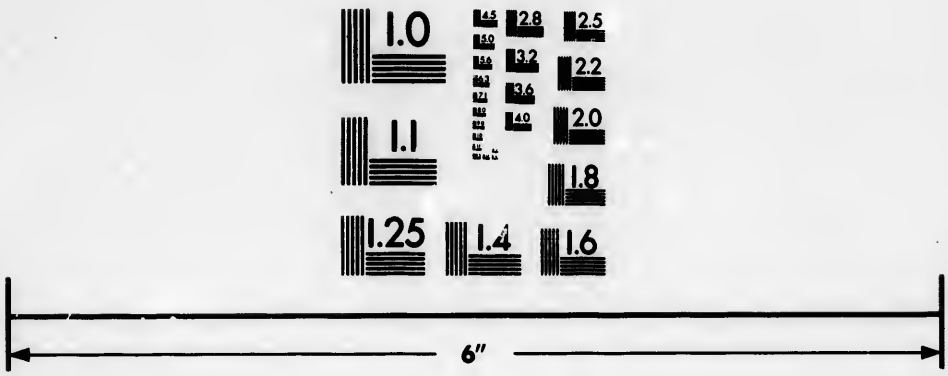
**IMAGE EVALUATION**
**TEST TARGET (MT-3)**




Photographic
Sciences
Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

## Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- [ ] Coloured covers/ Couverture de couleur
- [ ] Covers damaged/ Couverture endommagée
- [ ] Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée
- [ ] Cover title missing/ Le titre de couverture manque
- [ ] Coloured maps/ Cartes géographiques en couleur
- [ ] Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)
- [ ] Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur
- [x] Bound with other material/ Relié avec d'autres documents
- [ ] Tight binding may cause shadows or distortion along interior margin/ La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- [ ] Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/ Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- [ ] Additional comments:/ Commentaires supplémentaires:

- [ ] Coloured pages/ Pages de couleur
- [ ] Pages damaged/ Pages endommagées
- [ ] Pages restored and/or laminated/ Pages restaurées et/ou pelliculées
- [x] Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- [ ] Pages detached/ Pages détachées
- [x] Showthrough/ Transparence
- [ ] Quality of print varies/ Qualité inégale de l'impression
- [ ] Includes supplementary material/ Comprend du matériel supplémentaire
- [ ] Only edition available/ Seule édition disponible
- [ ] Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/ Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

| 10X | | 14X | | 18X | | 22X | | 26X | | 30X |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ✓ | | | | | |
| | 12X | | 16X | | 20X | | 24X | | 28X | 32X |

The copy filmed here has been reproduced thanks to the generosity of:

Seminary of Quebec
Library

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol ⟶ (meaning "CONTINUED"), or the symbol ▽ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:

L'exemplaire filmé fut reproduit grâce à la générosité de:

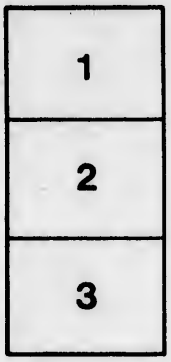
Séminaire de Québec
Bibliothèque

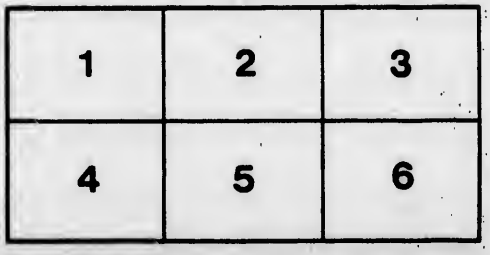
Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole ⟶ signifie "A SUIVRE", le symbole ▽ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

# OSSINIBOIA.

The Territory of Ossiniboia is situated on the West and South of the great Lake Winipic; it is watered by the two branches of the Red River, by River Dauphin, and other considerable streams. it extends from latitude 52° 30′ southwardly to the boundary of the United States, near the source of the Mississipi. The climate is remarkably salubrious, and has a general resemblance to that of Canada, but is far less subject to deep snows.—The general aspect of the country is level, varied only by hills of gentle acclivity, except where the steep banks of rivers intervene; and it lies on a basis of limestone, which is here, as in most other parts of the world, the concomitant of a fertile soil.—To the eastward of Red River, and near the shores of Lake Winipic on every side, is a woody country, thickly covered with the various species of

timber common in Canada; but in other parts, further to the west, there are vast tracts of open grassy Plains. These plains form a singular contrast to the close and uninterrupted woods, which, in the uncultivated parts of Canada and the adjoining colonies, overspread the whole face of the country. The difference appears to have arisen from the practice of setting fire to the grass every year, towards the end of summer. By this practice, which prevails among the Indians in these western parts, and has probably continued for a long series of ages, the woods have been destroyed, except where the moisture of the soil has prevented the fire from spreading. Spots of woodland, more or less extensive, occur frequently in the midst of the plains; and the banks of the rivers and creeks are generally wooded. The plains are frequented by innumerable herds of buffaloe, and would afford to settlers the benefit of pasturage to any extent. The trials of cultivation which have already been made, leave no room for doubt, that every species of agricultural produce, commonly raised in Britain or in any part of the North of Europe, may be cultivated in Ossiniboia, without incurring the expence of clearing away the woods, as in other parts of America.

This Territory is included within the Charter of the Hudson's Bay Company, to whom the property

of the land is granted in the most ample manner by the Crown. The Company have lately executed a conveyance of this part of their Territory for the purpose of settlement, reserving only their exclusive right to the Fur trade; and full power is granted to the settlers to export any produce of their lands, by way of Port Nelson to London, and to bring back goods of any kind required for the use of the settlement.

A right is reserved to the Company to charge duties not exceeding five per cent. *ad valorem*, or the rates paid at Quebec, on all exports and imports; but the revenue arising from these duties is to be applied to purposes of public utility, and in particular to the improvement of the road, and river navigation from Lake Winipic to Port Nelson.

Notwithstanding the difficulties arising from the late war with America, a settlement has already been commenced, in pursuance of this grant. It is situated at the confluence of Red River, and Ossiniboyne River; where the first colonists arrived in autumn 1812.—There are at present between fifty and sixty European settlers, occupying distinct allotments of land at the principal establishment, besides two or three detached settlements, formed of Canadians, who had previously followed a wandering life like the Indians, but

who, upon obtaining a permanent tenure of land, have been induced to apply, in some degree, to agriculture.—The last advices from the settlement were dated in July, when the harvest was about to commence, and the crops of every kind were luxuriant and promising.—The only article which had been planted on an extensive scale, was the potatoe, of which the produce was likely to be very abundant. From the peculiarity of the situation, combined with unfortunate accidents, the supply of seed corn had been scanty; but every kind of grain which had received a fair trial, had succeeded, even beyond the most sanguine expectation: and there is every probability that the next harvest will afford a supply fully adequate to every demand. Hitherto the principal support of the Colonists has been derived from the spontaneous produce of the country; of which the abundance is singularly great; particularly of fish and buffaloe.*

In order to carry more completely into effect the views of settlement intended by the Company, it is in contemplation to lay out a number of Townships, adjacent to the lake and the principal navigable rivers, each to be three miles broad in front, and to extend back about five miles, so as to

* See Appendix, A.

contain at least 10,000 acres of land. To a few gentlemen of property agreeing to go out and settle, townships will be granted upon the sole condition of establishing a stipulated number of settlers upon their lands, within a limited period of time. From absentees who wish to become Proprietors, a payment in money will be received in lieu of all such conditions. The townships which are now to be disposed of, will be charged at only £400; after payment of which, the proprietor will be liable to no farther demand whatever, on account of his land, nor to any expences but such as are completely at his own option. For the accommodation of persons who may be inclined to subscribe lesser sums, several townships will be divided, and disposed of in halves or quarters.

One-half of the money received for all townships to be granted within twenty years, is to be vested in Trustees, as a Fund applicable to the general improvement of the Colony. The Trustees are to have power to assign 200 Acres out of every township for the use of a clergyman, and 50 acres for a schoolmaster; and also in all cases where the proprietor of the township has not established settlers upon it, the Trustees are to b authorized to dispose of 500 Acres, in lots of not more than 100 Acres to a family, but on condition of their residing on their respective lots, and keeping open a road through the township. Any pay-

ment received from the settlers for these lots is to go into the general fund under the management of the Trustees.

In most of the British colonies, where settlements have been carried on by the proprietors of large grants of land, great inconvenience has been experienced from the conduct of some, who without doing any thing for the improvement of their own property, have, in a very unfair manner, deprived others of the just reward of their exertions. It has been frequently known, that after one proprietor had brought out settlers from Europe, and supported them at great expence during their first difficulties and had thus established a thriving tenantry on his lands, in the confidence that his expences would be reimbursed by the rents, which these settlers had stipulated to pay, this expectation has been completely disappointed by a neighbouring proprietor, who, by the offer of lands at a cheaper rate, has seduced away a whole body of tenantry. It is evident that, if such a practice be allowed to prevail, the exertions of individual proprietors must be completely paralyzed. For the general interest of the colony, it is necessary to check such unfair interference.

With this view it is proposed, that when any people are sent out from Europe, at the expence of a particular proprietor, or receive pecuniary assistance, to enable them to establish themselves

as settlers, the stipulations under which this assistance is given, should be distinctly recorded before a magistrate; and that when, in this way, a settler agrees to place himself under the patronage of one proprietor, he should not be allowed to enter into any transaction for the purchase of land from another.

In order to prevent the evasion of this regulation, it will be adviseable, that for some years to come, a limitation should be put on the quantity of land, that each proprietor may alienate to any settlers, except those who go out under his own patronage. Such a restriction will be very useful, in another respect, in preventing that excessive depression in the value of land, which in the infant state of a colony, is very apt to arise from the want of a due proportion between the quantity of land in the market, and the demand for it.—Experience has shewn, that when the price of land is excessively low, the settlers form no local attachments to their property, and fall into unsteady wandering habits, very prejudicial to moral improvement. On the other hand, it is more for the interest of the proprietors to be enabled to dispose of a part of their land at a fair price, than to have an unlimited power of alienation, without any adequate demand.

Upon these principles it is proposed that a distinction should be made between the ordinary

*Township Lands*, and the *Settling Lots*. A Register is to be kept of Settling Lots, parcelled off from any Township, for the purpose of being alienated to settlers: and when any lands are entered in this Register they are to become alienable without restriction; but the ordinary lands not so registered, are not to be separated from the property of the Township. Each proprietor will have the power of registering annually a certain extent of Settling Lots; and this privilege will be extended in favour of those, who have taken active measures for bringing settlers to their lands.

The precise extent of land to be admitted to registry, must be a matter of farther consideration; but perhaps it may not be far from a fair proportion, if on each township the proprietor be allowed to parcel off 50 acres annually; and that if a proprietor sends out settlers from Europe under his patronage, he should be allowed over and above the ordinary privilege, to parcel off 100 acres in the first instance, and 20 acres annually thereafter, on account of every family so brought into the colony.

It is not proposed that these restrictions should be continued any longer than the period, during which the Trust Fund is to participate in the price of all Townships that are disposed of. Neither will they extend to prevent a proprietor from alienating his township whenever he pleases; the pur-

chaser taking it under the same limitations as to the parcelling off of land, as if it had remained in the hands of the original proprietor.

It is well understood that the value of landed property in America does not depend, as in Europe, merely on the annual revenue arising out of the produce, but in most instances upon the profit expected from re-selling it at an advanced price.

A large tract of waste land, without an inhabitant, and lying at a distance from any settlement, may appear a worthless property. It does not indeed produce an annual income; but the capital vested in the purchase is rapidly increasing in value without expense or trouble to the owner. In a country where provisions are superabundant, and wages high, early marriages prevail, and the natural increase of population is rapid. The inhabited districts annually send out swarms of young men, who advance into the unoccupied waste, and purchase small lots of land, which they proceed to clear and cultivate, as the readiest means of providing for a family. Thus in process of time cultivation continually encroaches on the wilderness: and lands which were purchased for a trifle, while the settlements were at a distance, may be sold off at a high price, when the progress of population has brought them near. Innumerable instances might be quoted, in almost every colony in America, of tracts of land, purchased at a few

pence per acre, having been sold again, after the lapse of some years, at as many dollars or even pounds.

To every person who is acquainted with America, the profit arising from such speculations is familiar. But in the United States, the value of unoccupied land is now so fully understood, that the opportunities of making a successful speculation are comparatively few; the most favourable being pre-occupied by capitalists on the spot. The opportunity which occurs in Ossiniboia, is owing to its peculiar circumstances. It is so distant from the older settlements, that, in the ordinary course of things, population cannot be expected to spread into it for a long period of time. For this reason, notwithstanding the natural advantages of the country, the owners of the land are willing to part with it for a small consideration. Trifling as the price of £.400 for 10,000 acres must appear, it would perhaps be fully adequate to its value, if nothing could be done to accelerate the progress of population towards this remote situation. But the systematic employment of an adequate capital, to be expended in removing the first difficulties of an infant settlement, may place this tract of land in circumstances as advantageous to the proprietors, as if it were in the immediate vicinity of populous colonies. The expence might be too great for an individual, but

may be defrayed with ease out of the funds to be vested in the Trustees.

It is proposed that these funds, should be applied, principally in the way of loan, to assist settlers, who without some such aid might be unable to effect the purpose, on which they are bent, and who, in consideration of this support, will readily agree to settle in the situation that is pointed out. By means of this encouragement, useful settlers might be found among various different classes in the United Kingdom. Among others it may be proper to notice particularly one considerable body of people, who will not only be disposed cheerfully to acquiesce in the terms of this proposal, but who, without some such aid, would be in circumstances deserving of much commiseration.

The effects which have arisen in the Highlands of Scotland, from the abolition of the system of Clanship and the adoption of an œconomical plan of managing landed property, have been fully explained to the public. The great change which has been going on for half a century in that part of the Kingdom is not yet completed: and of late years its progress has been such as to press with redoubled severity on the poor tenantry, who are from time to time, dispossessed of their farms, in order to make way for a farther extension of sheep

farming. In the earlier stages of this progress, the tenantry who were to be removed, were in general possessed of a considerable stock of cattle, by the sale of which they were enabled to defray the expence of their passage to America. At present, there are great numbers who have not adequate means.

Upon many large estates in the North of Scotland, sheep farming has been introduced in a progressive manner, under an idea that all the former population might be retained. The highest mountains were first converted into sheep pastures, including a few insulated farms situated among the remoter vallies. The more extensive vallies and the lower parts of the country were left in the former state of occupancy, in the hands of small tenants, who were crowded a little closer together, to make room for those who had been removed from their former possessions. Patches of improveable ground on the lower declivities of the mountains, were brought into cultivation to support this additional population: but the pasturage was necessarily circumscribed: and on every new lease, more and more of the hill pasture has been taken away from the small tenants, and added to the Sheep farms. Thus the stock of cattle, that each family had the means of keeping, has been more and more reduced: their capital has gradually dwindled away;

and the same individuals, who 20 or 30 years had a considerable stock, are now possessed of a small number only. When one of these populous vallies is now to be converted into a large grazing, the tenantry who are to be removed are not so wealthy as in former times. A few individuals among them may have sufficient means of undertaking a voyage to America; but a far greater proportion, though possessed of some capital, fall short of the requisite amount. The sale of their stock of cattle may often produce two-thirds or three-fourths of the sum required for the passage of their family. But, if they have not the whole, the undertaking is beyond their reach; and however small the deficiency may be, they are obliged to sit down in situations, where their remaining pittance is soon dissipated.

Upon most of the estates, where these changes are now progressively taking place, it is customary to lay out portions of two or three acres, of arable or improveable land, to which the privilege of grazing one cow, upon an adjacent common pasture, is annexed. These portions of land, are provincially termed crofts: and upon the sea coasts, where the people are accustomed to fishing, the possessors have in some instances become industrious and thriving: but in the inland situations their condition is, in general, very miserable. To introduce among them

new branches of industry, to which they are totally unaccustomed, is no easy task; and at the best it is but a dreary and discouraging prospect, to a man who has been accustomed to a large range of mountain pasture, and to look upon his cattle as the only desirable source of riches, to be reduced to one cow, and obliged to commence the toilsome improvement of a moor or moss, in which his portion can never exceed two or three acres. Even for this trifling accommodation the small tenants are in a great measure indebted to the humanity of their landlords, who are reluctant to drive away entirely the old population of their estates; but who have little reason to expect, that under these circumstances, their industry will become productive of much benefit to themselves or to those under whom they live.

Most of the settlers, who are already established on Red River, are from a district, to which these observations peculiarly apply; where, by repeated divisions and subdivisions, the portions of ground occupied by the tenantry are now much reduced; and where there are several thousand families, who are little else than a burden on the proprietors, and who must necessarily be removed, in the course of no long period of years, if the lands are to be brought under an œconomical system of management. These people, though possessed of little

acquired skill or well-directed industry, have many of the most essential qualities for a settler in a new country. They are, for the most part, hardy, frugal, and persevering, of sober and steady habits, and strongly impressed with religious principles. The settlers already at Red River have made so favourable a report of the country to their friends, that many are anxious to follow them: and there can be no doubt, that a great number of people from these districts, would become settlers, if they could obtain a small degree of assistance, to defray the expences of their passage. There are great numbers of families, to whom the loan of £10 or 20, would make all the difference, between a state of comfortable independence, and one of degradation, rapidly declining into hopeless poverty.

Proceeding upon the principle, that the Fund under the management of the Trustees, should be applied to the temporary accommodation of emigrants of this description, arrangements must be made for collecting the debts due by them, for receiving the surplus produce of their lands in payment, and conveying it to a market where the value may be realized. Thus the funds advanced for the assistance of one set of emigrants will be replaced, and ready to be applied to support others in like manner. To the extent of the capital subscribed, there will be a continual influx of settlers

into the colony, while the funds applicable to this purpose, instead of diminishing, may be expected to increase, both by the interest, chargeable on the loans advanced to emigrants, and by the rents, payable to the trustees, for those lots which they have a right to assign to settlers.

It may be imagined, however, that the remote and inland situation of Red River will not admit of the settlers sending any produce to market, on such terms as to provide for the reimbursement of the advances made to them. But the inland situation of the settlement is by no means so insuperable an obstacle to its success:—and means may be found of conveying produce to the sea-coast, at such a rate as will leave a very fair remuneration to the farmer.

In the present unimproved state both of the river navigation, and the road by land, between Port Nelson and the interior, the expences incurred by the fur traders, afford no criterion of that which may be sufficient for the carriage of goods under a better system.—When Canada was first acquired by the English, the River St. Lawrence above Montreal, was considered nearly in the same light in which Nelson River may now appear.—Even since the settlement of Upper Canada by the Loyalists, it was deemed impracticable to convey produce to market from the remoter parts of that province;—

yet, of late years, flour, beef, and pork have been brought to Montreal, even from Detroit. If the attention of the settlers in Ossiniboia be directed to articles of higher value, in proportion to their bulk and weight, there can be no doubt of their success.

From Port Nelson to Red River, there are two routes, nearly equal in length.—One is by the River Nelson, a stream not much inferior to the St. Lawrence in magnitude, but interrupted by several falls and rapids, on account of which the boats now used must be small enough to be moved on rollers over the carrying places. It appears, however, that by far the greatest proportion of these obstructions are concentrated in one part of the river, not exceeding fifty miles in extent, and that both above and below there are great tracts of deep and moderate current, free from any obstruction.—It is therefore probable that this river may be improved into a much more useful navigation than it has hitherto been, especially for bulky articles, descending the stream.

The other route, by Hayes River, has been more carefully examined, and it is calculated, that by means of improvements now in the course of execution, the expence of carriage from Lake Winipic to Port Nelson may be reduced to £5 per ton at the fullest computation; and may

probably be accomplished for much less.*—To this must be added about per ton for the carriage across the Lake. When prices are high in the European markets, these charges would not be a bar to the exportation even of flour, beef, or pork, considering the extremely small expence of raising these articles upon the fertile plains.—Tallow may be procured on Red River in such abundance, and at so cheap a rate, that in any state of the markets in Europe, it will bear this expence of carriage.—Wool is an article on which a charge of £6 or £7 per ton, can never form a serious bar to exportation. A breed of the best merinos has already been introduced on Red River; and as the same breed has been naturalized in Sweden, and even in Iceland, there can be no doubt of their being soon inured to the climate. The plains that now feed the buffaloe may afford pasture to innumerable herds of sheep, and from the small quantity of snow on Red River, they will require but little provender in winter.†

The cultivation of Hemp and Flax may supply another valuable commodity, which can bear the burden of a considerable charge for carriage. This indeed is a cultivation, which cannot be expected to succeed extensively, except in an inland situation. The attempts to introduce it in our maritime

---

* See Appendix C. † See Appendix D.

Colonies have been unsuccessful, chiefly because the facility of exportation has induced the farmers to prefer more bulky commodities, of easier cultivation, and to which, from habit, they are more partial. There is the more reason to expect that hemp may be raised with success, as the soil and climate of Ossiniboia appear to bear a near resemblance to those of the Ukraine, and the other Russian provinces, from whence the chief supplies are now drawn. As soon as this branch of industry is properly understood by the settlers on Red River, it may be adviseable that the quit-rents to be reserved upon new allotments of land, should be made payable in hemp; and with some attention on the part of the Trustees, to encourage the cultivation, and to introduce the best methods, it is probable that, as the settlement advances, hemp will become one of its chief staples, and that the colony may thus become entitled to a large share of the protection and encouragement, which our Government have always been disposed to afford to this favourite national object.

After the subscription is closed, so as to ascertain the amount of the Fund, which is to be under the management of the Trustees, their first steps will be to establish an agent in those districts from whence the emigrants are chiefly to be expected; and another at the settlement; and to provide one or more ships, to be regularly employed between

Great Britain and Port Nelson, to carry out the settlers, and to bring back the produce of the settlement.

The Agent in Scotland will have to make arrangements with the emigrants, and to superintend their embarkation; to make a selection among those who may offer themselves, to receive as much of their passage money as they have the means of paying, and to take regular obligations for the balance.—The price of passage must be fixed at such a rate, as will afford a fair and full compensation for all expences which the conveyance of the emigrants will incur. This, as well as the number that can be received, must be determined by the Trustees from year to year, according to circumstances.

The Agent at the Settlement, will have to collect the debts due by the settlers, and for that purpose to receive from them any species of produce which can be realized at a European market, and will bring such a price, as to leave a surplus after paying all charges of conveyance, &c. &c. The amount of this surplus is the criterion for calculating the net original value of each species of produce at the settlement; according to which the agent will be directed to give credit to the settler for his payments. Every article will be valued at a fair price in money: but the whole transaction

may be carried on without the intervention of any circulating medium.

The produce so received must be prepared for the market, and conveyed to Port Nelson, to be shipped for England, by return of the vessels that bring out the annual accession of settlers. These arrangements must be carried on under the direction and superintendence of the principal agent at the settlement, with such assistance as experience may prove to be necessary.

In the infancy of the settlement, the ships that carry out the settlers, will be taken up for the homeward freight by the Hudson's Bay Company, to bring home timber, of which several cargoes may be supplied annually by one of their establishments on the Bay. The Company also require a considerable supply of provisions for their servants employed in the fur trade; and this will secure an advantageous market for the surplus produce of the settlement, so long as the quantity is too small to afford a sufficient homeward freight for a ship.

From the extreme facility of cultivation on Red River, such emigrants as have been alluded to, will have no hesitation to pay an annual quit-rent for their lands, at the rate of four or five pounds of clean hemp per acre, or an equivalent in wool, wheat, or other produce. No industrious settler

can find any difficulty in paying such a quit-rent: and it is in fact more advantageous to the settler to obtain clear lands at this rate, than a gratuitous present of a lot entirely covered with wood, on which four or five pounds per acre must be expended before the soil can even receive the rays of the sun; and where 15 or 20 years must elapse, before it can be disencumbered of the roots and stumps, and all the obstacles to cultivation, from which the land on Red River is by nature free. Nothing therefore but an adequate population is wanting to render these lands highly valuable to the proprietors.

By means of the arrangements, of which a sketch has been given, the conveyance of emigrants to this settlement may be effected at a moderate price, probably not materially different from that which must be paid for a passage to any other part of America; and when the superior advantages of the soil of Ossiniboia are more generally understood, the settlers will not be limited to those who require the aid of a loan.—At all events, the Fund vested in the hands of the Trustees will be the means of bringing a constant influx of people; and with the prospects arising from the natural increase of population, the value of land will soon rise in proportion to its natural advantages. There can be no doubt that in the course

of a few years the 500 acres, which the Trustees have a right to dispose of, out of every Township, may be occupied by at least five or six families; and in almost any part of America, where the population amounts to this proportion, on every 10,000 acres, it would be thought a great bargain to obtain a large tract, even of wood land, at one or two dollars per acre: nor is this extraordinary, as the purchaser may have the prospect of selling it off again in a few years, in small lots, at five, six, or eight dollars.

In these circumstances any Proprietor, who may not be inclined to take the trouble of parcelling out his lands to settlers, will have no difficulty in selling off his Township, entire and undivided, at such an advanced price, as will be an ample indemnification for the loss of some years' interest on his original Subscription. Those who are not anxious to realize their money soon, will find the value of their lands increasing continually upon their hands, without trouble or the necessity of any personal exertion. To persons who wish to lay up a provision for an infant family, so advantageous a mode of vesting money, without any risk, does not perhaps often occur.

# APPENDIX A.

An anonymous letter was inserted in the Quebec Mercury in October last, (1814), and copied into some of the English newspapers, stating that these people were not only treated with the utmost cruelty and injustice, but neglected, and left in a starving condition; and at the same time representing the climate of Red River, as precluding the possibility of their obtaining a subsistence by agriculture. This publication made no impression in Quebec or Montreal, where it was universally ascribed to a certain association of Fur-traders, who conceive this settlement to be prejudicial to their interest, and make no secret of their desire to obstruct its progress. As the motives of their hostility are not so well understood in England, it may be proper to enter into some detail, in order to place in a just light the circumstances which have been misrepresented; and when the true state of the fact is compared with the colouring which has been given to them, it will be seen how little attention is due to any farther allegations from the same quarter.

1. As to the settlers being neglected and left to starve, it may be sufficient to refer to the books of the

storekeeper (now in London) from which it appears, that between the 1st of Nov. 1812, and the 17th of March following, buffaloe beef, and venison of the moose and red deer, was served out to the settlers, to the amount of 29,217lb.; and as the number of people of all ages did not quite amount to one hundred, this makes an average of more than 2lb. per day of fresh meat; besides which several other articles were issued, particularly 4,967lb. of pemican, a preparation made by the Indians from the most nutritious parts of the meat. During the summer months, the settlers had always a superabundance of fish; but as it was distributed immediately from the hooks and nets, without being taken into store, no exact account was kept of the quantity. During the second winter, many of the settlers had a considerable supply of potatoes raised by themselves: besides which there was also a distribution of 24,000lb. of fresh meat, and 7,800lb. of pemican, the number of people being nearly the same as during the first winter.

These distributions were not made in daily rations; but from time to time, as the supplies came in, leaving to every family to manage it for themselves. A few thoughtless individuals, having wasted their allowance, while supplies were coming-in in superabundance, had but a scanty portion, during some of the intervals of comparative scarcity, to which a supply, dependent on the chace, must necessarily be subject. But the utmost hardship that arose from it was, that they had to part with some superfluities of dress to purchase meat from their more provident neighbours. This is the whole foundation of the tale of famine; and during the second winter, there was not even one day of scarcity to build a story upon.

2. With respect to the climate and soil of the Red River country, a multitude of authorities might be referred to, among which a few only shall be selected. The first is a letter from a gentleman, who has been for many years employed to manage a branch of the Fur Trade there, on account of the North-West Company of Montreal. He had received the strongest assurances of promotion in their service; but he judged it more advantageous to settle in the Colony lately formed in that country; and accordingly set out from Montreal, a few days after the date of the letter, with the intention of proceeding to Red River, and establishing himself there as a settler. He is brother to a very respectable manufacturer in Dean Street, Southwark.

SIR, *Montreal, 4th October*, 1814.

"In answer to your queries, concerning the climate and natural productions of Red River, I have the honour to present you with the following statement:

"I have resided thirteen years on Red River, and have always been in the habit of cultivating its soil; and from experience can take upon myself to say, that the climate is much the same as in Upper Canada; that is, the winters are of a shorter duration, and much milder, than those experienced at Quebec.

"Last summer I had water melons sown in the open ground on the 4th of June, which were ripe early in September; the largest weighing 13lbs. The musk melons and cucumbers were as large, and as well flavoured, as I ever met with at a fruit shop in London. Turnips sown on the 25th of June, were fit for the table about the middle of August. In October one of them

weighed 14¾lbs. One bushel of potatoes will produce from forty to fifty bushels.

"Wheat, barley, and rye I have only seen in small quantities; but I am of opinion, that no country will produce a more abundant crop, or with so little trouble, as on Red River.

"The natural produce of the soil, is wild flax, wild rice, cherries, pears, raspberries, strawberries, grapes, bush cranberries, currants, plums, crab apples, and different roots, which the Indians prepare as food. The plains likewise abound with medicinal herbs and roots. Salt springs are very common; and the sugar maple is to be found in every point.

"I need not mention the immense herds of buffaloe that graze on the plains, or the number of elk and moose deer that inhabit the woods.

"A line, with sixty hooks, set across any part of the river, will give you from sixty to a hundred catfish per day, each weighing from 9 to 25lbs. besides, sturgeon and many other fish peculiar to North America, may be taken in great abundance with nets. In the fall and spring, wild fowl of almost all descriptions are very common. The general price of a buffaloe, as large as an English ox, is from twenty to thirty rounds of ammunition, or from three-fourths to one pound of tobacco.

"But the real value of the country, is the fertility of its soil, and the facility that nature offers to the industrious of obtaining the reward of his labour. Here a luxuriant soil only asks the labour of the ploughman: not a root or stump requires to be taken up. THE LANDS ARE ALREADY CLEARED. The plains present you with a pasturage of many hundred miles in extent; and your horses and cows (except those required to be

milked), may be left out all winter. In truth, I know of no country that offers so many advantages: an exceeding wholesome climate, a fertile soil, fish, flesh, and fowls in abundance; and sugar and salt for the trouble of making them. In fact, all the necessaries and all the luxuries that are useful to mankind, are to be found there. Society only is wanting.

"I trust, my good Sir, you will pardon the cursory manner in which this is written. Being on the eve of my departure, I hope will plead an excuse; and believe me, though hastily written, the foregoing statements are strictly correct. I have the honour to be, &c. &c.

JOHN PRITCHARD."

---

The following letter is dated February 1812, from Mr. Donald M'Kay, who is now residing in the North of Scotland, and was formerly for many years employed in the Fur Trade, first from Canada, and afterwards in the service of the Hudson's Bay Company.

"In obedience to your Lordship's commands, I shall begin with the nature of the climate of the country you wish to describe, and Red River in particular, now called Stone Indian River.*

"I have wintered there four years, and during that period, found that it was far milder than in Canada. I have wintered in Montreal three years, and two at Point Claire, 18 miles above Montreal, and River St. Lawrence did not break open till April, and Red River breaks in March, and not half the snow falls on Red River: the soil is better than in Canada. Besides other advantages, Red River hath buffaloes, deers of different kinds, and

* More properly *Ossiniboyne* River, the original name, of which *Stone Indian* is an awkward translation.

in the fall and spring, geese, swans, wivies, ducks, heath hens, partridges, rabbits, &c. Sturgeon, and many other kinds of fish in the spring; the buffaloes do not come lower than Fort dès Eppinette, below Brandon House. Red River enters Lake Winipic at the south end on the west side, in lat. 53, long. 99; its course are S. W. to lat. 50, long. 109, when it turns to the N.W. at the bottom of the little Missouri, which course are S.W. till it comes to the east end of the Stony Mountain, and it is 24 miles to cross that hill to the great Missouri, which joins the Mississippi 45 miles above the Illinois and New Orleans, in the Gulf of Mexico. When I was there in 1780, I have seen tribes of Indians that never saw any European before, and some as fair and clean as some Europeans; the Shivetoons in particular, the Maudales, Soulliers, Flying Big-bellies, and some Snakes; their Horses are very beautiful and swift; who treated me with the utmost civility and hospitality. Every tribe hath a different language, but has interpreters all of them. The white beaver is in this River, and small crocodiles."

"Red River is almost clear from wood on the north side only along, the river itself about 40 miles from Lake Ouinipique or Winipeg; the south side are woods of different sort up to a great distance, and River au More (now called Red River,) joins Red River* 50 miles from the Lake, its source comes from the border of River St. Peter and Mississippi. There are famous fishing places at its bottom for barbot or catfish and sturgeon. Fort Dauphin has two rivers, River la Bish and Swan

* Of the two branches of Red River, the south is the largest and properly called Red River, though Mr. M'Kay, and some other of the traders, give that name to the west branch, or Ossiniboyne River.

River, the soil as about Lake Winipeg; these rivers enters into little Winipeg, opposite the Islands of St. Martin in the middle of great Winipeg, and River du Tremble opposite to that on the east side of the lake. The south end of the lake breaks open a month before the north end will. It is all woods about the lake, and the soil light in some places. The distance from York Fort to Winipeg is 350 miles, and 24 carrying places, some very trifling, and could be cleared with little trouble. But to enter minutely into a detail of the nature of this country, would need a whole volume, therefore shall conclude with having the honour of being, &c. &c.

DONALD M'KAY.

The above have been selected as the testimony of gentlemen who, being well acquainted with other parts of British America, are qualified to form a judgment of the comparative advantages of Ossiniboia. The same may be said of Miles M'Donell, Esq. Governor of the new colony on Red River, a gentleman who has passed most of his life in Upper Canada, and is well acquainted with the agriculture of all parts of that province. The subjoined extracts from his letters will serve not merely to give an idea of the country, but of the state of the settlement. The first letter is dated July, 1813.

"The Country exceeds any idea I had formed of its goodness. I am only astonished it has lain so long unsettled. With good management, the buffaloe in winter, and fish in summer, are sufficient to subsist any number of people until more certain supplies are got out of the ground. The River has amply fed us, and about 200 people in the neighbourhood, since the beginning of June. The land is most fertile, and the climate extraor-

dinarily healthy. The fever and ague, so prevalent in other parts of America, is here unknown. There is no complaint peculiar to the country." * * * *

"The country on the west side of the river, from above Deadman's River, throughout, is all a plain, with a belt of wood, on the river's edge, of irregular depth, from ¼ to 2 or 3 acres. In many places the plain reaches to the river-bank. On the east side it is well wooded; the wood consists of oak, elm, poplar, liard or cotton wood, ash, maple, &c. &c. There is no pine or cedar. Rivers falling into the Red River are generally wooded on both sides. * * * * * * *

"Our crops from bad culture, and the seed being old, do not promise great returns. The winter wheat being sown late, has totally failed, as also the summer wheat, pease, and English barley—of all these, there must be new seed sent us. The appearance of the potatoes, promises good returns.—The Indian corn has almost totally failed, from a great drought after planting."

The next extract is from a letter dated July 25, 1814.

"I arrived from York Fort 15th October last.—The harvest had been secured, which consisted chiefly of potatoes; the people had returns of 45 or 50 kegs for each one planted. I had only about 15 for one, owing to the carelessness of the servants in attending to the culture and digging of them." "The globe turnips were of an extraordinary size; the Swedish turnips also produced well. Our oats grew well; but from being late sown, part were overtaken by the frost before they were ripe. Wheat, pease, beans, Indian corn, rye, and hemp, entirely failed. The seed of these were old, and the few grains that came up were, from bad tillage, soon overcome by weeds." * * * * * * *

"There have been about seven kegs of barley, four of wheat, five or six of oats, a quantity of Indian corn and buck-wheat, and nearly three hundred kegs of potatoes put in the ground in our settlement:—the whole looks more luxuriant and promising:—very different from the crops of last year. We have had green pease, a fortnight ago. I ate new potatoes yesterday—size of walnuts; and some of our barley will be fit to reap a week hence. Of potatoes I expect we shall have as many as all the people now here and to come can consume; and I am in hopes there will be a sufficiency of seed grain, of the kinds we have, for all the people next year."

The following extracts are from the letters of two young men who have no acquaintance with other parts of America; but they are not destitute of interest, as they not only give some idea of the sentiments of the settlers, but may in some degree shew whether they are treated in the unjust and inhuman manner, which the Quebec libeller has represented:—Mr. John M'Leod writes to a friend in Scotland, under date July 22nd, 1814.

* * * * "This is a very agreeable department. I can take a ride, and visit the settlers at pleasure. I yesterday dined with Mr. and Mrs. M'Lean: he has his crops in as forward a state as ever I saw at home:—his barley and wheat are both in ear, and will be ripe in eight days hence: he had fifty returns of potatoes last year, and it promises no less this year. The soil is very productive and exuberant, but very much incommoded with flies in summer, and cold in winter. In summer I have seen the thermometer at 90° above the cypher, and in winter 35° below the cypher, 67° below the freezing point. These people that came out as settlers here has

encountered and surmounted many hardships, but they are getting on gradually. All the Lewis lads has been in the Colony's service. I saw B. Bethune the other day, and asked him if he intended going home this ship time:—he told me, if he got his wages a little augmented, he would serve another contract. In this country, people are esteemed according to their merits and good behaviour."

Mr. Archibald M'Donald writes, under date 24th July, 1814: "Coming up from York Fort, the young settlers behaved remarkably well, and soon acquired a pretty good idea of the falls and rapids we had often to ascend; came to Jack River in nineteen days, remained one day only, and then carried on through the Lake, but still was not able to get to the settlement till 21st June. On the morning of the following day got for the new settlers forty-two bushels of potatoes, to plant for themselves immediately, which was finished in the course of three days. Their own lands were now to be measured off, so as to get them settled without loss of time. Captain M'Donell very judiciously ordered their lands to be given them downwards from the settlement, along the west side of the river; but they, upon grounds that the upper part of the river must be better lands, would rather go farther up the country, not once thinking of the hazard they would run from the natives, by throwing themselves so far from any protection. But I am pretty well convinced the scheme did not originate with themselves, as they were highly taken up with the appearance of the country the very first day we arrived. However they agreed to take their allotments where first proposed. * * *

"They are now all settled in their respective lots, and most of their houses in a fair way of building—indeed

some were roofed.—It is their own advantage how soon they have them finished, as there is but few men left here when the captain and all the boats are off: and he wishes to give these people every encouragement, by giving them employment as often as he can. Captain M'Donell has ordered that ten or twelve horses that he has here, may be distributed among the new settlers whenever they wish for them. * * *

Of the productiveness of the soil of Red River, an idea may be formed from the following extract from the Journal kept, in the year 1813, at Brandon House, a trading establishment of the Hudson's Bay Company, where the cultivation of the ground is very far from being a principal object of attention.

"The little barley (three quarts) that was sown in our garden, 14th May, was cut down 15th August, and produced thirty-four gallons of clean corn:—the ground is the nineteenth part of an English acre."

N. B. This is in the proportion of ten quarters to the acre, or nearly seventeen bolls to the Scottish acre.

With a view to ascertain with more precision the nature of the climate of Red River, thermometers and other instruments were sent out four and five years ago, with instructions for taking an accurate series of observations. But from the remissness of the officers to whom they were intrusted, this intention has been very imperfectly executed; and the journals hitherto received are full of large blanks. Ever since the observations on the effects of extreme cold, which were made at Churchill Factory, by instructions from the Royal Society, thermometical observations have been made in many parts of Hudson's Bay; but the officers have directed their attention to the winter only; and their observations stop

precisely at the time, when to an agriculturist they are most interesting.

In searching for materials to supply this deficiency, the only document that has yet been discovered is a Journal of very old date, kept by Anthony Hendey, one of the first of the Company's servants, who explored the interior country beyond Lake Winipic. Though he had no instruments, his observations may perhaps convey as distinct an idea of the general nature of the climate, as if they had been made with more apparatus, and scientific precision.—He left York Fort on the 26th June, 1755, and on the 9th July arrived at Lake Winipic: he then proceeded westward up the Saskatchewan, on the 22nd passed Basquiau, on the 28th left the River and proceeded by land, and on the 13th of August entered the plains. He passed the winter among the Indians about latitude 53° or 54°, considerably to the north of Red River. He set out on his return in May; on the 3rd June he entered Lake Winipic, and on the 23rd arrived again at York Fort.—His Journal contains a daily notice of the state of the weather, which is here extracted in the form of a table; and every remark, which occurs in the Journal, to throw any light on the general state of the season is subjoined as a note at the bottom of the page.

| 1755 | Wind. | Weather. | 1755 | Wind. | Weather. | |
|---|---|---|---|---|---|---|
| June 26 | W. | fine | Aug. 9 | S.W. | moderate | |
| 27 | W. | fine | 10 | N. | fine | |
| 28 | S. & S.W. | fine | 11 | W. | fine | |
| 29 | N | fine | 12 | W. | fine | * |
| 30 | N. | fine | 13 | W. | strong gale | |
| July 1 | N.W. | rain and thunder | 14 | W. | moderate | |
| 2 | N.W. | fine | 15 | N.E. | fine | |
| 3 | S. | fine | 16 | W. | fine | |
| 4 | N.W. | fine | 17 | S.W. | fine | |
| 5 | W.N.W. | fine | 18 | N.W. | fine | |
| 6 | E. by N. | fine | 19 | W. | fine | |
| 7 | E. by N. | fine | 20 | W. | fine | |
| 8 | S.W. | fine | 21 | N.W. | fine | † |
| 9 | S.W. | fine | 22 | N.E. | fine | |
| 10 | N.W. | fine | 23 | N.E. | fine | |
| 11 | N. | wind and rain | 24 | N.W. by N. | fine | |
| 12 | S.W. | continuance of rain | 25 | W. | fine | |
| 13 | S. | moderate | 26 | N.W. | fine | |
| 14 | S.W. | fine | 27 | S. | fine | |
| 15 | E. | fine | 28 | N.W. | blowing weather | |
| 16 | E. | fine | 29 | W. | fine | |
| 17 | S.W. | fine | 30 | W. | fine | |
| 18 | S.W. by S. | fine | 31 | N.W. by N. | blowing rainy | |
| 19 | S.W. by S. | fine | Sept. 1 | N.W. | cold raw | ‡ |
| 20 | N.E. | fine | 2 | N.W. | fine | |
| 21 | W. | fine | 3 | N.W. | blowing rainy | |
| 22 | W. | fine | 4 | N E. | fine | |
| 23 | S.W. | blowing strong, with rain | 5 | W. | fine | |
| | | | 6 | W | fine | |
| 24 | S. | fine | 7 | W. | fine | |
| 25 | S. | fine | 8 | S. | cloudy, with rain at times | |
| 26 | S. | fine | | | | |
| 27 | S. | fine | 9 | W. | fine | |
| 28 | S.W. | fine | 10 | N.W. | fine | |
| 29 | N.W. | fine | 11 | N.W. | fine | |
| 30 | S.W. by S. | fine | 12 | N.E. | cold raw | |
| 31 | N.W. | fine | 13 | W. | fine | |
| Aug. 1 | N.W. | fine | 14 | S W. | fine | |
| 2 | N E. | fine | 15 | S.W. | fine | |
| 3 | S | sultry hot | 16 | W. | rainy | |
| 4 | N.W. | fine | 17 | W. | rainy | |
| 5 | S. | fine | 18 | N.W. | rainy | |
| 6 | calm. | sultry | 19 | N.W. | fine | |
| 7 | S. | hot sultry | 20 | N.W. | fine | |
| 8 | N.W. | strong gale, with thunder, lightning and rain. | 21 | S. | fine | |
| | | | 22 | W. | fine | |
| | | | 23 | N.W. | fine | § |

* Aug. 12.—Hazle and cherry trees loaded with ripe fruit.
† Aug. 21.—Many ripe berries and cherries.
‡ Sept 1.—Indians living on berries.
§ Sept. 23.—I cannot describe the fineness of the weather, and the pleasant country I am now in.

| 1755 | Wind. | Weather. | 1755 | Wind. | Weather. |
|---|---|---|---|---|---|
| Sep. 24 | N.W. | fine | Nov. 10 | N. to W. | frosty |
| 25 | W. | fine | 11 | N. to W. | frosty |
| 26 | W. by N. | fine | 12 | N.W | fine § |
| 27 | W. | fine | 13 | N. | moderate freezing |
| 28 | N. by W. | fine | 14 | N | ditto ‖ |
| 29 | W. by N. | fine | 15 | N. | clear frosty |
| 30 | S.W. | fine | 16 | from N.W. to N. | moderate freezing |
| Oct. 1 | S.E. | fine | 17 | | |
| 2 | S.E. | fine | 18 | | |
| 3 | N. by E. | fine | 19 | | |
| 4 | N.E. | fine | 20 | | |
| 5 | N. | fine | 21 | N.E. | clear frosty |
| 6 | W. | fine | 22 | variable | warm rainy weather |
| 7 | N.E. by N. | fine | 23 | | |
| 8 | S.W. by S. | fine | 24 | | |
| 9 | N.E. | fine | 25 | | |
| 10 | N. | fine | 26 | | ¶ |
| 11 | N. | fine | 27 | S.W. | fine |
| 12 | W. | fine | 28 | S.W. | fine pleasant summer weather |
| 13 | W. | fine | 29 | | |
| 14 | N.E. | fine | 30 | | |
| 15 | S.E. | fine * | Dec. 1 | N.W to N. | blowing, snowing, freezing at times |
| 16 | W. | fine | 2 | | |
| 17 | N.W. | frosty | 3 | | |
| 18 | N.W. | a gentle frost | 4 | | |
| 19 | N.W. | snow at times | 5 | | |
| 20 | N.W. | fine | 6 | | |
| 21 | W. | fine | 7 | | |
| 22 | W. | fine | 8 | | |
| 23 | S.W. | fine | 9 | | |
| 24 | N.E. | fine † | 10 | N.W. | freezing ** |
| 25 | W.S.W. | fine | 11 | S. | warm, with rain at times |
| 26 | W. | hail at times | 12 | | |
| 27 | W. by S. | fine | 13 | | |
| 28 | W. by S | fine | 14 | | |
| 29 | N.W. | fine | 15 | | †† |
| 30 | S.W. | fine | 16 | S.W. | fine |
| 31 | S.W. | fine | 17 | S.W. by S. to N.W. | fine, warm |
| Nov. 1 | S.W. | fine ‡ | 18 | | |
| 2 | S.W. | fine | 19 | W. | fine |
| 3 | S.W. | pleasant | 20 | W. | fine |
| 4 | S.W. | pleasant | 21 | N.W. by N. and S. | fine |
| 5 | N.W. | cold freezing | 22 | | |
| 6 | N.W. | heavy gale with rain and hail | 23 | W. by S. | fine |
| 7 | N. | moderate | 24 | S. and W. | frosty nights, warm days |
| 8 | N.E. | rain & sleet at times | 25 | | |
| 9 | N. | frosty | 26 | | |

* Oct. 15.—Froze a little in the night.
† Oct. 24.—It freezes in the nights, and thaws in the days
‡ Nov. 1.—A gentle frost in the night, gone by the middle of the day.
§ Nov. 12.—Freezes in the night, and thaws in the day.
‖ Nov. 14.—Women making clothing for cold weather.
¶ Nov. 26.—Ice almost gone.
** Dec. 10.—Ice neither bears nor breaks down.
†† Dec. 15.—Snow and ice almost gone.

| 1756 | Wind. | Weather. | 1756 | Wind. | Weather. |
|---|---|---|---|---|---|
| Dec. 27 | S. and W. | frosty night, warm day | Feb. 4 | N. | moderate |
| 28 | W. to N. | blowing, snowing, freezing | 5 | S. & S.W. | clear sharp |
| 29 | | | 6 | | |
| 30 | | | 7 | | |
| 31 | | | 8 | | |
| Jan. 1 | | | 9 | | |
| 2 | | | 10 | S.W. | warm ‡ |
| 3 | | | 11 | S. | fresh gale, with drift and snow |
| 4 | | | 12 | S. | moderate |
| 5 | W. by N. | moderate freezing | 13 | S.W. | moderate |
| 6 | W. by S. | blowing snowing | 14 | W. | moderate |
| 7 | S. | sharp freezing | 15 | S. and S.W. | moderate |
| 8 | W. | clear moderate | 16 | | |
| 9 | N.E. | close snowing | 17 | S.W. | moderate |
| 10 | N. and N.W. | cold freezing * | 18 | S.W. by S. and S.W. | variable |
| 11 | | | 19 | | |
| 12 | N.W. | cold | 20 | S.W. | snowy |
| 13 | W. to N.W. | moderate freezing | 21 | W. by N. | fine |
| 14 | | | 22 | N.W. | moderate |
| 15 | | | 23 | W. | moderate |
| 16 | N.W. | moderate | 24 | W. | thawing |
| 17 | W. | blowing freezing | 25 | S.W. | fine |
| 18 | N.E. to N.W. | variable † | 26 | S.W. | fine |
| 19 | | | 27 | W. | moderate |
| 20 | | | 28 | W. to N.E. | snow at times |
| 21 | | | Mar. 1 | | |
| 22 | W. | moderate | 2 | S.E. | moderate |
| 23 | from W. by S. to N. | moderate freezing, with snow at times | 3 | S.E. | moderate |
| 24 | | | 4 | N.W. | fine § |
| 25 | | | 5 | S.W. | fine ‖ |
| 26 | | | * | * * * | * * * ¶ |
| 27 | | | Apr. 23 | S. | rain at times ** |
| 28 | W. | fine | 24 | S. | very warm †† |
| 29 | N.W. | moderate | 25 | | |
| 30 | N.E. | fine | 26 | | |
| 31 | S. | fine | 27 | | fine |
| Feb. 1 | S.W. to N.N. | fresh gales with snow at times | 28 | N.W. | fine |
| 2 | | | 29 | S. | fine |
| 3 | | | 30 | S. | fine |
| | | | May 1 | S. | fine |

* Jan. 11.—The winter is now set in good earnest.

† Jan. 18 to 21.—I observe the bad weather is of no continuance, and the cold is nothing like so severe as at York Fort. I have had nothing on my feet yet but a flannel sock, and buffaloe-skin shoes with the hair inwards.

‡ Feb. 10.—Walked in snow shoes for the first time.

§ March 4.—Travelled on the river: the water running on the ice.

‖ March 5.—It thaws so much, that our sledges are in the water all the way.

¶ March 6 to April 22.—Weather for the most part moderate, and when we had blowing weather it was of no continuance.

By the middle of April the snow all gone, and the creeks and ponds broken open.

** April 23.—River broke open.

†† April 24 to 27.—Musquetoes plenty, many grey geese and swans flying.

| 1756 | Wind. | Weather. | 1756 | Wind. | Weather. |
|---|---|---|---|---|---|
| May 2 | S. | fine | May 25 | S.E. | rain at times |
| 3 | S. | pleasant | 26 | N.E. by N. | fine moderate |
| 4 | N. | fine | 27 | S.W. | fine |
| 5 | S. | fine | 28 | N.W. | rain, thunder and lightning |
| 6 | S. | rain at times | | | |
| 7 | S.E. | fine | 29 | S. | fine |
| 8 | N.W. | fine | 30 | S. | warm |
| 9 | N. | moderate | 31 | S. by W. | fine |
| 10 | W. | fine | June 1 | N.E. | blowed strong |
| 11 | S. | fine | 2 | S. | fine |
| 12 | S. | fine | 3 | N.E. | fine |
| 13 | N.W. | fine | 4 | N.E. by N. | strong gale |
| 14 | N E. | fine | 5 | S.W. | fine |
| 15 | S.W. | fine | 6 | N.W. | fresh gale |
| 16 | N.W. | clear blowing | 7 | S.W. | fine |
| 17 | N.E. | fine | 8 | S.W. | fine |
| 18 | S.E. | fine | 9 | N.E. | rain at times |
| 19 | N.E. | close | 10 | S. | small rain |
| 20 | S.E. | fine | 11 | S. | fine |
| 21 | S.E. | fine | 12 | S. | fine |
| 22 | S.E. | fine | 13 | N.E. | foggy |
| 23 | S.E. | fine | 14 | E. | fine |
| 24 | S.E. | rain at times | 15 | N. | fine |

Though none of the more recent journals kept in the interior, give so connected a view of the seasons for a whole year, as Mr. Hendey's, yet a number of interesting particulars may be collected from them occasionally.

Mr. Peter Fidler, who wintered at Swan River, in latitude 52° 20′, in the year 1795-6, observed that the river froze over on the 8th November, and broke up again on the 14th April. The snow was all melted before the 10th. Swans, ducks, &c. appeared on the 3rd. From the 15th to the 30th of April, the average of the thermometer, observed about the middle of the day, was 57°; and it was occasionally as high as 72° or 73°. The same gentleman another year, in descending Ossiniboyne River, observed on the 2nd of May, when in latitude 50° 30′ that all the trees, except the oaks, were nearly covered with foliage. In 1814, at Brandon House, in latitude 49° 42′, he observes as a proof of a remarkably late spring, that no leaves had appeared on

the 4th of May. The ice did not break up that season till the 21st of April. On the 23rd June of the same year, Mr. Fidler observed, that the potatoes were in flower, and the barley shot into ear. At Brandon House maple sugar is usually made towards the end of March, and about the middle of that month the snow is generally melting fast, and the ground bare in many places.

In 1812, Mr. Edwards, on the route from York Fort to Red River, observed the thermometer in the mornings and evenings in the month of July to be generally from 55° to 65°: on three days only it was a little below 50°. He did not make any observations in the middle of the day. In August, the thermometer observed at the same hours, was in general from 60° to 75°, and hardly ever so low as 50°.—In September, the morning and evening observations were in general from 50° to 65°;—once as low as 42°. In the middle of the day, about one or two o'clock, it was often 80°.

At the Settlement on Red River during the first half of October, the thermometer in the morning and evening was generally from 40° to 50°: on the 13th in the morning, it was as low as 31°: during this period, it was seldom above 60°, even at the mid-day observation. In the latter part of this month, the range of the thermometer was from 30° to 40°. On the 31st was the first severe frost; and on the 5th of November the river was frozen over.

The period of its breaking up the following spring is not noticed; but from other documents it is known that on the 18th April boats were navigating the river. Mr. Edwards's Journal closes on the 17th of May; and during the last fortnight of his observations the average of the thermometer at mid-day is 75°: for the preceding fortnight, viz. in the latter part of April it is 53°. On

the 11th May, it is remarked that the trees are looking green.

In winter the frost is very intense, so that after a continuance of North or North-West winds, it is sometimes so cold that at night even mercury is frozen. This is very rare on Red River; at Swan River, in winter 1795-6, it happened three times. It is observed however, that the most intense frost is generally accompanied by a calm, or very light airs, so that the cold is not so much felt as might be expected from the state of the thermometer. Even in January, men travel considerable distances through the wilderness, and sleep in the open air without danger. The weather is generally of a cheerful and pleasant character. By Mr. Fidler's observations in winter 1795-6, during a period of 148 days from November to March, 76 days were clear uninterrupted sunshine, nd 44 days fair, but the sky more or less clouded: the days on which snow or rain fell, including every shower however slight, amounted to 28. In winter 1813-14, he observed in like manner 25 days, on which more or less of snow or rain fell. He observed 10 days of drifting winds during the former winter, and 15 during the latter. Mr. Fidler always measured the snow minutely, when new fallen, and in these two winters he scarcely ever records a fall of more than two or three inches. The different falls added together, for the whole of winter 1795-6 amount to 24 inches; and for 1813-14 to 28 inches. On the 5th March, 1814, he observed the snow to lie on a level 15 inches deep: about the same period the ice on the river measured 20 inches thick. To those who are acquainted only with the climate of England, this may appear a great thickness; but in any part of Germany it would be thought moderate.

# APPENDIX C.

The Hudson's Bay Company are engaged in establishing a chain of intermediate posts, between Port Nelson and Lake Winipic; from which two great advantages will arise. It will admit of a communication being carried on in winter, by means of sledges drawn by horses, in the manner practised in Canada, and in all the northern countries of Europe. It will also admit of the navigation in summer being managed in a more œconomical manner. At present the boats carry but a small load, because there is one part of the river much interrupted by falls and rapids, where small and light boats are the only description that can be used; but this is only in a very small proportion of the whole tract; in other parts there are extensive lakes which would admit of large barges, and rivers of a smooth and equal current, where boats of considerable burden might easily be used. With an establishment of men stationed at these intermediate posts, various different kinds of craft may be used in different parts of the route, and the cargo may be removed from one boat to another, as circumstances render it convenient. The same men may be employed in winter to drive sledges, and convey goods from stage to stage along the same route.

Of the practicability of this method, the following letter contains the testimony of a gentleman of the first mercantile abilities, who, during a residence of many

years in Upper Canada, has had ample experience on the subject:—

"In answer to your Lordship's queries respecting the practicability of conveying goods by sledges in winter at a moderate expence, I have to observe, that recent experience in Canada has fully ascertained this point. I have known many instances of goods being brought in that way from Montreal to Niagara and Detroit. These sledges are generally drawn by two horses, and loaded with from 12 to 15 cwt. besides the driver; and they travel at the rate of from 35 to 45 miles per day. The road between Kingston and Niagara is frequently rough and hilly; and I am of opinion, that on a level road, or along the ice of a river or lake, a pair of horses could easily draw a load of 15 cwt. at the rate of 45 miles per day, for a continuance. If the business is to be carried on upon a large scale, the plan of having relays of horses, stationed at the distance of a day's journey apart, will be the most adviseable: these stages need not be nearer than 40 miles. Every driver ought to have a third horse, both as a reserve in case of accidents, and to enable him to give rest to every horse occasionally. With this there can be no doubt of his being able to make three trips per week, carrying about 14 cwt. to the next stage, and bringing back an equal weight each time.

I have the honour to be, &c.

THOMAS CLARK."

The distance from York Fort to Lake Winipic, measured along all the bends of the rivers, is nearly 400 English miles. If, according to Mr. Clark's computation, this be divided into ten stages of forty miles each, an establishment of seventy men, will allow seven to

each stage; and at three trips per week they may carry twenty-one loads of 14 cwt. so that the whole establishment should convey about 15 tons up from York Fort to Lake Winipic, and 15 tons down, for every week of winter weather adapted for this occupation. In the climate of York Fort, at least twenty weeks may be reckoned of clear and steady frost, after making every reasonable allowance for occasional interruptions from heavy falls of snow, drifts, or other weather of unusual severity. At this rate the winter's work will amount to 300 tons conveyed each way. With respect to the summer, in has been calculated and by a very accurate and intelligent officer of the Hudson's Bay Company, that seventy men, employed in navigating boats of a suitable description, may, at a moderate computation, carry 120 tons from York Fort to Lake Winipic, in the course of the summer, and bring down an equal quantity.

The expence of this establishment will consist chiefly in the wages of the men employed. Horses can be procured at a very low rate from the Indians of the plains, who possess great numbers. There are many at the trading posts of the Hudson's Bay Company, purchased by the common labourers for their own use or amusement; and it is thought a high price when 30 or 40s. is paid for a horse. During the summer there is hardly any work for the horses, which may therefore be turned out to pasture with very little attendance; provender for the winter may be raised by the labour of the men who are to drive them. Though the principal part of the men's time has been accounted for, there is an intermediate season, which is not reckoned upon, either for the boat navigation, or for the sledging in winter. For several weeks in spring, after the ground

is thawed, navigation cannot be carried on, upon account of the floating ice, which encumbers the lakes. In autumn also, there is a period, after the navigation is interrupted by the commencement of the winter frosts, and before they are sufficiently confirmed, for the ice to be safely trusted to. These intervals, may amount to ten or twelve weeks, on the whole; and though part of this time will be required for collecting fire wood, and other domestic objects, a part of it may certainly be appropriated to the cultivation of the ground. It is not proposed to attempt that of grain, which may be brought from the settlements in the interior, at a cheaper rate than it could be raised in the country below Lake Winipic, where the soil and climate are not so favourable. But there can be no difficulty in raising a sufficiency of potatoes, parsnips, turnips, and other such articles, for the support of cattle in winter. Oats may be sown to be mown before they are quite ripe, and given to the horses in the shape of hay. The natural meadows, which are found in some parts of the route, will afford a very easy supply of provender; and after a sufficiency of ground has been cleared, hay may be procured in all parts. By one or other of these articles of winter food, there can be no doubt that the horses may be maintained without any very great sacrifice of the men's labour.—Each man will have to provide the winter provender of three horses, for which purpose it can hardly be thought necessary to allow more than one third of his summer's work, over and above the time which may be spared in spring and autumn.—Upon this supposition, the quantity of carriage performed in summer, may be reduced from 120 tons to 80; and that of the whole year to 380 tons: but of the downward car-

riage about 40 tons may probably consist of provisions brought from the interior, for the maintenance of the men employed.

The prime cost of these provisions will be very small. Supposing that grain may be raised on Red River for the prices that are usually paid in time of peace in Upper Canada or the Genesee country, the quantity required for a yearly ration will hardly exceed £3 per man. From the abundance and cheapness of buffaloe meat, (as stated by Mr. Pritchard, Appendix A.) no great additional sum will be needed for supplying a ration of animal food. The grain may be sent by water carriage to the Depot at the outlet of Lake Winipic. The beef should be brought in winter frozen, by a continuation of the sledge road; and as the distance from the plains to the Depot is about half of that from York Fort, the expence may probably be in the same proportion, between £2 and £3 per ton. A very ample yearly ration of all kinds of provisions will not exceed 10 cwt. per man, or 35 tons for 70; so that even if the whole were to be brought by sledges, the expense of carriage to the Depot would only be about £100; and this added to the prime cost will not raise the total expence of these provisions to more than £4 or £500.

Supposing the wages of the men employed to be at the same rate as are commonly paid by the Hudson's Bay Company, they may amount to £1,600, viz. Fifty ordinary labourers, at £20 per annum; ten steersmen and overseers, at £35; and ten at £25; making the whole expence about £2000, besides an annual supply of horses to keep up the stock, the annual tear and ware of boats, and their apparatus, &c. &c. These items it would be difficult at present to ascertain with minute

accuracy, but it is not probable that they would exceed 4 or £500; so that the expence of conveying 340 tons down from Lake Winipic and 380 tons up, may be about £2500, *i. e.* about £3. 10s. per ton. In reckoning it therefore at £5 per ton, a sufficient latitude has been allowed to cover very considerable errors of calculation.

In estimating the wages at the rate now currently paid by the Hudson's Bay Company, the calculation certainly is not stated in the most favourable view that it might admit. These are the wages paid to labourers, who are sent out under indenture for a period of years, and who have no view but to return home after saving a little money. From the nature of the ordinary occupations of the Fur Trade, hardly any labourers have hitherto been sent out by the Company, except single men: but the proposed employment is perfectly well suited for married men with families. Many such, who are desirous of emigrating to Red River, and who have not adequate pecuniary means, might be found willing to engage for a term of years, at wages very much below those usually paid by the Hudson's Bay Company; and though an additional expence must be incurred for the maintenance of their families, this would be far from overbalancing the diminution of the money wages, when the settlement is so far advanced as to furnish an abundant and cheap supply of provisions.

# APPENDIX D.

The boundless extent of pasturage in the plains of Red River may afford a source of immense profit to sheep farmers, in the progressive increase of their stock, which may be multiplied in a rapid manner, by keeping all the ewes as long as they will continue to breed. It is well known that ewes may bear lambs for at least five or six years, before they are too old; though in Europe, where the land is already fully stocked, they are generally sold to the butcher at a much earlier age. But in a situation where the extent of pasture is superabundant, and where the object of the farmer must be wool rather than mutton, his sheep ought to be preserved as long as nature will allow. From the subjoined tables it will be seen that a farmer, beginning with one hundred ewes, and preserving all their produce, may, at the end of ten years, be possessed of a flock from which he may shear annually from twelve to eighteen hundred fleeces, and that this stock may still go on, doubling their numbers in the course of every three or four years.

As the settlers may be furnished with rams of the finest breed of merinos, and a supply may be procured

of ewes of the second or third cross, there can be no doubt that their wool, when thoroughly washed, will be worth in London at least four or five shillings per pound, and the fleeces may be expected to weigh on an average about three pounds of clean wool.

For the expenses of bringing the wool to market and realizing its value, it may be necessary to deduct nearly one shilling per lb. A bag of wool, containing 200lbs. must be reckoned as half a ton by measurement. This quantity of Spanish wool is packed into a bulk of 22 cubic feet with the help of a very moderate degree of compression; but there can be no doubt that by more powerful means, the bulk of the package might be still farther reduced: in the opinion of a person of great experience such a bag might easily be compressed into the space of 15 feet. It is therefore a full allowance to reckon it as half a ton. Allowing a shilling per lb. or £10 per bag; and supposing the expenses of carriage from Red River to the sea, and of freight to London to amount together to £7 (*i. e.* £14 per ton,) there will remain £3 per bag to cover other mercantile charges. It will be seen in Appendix C. that the inland carriage may be effected for £6 or £7 per ton; and £7 is a fair allowance for freight; for vessels have been chartered for the voyage to Hudson's Bay and back to London, at a freight of from £9 to £10 per ton, of which about one-third may be defrayed by the outward cargo.

Allowing a shilling per lb. for all expenses on the wool, there will still remain ten or twelve shillings per fleece as the net value to the farmer: and it cannot require much argument to shew, that this will afford a very ample remuneration for his expenses, when he has nothing or a mere trifle to pay for his land.

In calculating the progressive increase of a flock of sheep, the only point of any difficulty is to judge what allowance ought to be made for casual losses by disease or accident; which will be very different, according to the mode of management, and the degree of attention on the part of the farmer. If the sheep are to remain exposed to the winter storms, as in the mountains of Scotland, and to gather their subsistence from the herbage beneath the snow, considerable losses must be expected; but if a sufficient supply of winter provender be laid up, and cots be erected as a refuge for the sheep in severe weather, the losses will be proportionably very moderate. While the numbers of the flock are yet small, it will be very easy for the farmer to pay this degree of attention to them. It may require experience to determine whether this management can be continued advantageously with a numerous flock. If it should be judged too expensive, the sheep may certainly find their subsistence in the plains without any artificial shelter. We have the testimony of Mr. Pritchard (Appendix C.) that cattle may be kept in that manner, and it is known that the Ossiniboyne Indians keep numbers of horses for which no provender is ever laid up. There is no reason to suppose, that in this mode of management, a flock of sheep would sustain greater losses than in the mountains of Scotland. There is indeed a greater intensity of frost in Ossiniboia; but it is seldom from the direct effects of cold that sheep perish, and there is no animal, even of the arctic regions, that is better clothed than a merino sheep. The chief danger arises from drifting snows, which are more frequent and severe in the mountains of Scotland, than they appear to be in the level plains of Red River; and the sheep are far more exposed to danger from this cause in a barren moun-

tainous pasture, where they must be allowed to wander singly over a great space of ground, than in a situation where the herbage is more abundant, and where the flock may therefore be concentrated under the eye of the shepherd.

It will indeed be necessary in Ossiniboia, that the sheep should be so concentrated at all seasons of the year, on account of the necessity of protecting them from the wolf. They cannot be allowed to wander by themselves, as in our mode of management, but must be kept together and watched by shepherds, as they are in those parts of the continent of Europe, where wolves abound, and indeed in almost every part of the world, except Great Britain. This circumstance requires a greater degree of attendance than in our sheep farms. In Spain a shepherd is allowed to every 200 sheep; but this attendance serves not only to protect the flock from the wolf, but also to obviate other accidents, to which they are exposed when they are scattered among our mountains. If therefore a full allowance of shepherds be employed, it is probable that the casual losses of a flock in Ossiniboia will be less than in a mountain flock in this country; but even if the loss be reckoned at the highest rate, that is warranted by experience in Scotland, the result of the calculation will be sufficiently encouraging.

In very exposed and unfavourable situations, it is understood that an attentive farmer may expect to lose from 5 to 10 per cent. of his young sheep, viz. the lambs of the preceding season, and from 2 to 5 per cent. of other sheep. The subjoined tables are calculated on these data. In the first, the loss is taken at the highest rate, and is supposed to be 10 per cent. annually on the young sheep, and 5 per cent. on the rest of the flock.

In the second table, the loss is calculated at 6 per cent. on the young sheep, and 3 per cent. on the rest.

It will be observed, that by one of these calculations the stock doubles in about three years, and by the most unfavourable in four years. The former, however, is far from shewing the greatest degree of rapidity with which a sheep stock may be made to multiply. By the care and attention which may be given to a small parcel of sheep, the losses may be kept much lower than in the most favourable of these calculations. If plenty of succulent food be provided for the aged ewes, they may continue to breed for some years longer; and by a careful preservation of the twins, a greater proportion of lambs may be reared. But as these refined attentions cannot easily be applied on a large scale, they are not reckoned upon. The subjoined tables are calculated on data which may be realized with a numerous flock, by any farmer of competent skill and attention to his business.

In both tables, it is supposed that the farmer begins with a stock of one hundred ewes, all young; and that a lamb is annually reared from each ewe, the twins being in sufficient numbers to balance the lambs which may be lost in the yeaning season. It is supposed that the ewe lambs may be brought in to have lambs again at the age of two years; and that every ewe is to breed for five seasons before it is put off as too old. In the second table, one-half of the ewes are supposed to breed for six seasons. The first column shews the number of ewes that may be expected to bring lambs each year; the second, those which have bred the full number of years, and must therefore be deducted from the breeding stock before next season. This is found by taking the number of gimmers which have been brought into

the breeding stock in the fourth preceding year, and deducting the supposed annual loss during the intermediate seasons. The third column shews the amount of casual losses, which may be expected among the other breeding ewes, and is calculated by deducting the sum in the second column from that in the first, and applying to the remainder the assumed proportion of loss. The fourth column shews the number of ewes which may be expected to survive and to have lambs the next ensuing season; calculated by adding together the sums in the second and third columns, and deducting the amount from the first. The fifth column shews the number of ewe lambs which may be expected to be reared each year, being one-half of the number of ewes in the first column. The sixth column shews the amount of losses which may be expected among these ewe lambs, according to the assumed proportion. This sum being deducted from that in the fifth column, gives the number which may be expected to survive the winter, and to remain next year under the denomination of *gimmers*, or yearling ewes: this number appears in the seventh column, but in the line immediately below that in which they are stated as lambs. The eighth column shews the loss which may be expected among these gimmers during the second winter; and this being deducted gives the number of young ewes which may be expected to produce lambs the ensuing year, as in the ninth column. This number, added to that of old ewes in the fourth column, gives the total number of ewes which are to breed next season, as in the following line under the first column.

The tenth column shews the total number of fleeces which may be shorn from the whole flock. It is formed by adding the number of gimmers in the seventh

column to that of the breeding ewes in the first, and doubling the sum; on the supposition that the wedders will be equal in number to the ewes. This will be the case, if they also are kept to the full age which nature will allow; which will probably be done in a situation where wool must be the principal object.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Year. | Breeding Ewes. | Old Ewes to go off | Loss on the rest. | Remain to breed next Year. | Ewe Lambs reared. | Loss on Ewe Lambs. | Gimmers. | Loss on Gimmers. | Gimmers to breed next Year. | Fleeces. |
| 1st | 100 | 0 | 5 | 95 | 50 | 5 | 0 | 0 | 0 | 100 |
| 2nd | 95 | 0 | 5 | 90 | 47 | 5 | 45 | 3 | 42 | 185 |
| 3rd | 132 | 0 | 7 | 125 | 66 | 6 | 42 | 2 | 40 | |
| 4th | 165 | 0 | 8 | 157 | 82 | 8 | 60 | 3 | 57 | |
| 5th | 214 | 81 | 7 | 126 | 107 | 11 | 74 | 4 | 70 | |
| 6th | 196 | 0 | 10 | 186 | 98 | 10 | 96 | 5 | 91 | 584 |
| 7th | 277 | 34 | 12 | 231 | 138 | 14 | 88 | 4 | 84 | 730 |
| 8th | 315 | 32 | 14 | 269 | 157 | 16 | 124 | 6 | 118 | 878 |
| 9th | 387 | 46 | 17 | 324 | 193 | 20 | 141 | 7 | 134 | 1,056 |
| 10th | 458 | 56 | 20 | 382 | 229 | 23 | 173 | 9 | 164 | 1,262 |
| 11th | 546 | 74 | 24 | 448 | 273 | 27 | 206 | 10 | 196 | 1,504 |
| 12th | 644 | 68 | 29 | 547 | 322 | 32 | 246 | 12 | 234 | 1,780 |

Loss on Lambs..... 10 per Cent.
—— on other Sheep..... 5 per Cent.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Year. | Breeding Ewes. | Old Ewes to go off. | Loss on the rest. | Remain to breed next Year. | Ewe Lambs reared. | Loss on Ewe Lambs. | Gimmers. | Loss on Gimmers. | Gimmers to be ed next Year. | Fleeces. |
| 1st | 100 | 0 | 3 | 97 | 50 | 3 | 0 | 0 | 0 | 100 |
| 2nd | 97 | 0 | 3 | 94 | 48 | 3 | 47 | 2 | 45 | 191 |
| 3rd | 139 | 0 | 4 | 135 | 69 | 4 | 45 | 1 | 44 | |
| 4th | 179 | 0 | 5 | 174 | 90 | 5 | 65 | 2 | 63 | |
| 5th | 237 | 44 | 6 | 187 | 116 | 7 | 85 | 3 | 82 | |
| 6th | 269 | 43 | 7 | 219 | 135 | 8 | 109 | 3 | 106 | |
| 7th | 325 | 20 | 9 | 296 | 162 | 10 | 127 | 4 | 123 | 904 |
| 8th | 419 | 38 | 11 | 370 | 220 | 13 | 152 | 5 | 147 | 1,142 |
| 9th | 517 | 45 | 14 | 458 | 258 | 14 | 207 | 6 | 201 | 1,448 |
| 10th | 659 | 60 | 18 | 581 | 330 | 20 | 244 | 7 | 237 | 1,806 |
| 11th | 818 | 79 | 22 | 717 | 409 | 25 | 310 | 9 | 301 | 2,256 |
| 12th | 1,018 | | | | 509 | | 384 | | | 2,804 |

Loss on Lambs.....6 per Cent.
—— on other Sheep .....3 per Cent.

FINIS.