons, were then slaughtering them at the rate of 375,000 a year.

In 1876 the American troops drove the hostile Indians out of the country, opening the way for the skin hunters. In 1872 the last herd went south from the Saskatchewan and the few scattered bands there were killed off by the Indians in 1879. In 1880 the Southern Pacific railroad opened a way into the central country of the last great herd, and the southern story was repeated.

Condensing Mr. Hornaday's account,

In 1881 the skin hunters shipped out	50,000
In 1882	200,000
In 1883	40,000
In 1884	500
In 1885	0
	290,300

This was the end of the northern herd.

The last survivors, twenty-eight in number, were killed on the Big Porcupine, in 1886, and mounted by Mr. Hornaday himself for the National Museum. The only wild ones left are the band preserved in the Yellowstone park and the herd of wood buffalo that finds a refuge in the woods and on the plains of the Athabascan region.

How many buffalo, all told, are living now? This is a question put by all who are interested in the subject. For a clear expression of their numbers, their decline, and the rescue of the survivors, I shall set the various figures in columns.

Estimate of buffalo in primitive days	55,000,000
In 1800	40,000,000
In 1850	20,000,000
Mr. W. T. Hornaday's estimate in 1871	4,500,000
Mr. W. T. Hornaday's census (wild 535; captive in America 256, in Yellowstone Park 200) in 1889	1,091
About 1895 they probably reached a minimum	800
Mr. Mark Sullivan's census in 1900	1,024
Mr. S. P. Langley's census Feb. 6, 1902	1,391
Dr. Frank Baker's census in 1903	1,753
In 1905	1,697

The apparent diminution in 1905 is due to the continued hunting of the wild ones in northwest Canada.

In 1903, Dr. Baker estimated these at 300; in 1905, at 400. They seem to be doomed; but the rest are captives in America and Europe; they have increased from the original stock of 256 in 1889 to 1,297 in 1905, and there is every prospect that they will continue as they have begun