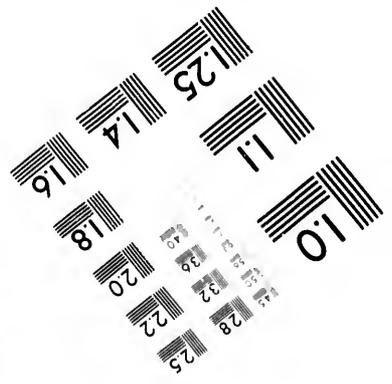
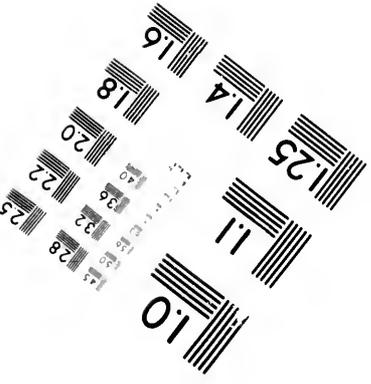
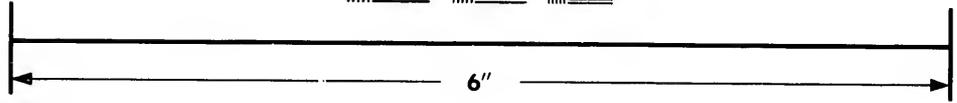
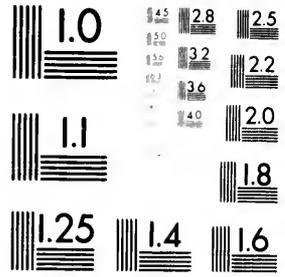


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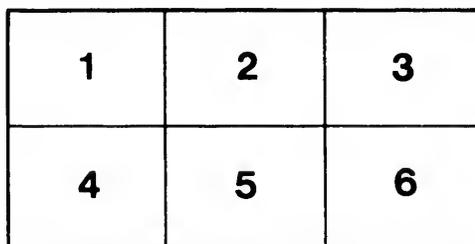
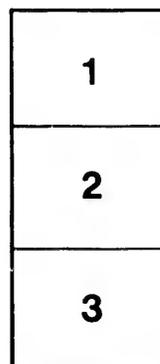
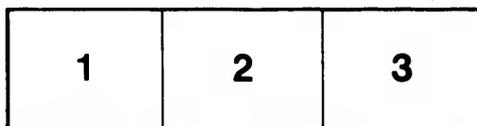
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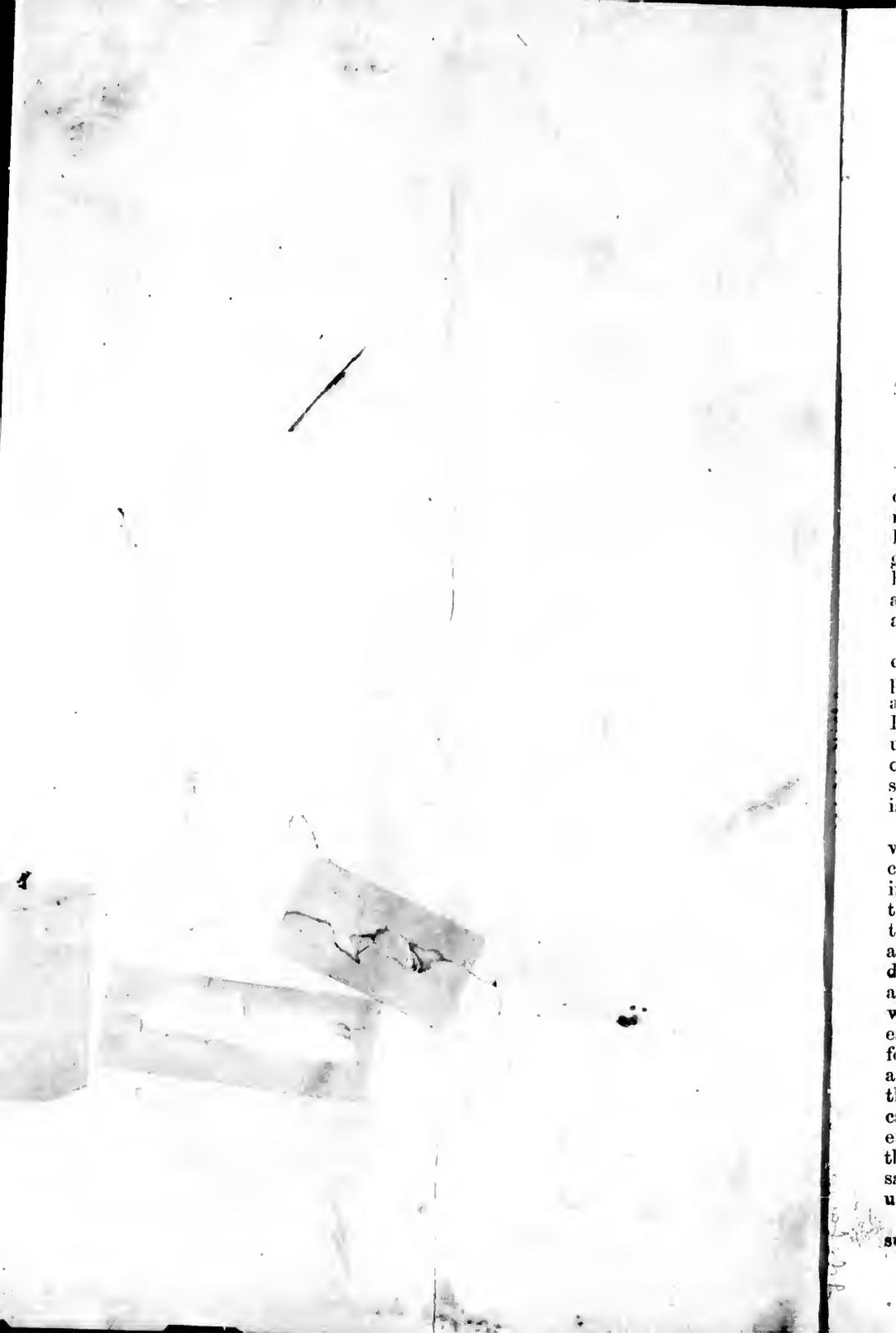
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REPORT
OF
WILLIAM BROWN,
PROFESSOR OF AGRICULTURE,
(ONTARIO AGRICULTURAL COLLEGE, GUELPH.)
ON
THE HERDS AND FLOCKS
OF ONTARIO.

Printed by Order of the Legislative Assembly.



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REPORT
ON
THE HERDS AND FLOCKS OF ONTARIO.

To the President and Members of the Council of the Agricultural and Arts Association of Ontario.

GENTLEMEN,—In July last I had the honour of a communication from Mr. Drury, asking if I would undertake to act as Live Stock Reporter to your Association. I took the offer as a high complement to our College and an honour to myself, and accordingly agreed to report upon the cattle and sheep shown at the Exhibition held at Kingston, in September last. In addition to these, it was suggested that I should also undertake a description of the breeds of horses; but, having doubts of my own exact knowledge—at least such a knowledge as should alone be presented to our Province—I declined their representation meantime, and would rather do better if possible to a smaller area in one year.

I proceeded to Kingston, and was occupied four days in examining, criticising comparing, and in every sense judging the several breeds of cattle and sheep then present. I did so alone, asking nobody's opinion—not even that of the owners—and thus what is advanced in these pages is chargeable for or against myself alone. I am prepared for any form of criticism as, occupying the position I do, I am untied to any breed or influence, and can give opinion fearlessly. I took no note of the decision of the regular judges, and had no communication with them whatsoever. I understood my work to be an independent report upon the characteristics and standing of what I found within your grounds on that occasion.

Shortly after receipt of this commission, and on taking in the bearings of the whole subject, it occurred to me that much greater interest and value would accompany my report were it, in some respects, made applicable to the whole Province. Your exhibition cannot possibly represent all sections, though possibly all the breeds, and in order therefore to give the work a truly Provincial ring, I obtained from Mr. Wade, your secretary, the names and addresses of over one thousand and eight hundred breeders of cattle and sheep—obtained by him, I have no doubt, from the oldest as well as the most recent reliable records. I wished to know as exactly as possible the number of herds and flocks in our Province, when they were established, in what manner they were established, or rather from whom each received its start, thus checking its genuineness as regards purity of source, for many would give a return as possessing so many head of, say, Cotswold Sheep and Shorthorn Cattle without reference to pure breeding; indeed, not a few of those received by me have not given this required reference, and consequently cannot get a place in this report. Still further to obtain the greatest possible exactness on the important point of breeders of pure breeds of cattle, I required the registered name and number of the bull in use with each of the herds; the same could not so well apply to sheep, but the breeder of the stock ram then in use for the flock, having been received, should help us to check purity.

In this manner I think we have obtained material of a valuable character such as, if properly handled, should stand of some national reference in future,

when, let us say, the political economist of the year 1900 will compare and build upon past history. I cannot take the blame for any omissions, and I have no doubt some exist

I shall handle the whole subject under the following heads :

A.—The Herds of Ontario.

I.—Breeds :

1. Their localities and numbers.
2. Their origin and present standing.

II.—The characteristics of Breeds.

B.—The Flocks of Ontario.

I.—Breeds : localities, numbers, origin and present standing.

II.—The characteristics of Breeds.

III.—Herds and Flocks unrepresented at Kingston.

C.—Present Position of Ontario, in regard to thoroughbred Cattle and Sheep.

A.—THE HERDS OF ONTARIO.

A Herd, by the practice of most Agricultural Societies, consists of one male and five females. My first pleasant duty is to congratulate the Province on the average number of animals in her herds ; there are as many as 350 herds of pure bred cattle of all classes in all her area, and the average number in each herd is 10½ cows or cow kind, and exactly three bulls. The first idea here may be a disappointing one as regards the number of herds—only 350 in such a Province as Ontario, with all her age comparatively, her wealth and enterprise. True, we say, and very creditable also, because other countries—according to age and wealth—cannot equal such an exhibit. England, with all her age and gold, is said to possess but 500 breeders of thoroughbred cattle, but no doubt the average number per herd there must be much larger than here. I am prepared to show that were all our farmers up to time in the live stock interest and took advantage of the sources of purity at their own doors, there is material enough to make Ontario what she is not at present—a grower of flesh as much as she ought to be, as well as a grower of grain. The very fact of numbers per herd is evidence of centralization, of non-distribution, and of grain-growing more than beef. I consider ten pure-bred females a very large average over seven different breeds of cattle ; it means that some have fifty and more, and in this item I do not take advantage of the unusual Bow Park circumstance. Our breeders, therefore, are evidently such in *profession*, more than possessing, only one bull and one cow to keep up, their own thorough-breds solely for their own use. In one sense they are ahead of their day : they are practically waiting until their neighbours feel their places their duty, as well as their self-interest. Ontario, then, has no cause to blush for meagre herds or in numbers per herd.

I.—Breeds of Cattle in Ontario.

It would be an interesting enquiry to make out what led to the choice of particular breeds of cattle on the part of certain individuals in our Province. In all countries cattle have preceded horses in helping man to make a living, to reclaim land and to cultivate. Ontario was no exception in this, and is now as much so as ever. Shall we say, then, that Englishmen as such, not Scotchmen or Irishmen so much, brought with them the old knowledge of Devon cattle as superior workers and acted upon such facts? It is true that Devon history goes far back in Ontario breeding, both as direct importations and as purchases from the United States: the want of oxen in clearing the forest had to be largely supplied from our neighbours who, fifty years ago, were older than we are now.

Possibly the second idea on the part of our pioneers was a household want—the necessity for milk in all its value—and thus, in addition to labour, the particular breed would be chosen for this purpose. Why not the Devon here also? Then, again, the great lumbering interest would call for working cattle, a market which the settler would attend to through a particular breed, and the Devon more than any other would get a preference.

But, in addition to these influences, it is clear that choice of breed has been very much a matter "*bred in the bone*." Why is it that Jardines from Ayrshire, Scotland, are breeders of Ayrshire cattle; that McCraes from Galloway, Scotland, are eminent here as breeders of the south of Scotland Polls of that name; that the Rudds from the south of England still lead the Province in Devon breeding; that the Stones from Gloucester, England, still bow to no one in value of Shorthorn and Hereford cattle; and to be more modern, why is it, as a rule that Scotchmen won't look at Jerseys, nor Englishmen at Aberdeen Polls? Naturally, then, men follow very much as they are taught, according to what they know—not always even according to self-interest.

Practically, however, since the year 1876, men have imported and bred to meet the growing demand for four things: (1) Cattle to fatten in Ontario conditions—stall feeding; (2) Cows to make the Dairy in Ontario; (3) Cows to suit wealthy private families and creameries; and (4) Cattle to fill the American and Canadian demand for extensive ranch grazing. Thus, then, we find the following classification:

- 1.—Ontario Stall feeding..... Shorthorns.
- 2.—Ontario Dairy..... Ayrshire and Shorthorn.
- 3.—Ontario Creameries and families of wealth.. Jerseys.
- 4.—American and Canadian Ranch Grazing..... Hereford, Aberdeen Poll, and Galloway.

1. The Localities and Numbers of Pure-Bred Cattle in Ontario.

No truer guide to the enterprise of a country can be used than existing evidence of what in any profession is the acknowledged line of wealth. In this, legitimate speculation is necessarily a part, as it is always a part of vigorous enterprise; but irrespective of any such motive, and keeping to the steady tenor of agricultural progress, it should be to every Canadian a most interesting subject to study the existing centres of breeds of live stock, what have regulated such localization and what retards the spread of the circles.

As a help to such a sketch, I beg to submit a skeleton map of the Province, showing counties, cities, towns and principal villages, and well-known parts, whereon I have outlined four breeds of cattle according to what is statistically known as "great centres,"—that is, the coming and going of an enclosing ring as

regulated by numbers from a given centre, that centre being also established by a given average obtained from the actual figures sent to the compiler. This is now my subject with cattle.

The Shorthorns—I wish people would go back to the fine old name, Durham—in Ontario are nine-tenths of all the pure-bred bulls, and six-sevenths of all the pure-bred cows; their great centre is a point near Elora, in the County of Wellington, from which the radiation is comparatively regular—very uniform indeed when compared with the isolation of other breeds of cattle. Starting from Hamilton as the nearest point on the southern boundary of the Shorthorns, the lake shore is followed eastwards to Whitby in the County of Ontario; from that the line takes a north-easterly direction through Ontario county and embracing the most of it, striking Victoria county at Woodville, running along the boundary line between these counties, partly into the Township of Mara, thence to Orillia and Thuy into the village of Stayner. This is the only part of the Georgian Bay touched by our Shorthorn circle, as from Stayner it strikes westwards, bending slightly southwards through the counties of Grey and Bruce to Southampton; from Southampton the shore of Lake Huron is followed all the way to Lambton; thence between Middlesex and Lambton to the shore of Lake Erie; from this latter point an almost straight line is maintained eastwards through the counties of Elgin, Oxford, Brant and Wentworth to Hamilton.

This is the present warm ground of the Shorthorn—all outside this boundary is weak in the same thing; not that there are not several herds, and good ones, but numbers are so few as to be unable to draw the line aside from the stronger average of others. Take an example or two: The counties of Essex, Kent and Lambton are outside of this circle, because Kent is particularly a non-Shorthorn section, as it is, by-the-way, in any other class of cattle; but Lambton and Essex stand fairly well on the average, and would be entitled to representation were Middlesex not so strong. Middlesex is so strong that but a slight divergence of the boundary is allowed into Lambton, and Essex is, by its position, cut off by Kent. Then, again, take a southern example of weakness in Shorthorns, as represented by the counties of Welland, Simcoe, part Wentworth, Haldimand, part Brant, Norfolk, part Oxford and part Elgin. Neither Elgin, Lincoln, Norfolk, nor Welland are up to the average—are very weak, indeed—and thus pull down the standing of all that district of country, which, but for Brant, Wentworth and Oxford, would be still more conspicuous in its isolation. In this I must except Haldimand to some extent, for it, of itself, stands well.

In this manner much more could be said of Shorthorn centralization, but the map will guide the enquirer better than any elaborate description. Is it not a sad blot on our escutcheon that the greatest beefing cattle of the world are practically unrepresented east of the County Ontario? No fewer than fifteen of these counties cannot ask for even a passing notice, but a good deal could be said of Durham, Northumberland and Victoria, as taken together they would equal York county in this regard, though not sufficiently strong to draw the line east of Ontario.

The great central district of Shorthorns is Wellington, second is Brant, which may thank the Bow Park Herd, third is Middlesex, fourth Waterloo, fifth Ontario, sixth Perth, seventh York, eight Oxford, ninth Bothwell, tenth Simcoe, eleventh Huron, and Bruce 12th in order of merit by numbers.

Another point demanding notice in such a public report as this, is the relative influence, apparently, of certain herds upon the cattle of the neighbourhood. One or two marked examples only: How is it that no fewer than five counties immediately south of the finest herd of Shorthorns on the American Continent are practically non-patronizers of the breed? It must be want of interest in the special line, because, taking it for granted that Bow Park prices are on an average

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too much for the average farmer, the other sources—and cheaper—are not too far off for them; neither can it be explained for want of time, as Mr. William Douglas, of Caledonia, began as a breeder of Shorthorns in 1855. If the county of York be taken as a centre for distribution and influence, what is the matter with Peel? Low-lying, heavy land is just as suitable for Shorthorns as any other breed, under proper management, and grain growing is very intimately associated with their history in all countries.

In order of numbers we notice next the Ayrshires. There are two prominent districts of these in Ontario. That having York County as a centre, and embracing part of Ontario, Simcoe, Peel, Halton, and Wentworth; and the second including parts of Frontenac, Lanark, Carleton, Russell, and Prescott. This division into two centres is regulated by Wentworth and Ontario Counties on the one hand, and by Lanark and Carleton on the other. Outside of either of these rings, no other county can talk Ayrshire excepting to some extent Oxford and Northumberland, but certainly no where else, and this is somewhat remarkable for the western part of the Province where dairying is so prominent. One hundred bulls and three hundred cows limit this breed all over.

The Herofords are represented in eight counties, and, we may safely say nowhere else. Wellington holds one-half of the whole, Cornwall is second, Simcoe third, Muskoka next, then Middlesex, Victoria, Ontario, and Brant in order of numbers. Seventy bulls and two hundred cows in all.

The Devon is limited to six counties, and about twenty bulls and forty cows. The counties of Simcoe, Ontario and Wellington, with a touch in York, Grey, and Elgin.

The Aberdeen Polls, by a recent fever, are somewhat ahead of the Galloways in number. They are to be found in Middlesex, Wellington, and Victoria.

The Galloways, so far as I can ascertain, are yet confined to Wellington—having an advocate there of undaunted pluck, and who is now receiving a corresponding reward.

The Jerseys are scattering, and are found in the counties of Wentworth, Lincoln, Peel, Wellington, with a few in Hastings and Halton.

2. The Origin and Present Standing of Cattle in Ontario.

In a duty of this kind, it is one of the difficulties to trace most things to their beginnings, and as it is best to submit to no speculations, but hold to actual facts, I shall simply record what has been sent me from various breeders.

The five oldest herds of Shorthorns in Ontario are:

F. W. Stone, Wellington County	1853
John Snell & Sons, Peel County	1854
James J. Wright, Wellington County	1854
James Cowan, Waterloo County	1855
Wm. Douglas, Brant County	1855

Just thirty years ago, when even the present older townships were seventy per cent. bush, roads of a very scratchy character, lake navigation somewhat primitive, and any trade with the United States of a corresponding irregularity, the idea of importing valuable cattle from England could have been held only by the more bold and enterprising—such as F. W. Stone, of Guelph. His imagination must have seen Ontario of 1882, in order to back up his present herds. I have no authority from him, nor any other, for saying that at the lowest computation his Shorthorn and Herford interest cannot be less than \$100,000. He began importing Shorthorns in 1853, and Herefords in 1860. I cannot leave this

brief notice of one of our oldest herds, without the remark that during all the years from 1860 to 1875, Mr. Stone was actually laughed at by very many because of his madness in having anything to do with Herefords: Who laughs now?

The Messrs. Snell began with purchases from Thos. Blanchard, of Malton, and Ralph Wade, of Port Hope, and while giving more attention now than formerly, to sheep and swine, they still hold several good cows and the newly imported bull, "Waterloo Warbler" [696 reg. 7 vol.], as bred by Lord Polworth, Scotland.

Mr. Wright established his herd from that of H. Parsons, of Guelph, and has now in use "Senator" [7837]—bred at the Ontario Experimental Farm.

The Clochmor herd of James Cowan and Sons, has an interesting history. Their first purchase was Red Rose 10th from Stephens and Sherwood, New York, giving \$160 for what had cost \$600 when a sucking calf—a rare figure in those days. Mr. Cowan sold three of her offspring to J. L. Harrison, of New York, for \$1000, who in turn disposed of them to an English purchaser for \$6,000, and afterwards exported another for \$800. He even declined the handsome sum of \$5,500 for a cow and calf of the same blood. Mr. Cowan also added to his herd from those of Mr. Wingfield, Guelph, and the Hon. W. A. Ferguson. In 1861 an important addition was made, by joint ownership with the Hon. D. Christie, by the purchase of "Oxford Lad" [578], 5056, from J. O. Shelden, New York, at a cost of \$1,000, which gave the herd a high standing for symmetry and constitution. Thus invigorated, the Clochmor herd has had Bates blood in all subsequent use. Its present lord is the 6th Earl of Antrim, 38674, and last year there was added some thirteen head of females from the extensive herd of F. W. Stone, Wellington, consisting among other families, of Sanspareil and Polyanthus.

Mr. Wm. Douglas, Brant County, made a beginning from the Hon. A. Ferguson, in 1855, and subsequently made use of bulls from the Hon. M. H. Cochrane, Quebec. His present stock bull is Earl of Goodness 5th, 32519, from the Bow Park herd.

Halton County as represented by Mr. R. B. Ireland's herd, goes back to 1855, also where "Mazurka Duke" [5703], 16523, is now in use.

Ontario County dates back to 1857, when Mr. J. S. Thompson imported from Mr. Douglas (Athelstone?), Scotland. His present bull Searlet Velvet [7833].

Mr. Jonathan Davis, Wentworth, is still a breeder of Shorthorns on a small scale, having begun in 1858.

Lincoln County has a few old herds, among which is that of Mr. Wm. Ash, St. Catharines, starting in 1858, and from the herd of Mr. John Baker, Macedon, New York. The present bull of this herd is "Model Hero," [7481], bred at the Ontario Experimental Farm.

These, going back in our history a quarter of a century, may be taken as our older types or herds now rarely competing at our larger exhibitions, and but one of them—that of the Messrs. Snell—showing at Kingston.

It will be well now to take up the systematic notice of those herds that were represented at your Kingston Exhibition this year, and in doing this we shall follow the counties according to their standing by numbers of thoroughbred cattle.

Wellington.—F. W. Stone, has a Shorthorn herd of about 120 head, but none were shown. He has also a herd of 130 Herefords, of which eighteen head were on the ground. This representation of one of the oldest and largest Hereford herds on the Continent was headed by the aged, but grandly even bull Regent (5532), got by Governor 4th, an importation from England. Regent is remarkable for length of hind quarters, great substance and a general evenness,—no coarseness anywhere. Were we very critical, a somewhat flat rib would form but a very small item in such a fine field—not overfed either. A young bull, Victor 5th (6246)—out of Vesta 9th, by Duke of Manchester—is not equal in the crops

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to his sire, has a rather effeminate head for a Hereford, but a perfect loin and all the fullness of the breed in the hindquarters. Vesta 9th, herself a five-year-old, out of Vesta 7th, by Governor 4th, is simply a perfect animal of her class, with a leaning on the small side. What a splendid loin, and depth of frame without coarseness.

Messrs. J. & W. Watt exhibited fifteen head of Shorthorns out of their herd of sixty-two. "Barnpton Hero" [6595], four-year-old, bred by J. Dryden, of Brooklin, from Sittyton blood, weighs 2,500 lbs. This bull is but in good fair flesh, has an Aberdeen skin—neither thick nor thin—a grand, intelligent head; looks rather light in flank, which is but partly true, for his immense forward depth would require something unnatural to correspond, there is just a cut of a "Hereford ham" in this almost faultless animal. Rosalie, out of Rose 2nd has all the appearance of making a typical mother. "Matchless" of Kinellar 2nd, from Campbell, of Kinellar, Aberdeenshire, is an unusually heavy cow, with calf at foot—milk that would keep twins, and in her build has just as much a milking type as an Ayrshire.

Messrs. J. & R. McQueen from a herd of forty-one head, exhibit "Duke of Athol" [4962], a five-year-old, bred by W. Douglas, of Caledonia; this, by the way, is a descendant of the \$46,000 cow of New York Mills fame. He is not in high flesh—2,350 pounds—has great length of frame, fine even loins, rather flat on the shoulder, and narrow at tail, but has great length of rump, and depth of fore-quarters.

Thos. McCrae had forty-one head on the ground—thirty-five Galloways and six Aberdeen Poll-cows—all recently imported. Among the Galloways is a yearling bull, "Macleod 2nd of Drumlanrig" [553] (1676), bred by the Duke of Buccleugh. Here we do not find the rough characteristic head of the breed, age being allowed for, and the bone is even on the fine side; there is a deep chest, grand hair, and just the right kind of quality by handling—a mellowness under a thickish skin. The deep flank, grand shoulder and arm, with full short neck make up an unusually good Galloway bull—marred only by a slight droop of the hind-quarters, that will improve with age. "Beauty 2nd of Troquhain" [536], (3517), four-year-old, and a Medalist, is not, to my thinking, a typical Galloway, because too fine all over, though large and strong. Altogether this herd is the best ever shown in Canada—not possessing a single cull. Mr. McCrae's Aberdeen Polls, as a class, are, all over, not so good as his Galloways—good unquestionably, but the Galloways are hard to beat. The cow "Ariadne 7th" (4915), bred by James Scott, of Easter Tulloch, Aberdeen, taken as a fair stamp of the herd, has plenty length, but too bold headed, and wants width according to her length.

Hemlock Young showed a four-year-old fat heifer, weighing 1,950 pounds by estimate; the fine head, and bone with fully two-thirds "blood" makes her a very fine stamp of the Western Ontario beeper.

Ontario.—Messrs. T. Guy & Son, whose herd history dates from 1865, had no fewer than twenty-three head of Ayrshires on exhibition. "William Wallace" [19 Reg. 2 vol.], as head of the herd, three-year-old, bred by Jardine, Hamilton, from Mars 1st, a well-known prize-taker, is in good form, with no coarseness, much depth all through, and no slab-ribbing as follows many of the breed; he has the strong bone, however, that characterises. The top cow of the lot may be "Gerta 4th [1181]," a four-year-old, one month after calving. Here we have a medium length of face, clean head, very fine neck, beautiful light fore-quarters, grandly sprung ribs, with width behind, and the desirable double udder.

Waterloo.—Messrs. H. & J. Groff are breeders of Shorthorns, and fatteners of their grades. In competition now they had fifteen head of thoroughbreds, sixty grades, and nine fattening animals. These are led by "Baron of Waterloo"

[6613], by "Young Aberdeen" [4512], out of "Red Rose of Waterloo," coming three years; quality on the fine side, a splendid head of the old Durham stamp, with, however, drooping hind-quarters. "Pilot 2nd," an eight months calf, takes his sire's fineness, with good fore-quarters, but deficient on ribs. A two-year-old cow, with calf at foot, has an extraordinary width of hind-quarters, and to some judges, is too fine in skin—a rare fault others will say, and may be one of the reasons of the Groff success in early maturing when fattening. A three-year-old red cow cannot be met on the ground for length of hind-quarters, a heifer calf out of "Lady Graceful 2nd," by "Knight of Warlaby" [5501], is a very massive five months on milk, and takes great width behind.

In beefers the Messrs. Groff have several magnificent specimens—magnificent is not too strong. Choose first a yearling steer, a year-old in December, 1881, weighing 1,450 pounds, from "Knight of Warlaby" [5501] of steer-getting fame; the hair, the grand silky mossy coat of hair, so indicative always of quality—the handling everywhere—loin included, and the round barrel, lacking, however, in width behind, all go to bespeak a coming prize taker. Take next a lot of four two-year-old fat steers, averaging 1,900 pounds (April calves); note the great girths, the covering of loin and barrel, and yet after all a deficient hind-quarter in two cases, both above and below. Then again examine two three-year-old steers, the second cross of Booth blood—upon grade cows—that average 2,350 pounds. In these we naturally look for the weakness, the grandeur being so conspicuous. Shall we speak of standing too high behind, of narrow thighs, of a cow head, and dog hocks? true in a measure, but yet measurable and makes the great points stronger.

Victoria.—Mr. M. Boyd, Bobeaygeon, had five Herefords and nine Aberdeen Polls on exhibition. His Hereford bull "Bonnie Lad 2nd," by "Duke of Manchester," from the Ontario Experimental Farm, is a very even animal of good quality, and lengthy; but wants length in hind quarters, and holds a rather effeminate head. The three-year-old cow from Mr. Stone's herd has the great length of hind quarters, with corresponding width that belong to the breed; here also is that "depth without height" which is liked in her kind—a good chunky cow. The two-year-old heifer from the same stock falls off in this kind of quarter.

The Aberdeen Poll exhibit is headed by "Black Prince of Ambleside;" this bull is in low condition, and disappointed those unacquainted with the breed. He is lengthy and takes flank and thigh down well, though rather high in the tail. "Princess Dagnar" is a four-year-old cow, carrying a grand head, has depth of shoulder, length of barrel, plenty of depth also behind, and unusually wide there, with all the quality of a first-class Shorthorn. At the same time this cow is deficient in ribs and crops, and short in rumps. The four-year-old cow "Caroline" has strength tending to coarseness, though not coarse actually, an irregular head, length and width of hind quarters; altogether a fine frame, spoiled by a curious head. "Dominion Girl" is a yearling, characterised by a strong tail, fine length of body, and otherwise has the appearance of a future prize taker. "Pauline" is a leggy five-year-old, with the fore-quarters of a milker, and plenty of substance behind. "Coquette 10th" (4663), two-year-old, bred by Sir George McPherson Grant, and recently bought from Mr. Whitfield, Quebec, is of the valuable family of her name from Ballindoloch, Scotland. A heifer of grand quality all over—bone, skin, hair, and covering otherwise, with a Roman nose touching on coarseness, a chunky frame—a big-little beast.

Mr. Boyd's enterprise deserves special notice. He is evidently exercising a cautious liberality in testing Shorthorns, Herefords, and Aberdeen Polls under precisely equal conditions upon an extensive back-woods grazing. The result will

be interesting and important to us as a Province, and every reliance can be placed on Mr. Boyd's impartial treatment, and a faithful report will no doubt be made ere long as to such an unusual competition between the three greatest beefing breeds of the world.

Simcoe.—Another, and an older, civilizer of his country with improved stock is C. C. Bridges, of Shanty Bay, who began just ten years ago with a draft of Herefords from Mr. Stone, of Guelph. His present stock bull is "Corporal" (4175), imported, with a very fine herd of six other bulls and thirty females. This bull has a good depth of chest and plenty of thigh, but is wedgy in rumps, and slack crops; indeed his superior fore-quarters make his other parts appear to be deficient, if not really so. Mr. Bridges shows nine females, among which we notice "Miss Annie," a three-year-old, newly imported, with very fine fore-quarters; forward of the hooks this is a grand cow—superior to Mr. Stone's "Vesta 9th"; there, but not nearly so good as his behind. "Mary 3rd" is larger, longer, and good in barrel, but not so even all over as "Miss Annie"—a massive, vigorous cow.

York.—Messrs. G. and D. Wood have nine Devons here. The three-year-old bull "Marquis" is a very finished Devon of the chunky stamp, with broad loins, plenty depth of thigh, fine bone, and altogether a deep beast; he lacks, however, in width of thigh, has rather a strong tail, and too flat on shoulder for his kind. "March Rose," a six-year-old cow, has the light fore-quarters of a milker, with plenty depth, broad loins, and length of rumps, and even better shoulder than the bull.

Wentworth.—V. S. Fuller, of Hamilton, is our latest and most vigorous exponent of the Jerseys; not only so, but a fearless, practical exponent, which is more than many enthusiasts do. His herd was represented by a draft of eleven, from which note two samples; "Le Breve" (5604), a 25-months old, newly-imported bull, of the dark stamp of these famous creamers. Though dark, he is full coloured, which now-a-days gives value; his very thin condition strains one's judgment, yet there is no fault to be found with the great length of hind-quarters, and plenty depth forward. The cow "Faith" has a nicely balanced head, great length of frame, moderate neck; but with all the surface markings indicating cream—a grand milker evidently.

P. T. Ware, of Hamilton, exhibits one Ayrshire bull-calf "Garfield" [133], a dark-coloured, nicely headed animal, with the characteristic slab sides and high tail of many of the breed.

John Fothergill, of Burlington, had "Prince James" [893 reg. 7 vol.], a yearling Shorthorn bull of the Messrs. Hunter's blood; good, and improves on acquaintance. His 1,700 pounds in eighteen months is away above the average in vigour, and if his prepotency be high, this is the kind of bull wanted to make and finish two-year-old steers.

W. J. Pettit, of Burlington, shows a yearling Shorthorn heifer "Belle 2nd" [901 reg. vol. 7], from the stock of McQueen, Wellington; a lengthy animal, with grand back and loins.

Leeds.—Mrs. E. M. Jones, of Brockville, and Jersey cattle fame—well merited, with pluck and good management. From a herd of twenty-five, this lady shows twelve head. "Rival" (3762, A.I.H. Book) is six years old, a whole cream-coloured bull, with a black brush, great depth of barrel, good width, a very fine horn, strongly yellow, with black tips of course, medium length and fineness of tail, which is just somewhat too high. "Flora of St. Peter's" and "Maggie Bradley" are cows of rare merit.

James McNeish and Son, of Lyn, exhibit six head of Ayrshires. The bull, "Duke of Ardgowan" is a particularly chunky, deep, well-balanced two-year-old,

with lengthy hind-quarters, an unusually handsome neck, long face, and carries the hind leg of a horse in style. Much of the energy in the management of this herd is due to C. H. McNeish, one of the sons, a student of the Ontario Agricultural College, who, in addition to cattle, is well up in Berkshires.

Joseph Haig, Gananoque, shows one Shorthorn bull, "Duke of Glenallan" [1382 Reg.], a yearling of good quality, has plenty length; a growing animal, not in much flesh, and stands better behind than before.

Grenville.—W. T. Benson, of Cardinal, has seventeen head of Herefords from a herd of thirty-five, and a sample of his Shorthorn herd in "Grenville Duchess 3rd," by "Prince Albert" 28336, a two-year-old heifer, with a grand frame, spoiled by head and horn. Among the Herefords are: "Bloomer 2nd," four-year-old, very good forward of hocks, with fine length and depth of fore-quarters, and a thoroughly characteristic Hereford head. On the plan of finding fault with everything if possible, we would like to see more width behind. "Rambler 6th" (6630), out of "Rosebud 5th," by "Chieftain" (4427), has a good head and fore-quarters, with depth, without filling of hind-quarters. There is a pair of extra good three-year-old cows—one particularly nice. A marked feature of Mr. Benson's Herefords is their grand Hereford heads—one of our best indications of character in these days. For example there is nothing on exhibition equal to the head of "Ajax," a yearling bull; this animal was sired by 6781. The show cow of the herd is, perhaps, "Miss Greve 4th," now eight years old—out of "Miss Greve," by "Renown" (2719). Look at the head here also, the fore-quarters of a milker, plenty length, good quality, with dog hocks however, and a slight droop of hind-quarters.

Northumberland.—W. Courtice, of Darlington, took to Devons by importing in 1857. He has nine head on exhibition. "Plumb," as a six-year old cow, is an usually large Devon, with long hind-quarters, well filled in rumps, great length, with a somewhat steery head and horn, but yet a fine head; the covering of the loin and handling are excellent, but we don't want her high tail, and don't expect the breed to be better in depth behind, which this one also lacks. "John A," a bull, two years old, out of "Plumb," by "Jack's Alive," is from the stock of G. Rudd, Guelph.

Frontenac.—David Nicol, of Catarqui, is a breeder of Ayrshire cattle, South Down sheep, Berkshire swine, and several kinds of poultry. From a herd of twenty-four, he shows twelve. The first thing that strikes the eye in this representative selection is no attempt at effect, and no pampering for exhibition—everything put up naturally—a practice much desired in these days of keen competition. The bull "Stonewall" is a dark red, with a vigorous look, fine head, and without being high fed is somewhat lanky. A great Ayrshire cow all over is "Moss," seven years old, out of "Effie Dean," by "Parker," by "Highland Chief," and tracing back to "Rob Roy" and "Sir Samuel" of Scotch milking fame; she is also thin from grass, and would please believers in escutcheon—which is very broad and full.

Allan Bond, of Inverary, exhibits in Shorthorns "Lord Dufferin" [8841] and "Rose Dale," the latter a pure white, and of very fine quality, with compactness.

Hastings.—H. B. Rathbun and Son, of Deseronto, are breeders of Shorthorns and Jerseys, and showed one and three of each respectively. The Shorthorn bull "Master Hill" [8474] is a chunky, well balanced two-year-old. In Jerseys, "Prince of Wales 5th" and "Daisy" are exhibited, the latter is particularly nice—perhaps unusually deep for her kind, with a delightful tail and brush.

Prince Edward County.—Benjamin Storey, of Picton, shows three Ayrshires, "Sir Walter 2nd," from the Ontario Experimental Farm stock, of the stronger stamp of the breed, as liked by many; "Beauty of Wellington" is also from the same place; the bull-calf "Picton" is a very deep and broad animal of its age.

THE ONTARIO EXPERIMENTAL FARM EXHIBIT.—It would be better that this was criticised by another, and I shall only, therefore, submit the card that accompanied the animals;—

Four Steers, as Specimens for Exportation, not in competition.

Breed—Grade Shorthorns, two-thirds bred.

Age—Average, 920 days—2½ years.

Weight—"Chancellor," 1,680lbs; "Champion," 1,530lbs; "Commander," 1,605lbs; "Conqueror," 1,595lbs; average, 1,602lbs.

Increase—1.73lbs per head per day since birth.

Food—Daily for 324 days: Corn, peas, oats, in equal parts, 10lbs; mangolds, turnips, for six months, 35lbs; green fodder, for four months, 75lbs; oil cake, for three months, 4lbs; Bran, 2lbs; Thorley's food, ¼lbs.

Cost of Production—Per head, \$133.

Manure Value—Per head, for last twelve months, \$55.

Present Value—Per head, \$121.

Profit Realised—Per head, \$43.

Shorthorn Heifer, five years old on 17th September, 1882.

Weight, 1,905lbs; increased 2½lbs per day during last seven months.

Experimental Feeding—Corn gave daily increase per head, 1.91lbs; peas, 1.83lbs; oats, 1.60lbs.

Twelve Fat Wethers, as Specimens for Exportation, not in Competition.

Breeds—First crosses of Leicester, Oxford Down, Shropshire Down, South Down, and Merino rams with Canadian ewes.

Age—Shearlings, 18 months.

Weights—Per head, average: pure bred Leicesters, 265lbs; Leicester Grades, 220lbs; Oxford Down Grades, 210lbs; Shropshire Down Grades, 210lbs; South Down Grades, 180lbs; Merino Grades, 150lbs.

Food—Peas, oats, bran, hay, green fodder, and oil cake.

Wool—Washed, per head: Cotswold Grade, 9lbs, 22 cts; Leicester Grade, 8lbs, 22 cts.; Oxford Down Grade, 9lbs, 28 cts.; Shropshire Down Grade, 8lbs, 35 cts.; South Down Grade, 7lbs, 35 cts.; Merino Grade, 6lbs, 35 cts.

BALANCE SHEET.—MANURE NOT CREDITED.

	Carcass.	Wool.	Cost.	Balance.
	\$ c.	c.	\$ c.	\$ c.
Leicester Grade.....	11 00	1 76	8 10	4 66
Shropshire Down Grade.....	12 60	2 80	7 00	8 40
Oxford Down Grade.....	12 60	2 52	7 40	7 72
South Down Grade.....	11 70	2 45	6 00	8 15
Merino Grade.....	7 50	2 10	5 50	4 10

Quebec Province.—An unusual feature of your exhibition was a display of fifty animals of five breeds of cattle from the yards of Geo. Whitfield, of Rougemont. Quebec possesses, in private enterprise, as much as Ontario does publicly, an Experimental Farm of rare variety in live stock. It appears to be Mr. Whitfield's desire to thoroughly test the conduct of beefing breeds under Canadian conditions, and for this end is unsparing in means and measures.

First, in regard to his draft of Aberdeen Polls, and this for a very good reason, as, without doubt, it is headed by a stamp of bull rarely seen on this continent. What strikes on the first glance of "Judge" (1150); is his *great length*; there is no coarseness anywhere, and though a side view gives a bold head, a diagonal one tells of a mild countenance; then there is a grandly filled neck vein, yet a somewhat flat top shoulder, without any narrowness however. The bone is of medium quality, and the skin a true Aberdeen one; there might be a broader loin—just the right kind of arch though—and better filled crops; for a bull there is an unusual width of the pin bones. "Judge" has grand substance, and weighs 2,300 lbs.

I am not practically acquainted with the Sussex cattle of which there is a yearling bull—"Bruce Standen 2nd." The first impression is Devon, but this disappears under minute inspection. In comparison with size and weight no doubt the bone is too fine—apparently unable to carry his body, and the head is also on the fine side for a bull. Mark his beautiful bottom line, the splendid shoulder vein, somewhat flat neck; the joining of rib and loin is simply perfect, and a style and depth of barrel like a "man-of-war." We cannot overlook the droop of the hind quarters, however, and a little narrowness at tail—just a little; the quality by skin is decidedly inferior, though it may be a Sussex skin. The beef of this bull goes right down to the hoeks.

"Count of St. Cesaire" is a South Devon bull; compared with the Sussex the hind quarters are unquestionably superior; there is the head and horn of a North Devon, but finer, and a great evenness all over, not a bit of coarseness anywhere, and yet no delicacy.

West Highland Cattle.—Among the first, if not the first, and some think should be the last, importations of this kind. But opinions differ, and Mr. Whitfield is of opinion that the Highland bull is one of the correct experimental lines in connection with our North-West grazings. He justifies this by reference to well-known hardiness of the breed, their remarkable quality of flesh, their well-doing from the glens and hillsides of Scotland, and even their weight when matured—maturing however later than a good many other breeds.

"Beauty," a three year old cow, has all the breadth and depth of a small Short-horn, straight hind legs, flat bone—not coarse, wide behind, broad on shoulder tops and crops—a fine head with Hereford horns—an almost faultless build for a beeper. A specimen of the bulls in "Boby" two years old: mark the peculiar black streaks of hair among the dun, rather short in hind quarters, thick skin with mellowness below, and no want of substance according to size.

The Galloways are headed by "Premier of Landlough," a two year old bull, which combines all the strength and general stamp of the breed—the strong bone, the heavy tail, strong head, long rough hair, the characteristic length of barrel, with well sprung hind ribs, and most marked in depth and width of thighs.

Thus roughly, but to the best of my judgment, was the standing of the cattle at your Kingston Exhibition this year. If any exhibitor has been omitted, it must be charged to himself as I visited every stall, but occasionally found no one in attendance, and it may be therefore that one or two are unrepresented.

11.—The Characteristics of Breeds.

It would not be difficult to sketch the conduct and peculiarities of different breeds of cattle as known in their own habitat, but what would be the use of such a presentation in comparison with the same thing in other lands? The value to us as Canadians is not so much what is realized in Britain, but how they conduct themselves under different circumstances, and particularly of Ontario.

Taking this view as the correct one, I cannot do better than present your Board with some brief notes on the experience of the Ontario Experimental Farm—an experience now embracing seven years under one man's management.

The Canadian.—I know of no class of cattle so well deserving a first notice in these pages as the Canadian. There is a distinct type entitled to this name. I do not mean those with a touch of Ayrshire, Devon, or any others—not even the Shorthorn grade—but that moderate sized, milking, wirey, active stamp, well known to the average farmer. If this be considered as somewhat indefinite, we shall be glad to point to specimens here or elsewhere.

I claim that the Canadian deserves more notice than has ever been given to it—public and specific—giving a recognized position that cannot be doubted. Have we on record anywhere such a description and history of the Canadian cow as that, when the time comes, as come it will, when the Herd Book editor will require materials with which to trace back to the beginnings of what with him may be as eminent as any Bates or Booth in England? This is no improbable matter indeed, but deserves our serious attention.

Our experience of this breed has been intimate and very satisfactory. We hold by clear and substantial evidence for eight years that the Canadian cow takes no mean place as a milker, a mother, and a field for wide work both for beef and dairy purposes. Much of this is due to her distinct character in some respects: She is decidedly content with her average circumstances—miserable as they be at times—can do as well in the bush as on clover fields, and responds with her best when the thermometer is at zero or 90° in the shade. Her quantity of milk is not so large as the Ayrshire for six weeks after calving, but far ahead in continuance, and therefore, on an average, equal; in cream it is unquestionably superior to the Ayrshires. No one well acquainted with the breeds would choose the Ayrshire against the Canadian, where hardiness and profits under ordinary conditions were elements.

So also in regard to a common source for cheap production of beef with a Shorthorn or Hereford bull. Other bulls have not as yet been sufficiently tried except the Ayrshire and Devon, which cannot compare with these two. While small as a beofer, the Canadian cow is roomy as a breeder, and thus affords field enough for such a purpose.

I am confident that a proper selection of the milking Canadian would add immensely to the dairy and beefing interests of the country.

The Devon.—The remarkable feature of the Devon with us has been an uniform conduct—no coming and going in anything, but an even run of breeding, health, and good doing under all conditions. Summer and winter the Devon is equally at home—plump on pasture, and in good heart in the stall without grain. They have also been particularly good mothers, nursing their calves in a manner superior to anything in our experience. The Devon calf is always a full calf on its milk alone—rolling in fat and with all the build of an old animal. The particular character of the breed and rich milk give these results. After weaning, and all up to heiferhood breeding there is a distinct heartiness and vigour, on the small scale as regards size; there is no stunting according to their kind, but one

has to know the kind in order to appreciate the difference between them and the larger beefers. We have never got much milk from a Devon, but in quality it is second only to the Jersey. The bull attains to a greater size and weight proportionately to the cow than the same thing in most other breeds, as his "get-up" is comparatively more of a beeper than, for example, the Ayrshire bull is against the Ayrshire cow. The Devon cow therefore is a milker in quality and moderate quantity, while the bull gives a frame to the steer that compares well with others for beef carrying. But the steer will not mature so early as the Shorthorn, Aberdeen Poll, and Hereford, nor ever attain the same weight on an average.

The Ayrshire.—We have had a pretty thorough test of the Ayrshire cattle. In sure breeding we have no cause to complain, nor can anything be said against their adaptability in raising a calf. Every cow we have has had to be milked three and four weeks previous to calving—an imperative necessity to avoid milk fever; after calving, two of our best have regularly suckled two calves, and in addition have had to be milked with the hand twice daily for two and three weeks, depending upon the time of the year, whether on grass or in stall. We have not, however, been treated to that continuance of milk that I was intimate with in the Lothians of Scotland—the great flow lessening more rapidly and dribbling too long. I do not attribute this to actual poorer pasture or keep otherwise, but to the great difference in climatic conditions and the want of that important variety of grasses secured only in permanent pasture. It is not true in our experience that the Ayrshire cow gives a lash of milk on comparatively bare pasture, in which regard she is, on an average, decidedly inferior to the Canadian, but it is true that her milk is of that blue type—not so rich in cream—as characterizes them in their own country. A cross between the Ayrshire bull and Canadian cow is in good repute as a milker with us; they do not lose in size of frame, and gain somewhat in long milking. A cross with an Ayrshire cow and Shorthorn bull has not shown any advantage in milking, and very little in build for beefing, though the steer is vigorous and growthy, but too slab-sided and wedgy—taking too much after the mother. Practically then as regards the pure Ayrshire they require good treatment in order to maintain their famous milking properties, and I am of opinion that an infusion of new blood is as often needed as in any other breed—not so much a change of bull from other herds in this country as that of a directly imported one.

The Hereford.—This breed has exhibited a very clear and steady line of conduct all throughout. No trouble in breeding, and no petting required. The Hereford is a good mother, second only to the Devon in our experience, and ahead of its dangerous compeers—the Shorthorn and Aberdeen Poll.

We have been charged with partiality and lack of practical experience in cattle life, by one of our American critics—especially in comparing Herefords and Shorthorns. This is not true, and I trust will never be so. As responsible to a Liberal Government, and guiding a grand country, it is, above all things, our religious duty to report just how it is in every case—no colouring, no exaggeration, and no understatement of anything whatsoever. To say more is unnecessary; to say less would savour of want of interest.

The Hereford, I repeat, has shown an uniformity of conduct quite exceptional along with the Devon; without grain, winter and summer—bran excepted, and the usual treat after calving. The Hereford keeps fat on pasture and in the stable, never falling off, even when suckling. Greedy enough, no doubt—down to the horse manure—not a speciality, as showing a want of something, but a consistent looking out for number one. We have no breed as a whole, nor individuals among breeds, that can touch the Hereford in maintaining flesh on pasture. Indeed, we have cases of too much tendency to coveting the ribs, and taking from the calf;

and a peculiarity of their build is the being deep in calf and not showing it, as is otherwise in most other breeds—the calf also coming, without affecting the mother's appearance much.

The fattening steer, from the Hereford bull and Canadian cow, is quite characteristic. The marking is strong and unquestionable; the build is a Hereford in almost every detail, the pig hain (as age advances), the round, compact barrel, longish rumps, deep twist, and the general low, chunky set of the whole animal.

The Shorthorn.—We have never treated one breed of cattle or sheep differently from another, unless special circumstances demanded it; thus then, these comparative notes are the more valuable and reliable. I say this, here, because Shorthorn history, with us, has been more complicated than with other cattle: not, certainly, by reason of want of variety in blood and family, nor even numbers, to make a good average—for we have, or have had, plenty of both. With Shorthorn leanings, as an individual, I can freely and fearlessly, nevertheless, record how Shorthorns have conducted themselves with us for seven years.

We can speak highly of the milking properties—in quantity and quality—of the most of our cows of this breed,—making good calves, or reliable milkers, as the case may have been. We have nothing to say against the sure breeding of the cows, but our four bulls, in these years, have not given satisfaction in this respect. Without exception, they have caused delay, loss, trouble, and extra expense. Why, I am not prepared to say,—two were imported and two Canadian bred; none were ever in such high flesh as those of some other herds; indeed we have noted, very distinctly, that those bulls, in best flesh—that is, on the heavy side, have been surer in getting than those on the less fleshy side. But, and I desire most seriously, to make this "*but*," once and for all, understood, we have never fed Shorthorns differently from others; if we had done so, this would be no *experimental* station. Understand what I mean by this. If we have a two-year-old Shorthorn, with a large frame, weighing 1,600 lbs., and a Hereford, exactly of the same age and of a somewhat smaller frame, weighing 1,500 lbs.,—we feed them according to weight and size,—a little more to that weighing the most; this is in agreement with all rules of common sense as well as with science and physiology—not breed, because we do the same thing with individuals of the like breeds: *But*, we have never fed the Shorthorn, because he was a Shorthorn, nor the Hereford, or Aberdeen Poll, because of their kind. This is the true experimental idea, we think. If, 'tis said, the choice of individual bulls was bad, then the reply is, that three independent judges did so; if management, by want of practical knowledge is charged, then, the same management had to do with the other bulls that have stood so well. If the Shorthorn requires, on an average, more drawing-room attention than other beefing breeds, then it had better be acknowledged at once, and I don't think their admirers need be ashamed of the fact.

We have fattened Shorthorn grades, Hereford grades, Devon grades, Ayrshire grades, and Galloway grades for beef, both in the stall and on pasture, and nothing equals the Shorthorn, in giving that stamp to produce weight in the shortest time on *Ontario conditions*—growth of youth on good pasture, and finishing in the stall.

The Aberdeen Poll.—We hold the honour of having introduced this breed to Canada as put by Mr. McDonald, the clever author of "Food from the West," as well as the recent work on Aberdeen Polls, and who is also editor of "The Irish Farmers' Gazette."

Our experience, thus far, is somewhat irregular: Health and breeding have been very good; milking sure, in moderate quantity and rich, with plenty of flesh both in stall and on pasture, yet we have to record an indefinite sort of instability, difficult to explain—I speak now of the first imported animals and their progeny,

not of 1881 purchases. The instability in question has reference to a coming and going of health, especially in summer, as indicated by change of coat and general "staring" of the whole animal, as if going through a course of medicine. Individual animals of any class often do so, as everybody knows, but not a whole herd of one kind. There has been no sickness actually.

We have on hand four very fine steers—the first cross of an Aberdeen Poll bull with Shortborn grade cows, with which we trust to convince the Province, ere long, as to the eminent beefing properties of the Black Diamonds of the North of Scotland.

THE FLOCKS OF ONTARIO.

A flock may consist of any number. A pen is more definite, and usually made up of one ram and ten ewes. Ontario is not bright in wool and mutton, in comparison with cattle. Were she so, there would be 60,000 in place of 8,000 thoroughbreds. During the early settlement of the country, sheep were not wanted; things were too rough—bush life is not good sheep life, and though the housewife of those days would like to have had her spinning-wheel at work, the greater need of food would overrule. Gradually, however, as cultivation increased and wealth and leisure grew, mutton and wool were wanted. Then all over, as now in too many cases, it was weight or quantity of everything, more than quality, so that long-wooled breeds were known long before any others. We have evidence of this as follows:

Some early Importations and Breeding of Sheep in Ontario.

Year.

- 1834—Leicesters, by late Hester Rennelson, North Dumfries.
- 1835—Leicesters, by James Cowan, Galt.
- 1838—Leicesters, by William Ash, St. Catharines.
- 1842—Leicesters, by William Whitelaw, Guelph.
- 1843—Southdowns, by William Ash, St. Catharines.
- 1846—Leicesters, by William Douglass, Onondaga.
- 1850—Cotswold, by James Russell, Richmond Hill.
- 1850—Lincoln, by W & H Gourley, Carp, Carleton.
- 1850—Southdown, by Robert Marsh, Richmond Hill.
- 1850—Southdowns, by H. H. Spencer, Brooklin.
- 1850—Lincoln, by Albert Tamblyn, Orono.
- 1854—Cotswold, by John Snell, Edmonton.
- 1856—Cotswold, by Henry McGurk, Colville, Lambton.
- 1859—Cotswold, by R. Rennelson, North Dumfries.
- 1860—Southdown, by W. E. O'Brien, Barrie.
- 1862—Southdown, by John Jackson, Abingdon.
- 1864—Southdown, by A. Smith, Aberfoyle.
- 1865—Southdown, by T. Wilkinson, Renton.
- 1865—Southdown, by R. Rennelson, North Dumfries.

Previous to the year 1842, therefore, the importation and breeding of Leicesters were not uncommon with the men who still lead us in the same thing, and even up to 1850, with one exception, the examples of early work were among long wools; not only so, for, even up to 1860, we have but three cases, so far as returns obtained by me show, of Down breeding, so that practically long wools were a quarter of a century in advance of the short wools.

At the present time the Leicester and Cotswold are upon an equal footing by

numbers, so that as the Cotswold era began in 1854 there must have been a decline in Leicester patronage, and a corresponding increase to that of Cotswolds. The Lincolns have never got a strong hold in Ontario, and at this date can be told inside of one hundred rams and three hundred ewes—a mere handful, of course. So also with the Merino. Indeed the Merino has not any place in Ontario, whatever Mr. K. Bailey, of Union, County of Elgin, may have to advance to the contrary. The reasons for this are good and practical. As recent Britishers we are unacquainted with them, they give but indifferent mutton, they are slow in maturing and unprolific, and they are a ranging and unkindly breed, ill adapted to the small farms of a wooded, newly-improved country. In these days, anywhere, even in our great runs of America, California and Australia, a mutton crop is wanted along with the wool, and consequently a change is urgent.

Next in order of introduction to the Province were the Oxford Downs, and this, so far as can be ascertained, by the Ontario Experimental Farm in 1876. They have not made that rush which many predicted—still in the hands of a dozen and numbering about two hundred head.

The earliest record of the Shropshire is by William Donaldson, of East Zorra, Oxford county, in 1867, and they are now far ahead of the Oxford in distribution and numbers—over five hundred in all—in the counties of York, Simcoe, Middlesex, Ontario, Huron and Wellington.

The relative numbers of the different breeds of sheep in the Province may be thus illustrated:



The Conduct of Breeds of Sheep in Ontario.

For the same reason as given in my report on Cattle herewith, it is as much in place to submit the experience of The Ontario Experimental Farm with Sheep, since the year 1875, and, in addition to the pure breeds, a few words upon the Canadian ewe will aptly precede.

The Canadian Ewe.—What is she? A very difficult question to answer. If roadside samples be taken as a guide, she is everything and nothing, most clearly. The reference to the roadside bids me say that of all kinds of pasture in Ontario—I cannot speak of other Provinces—whether rotation, permanent, bush, or cleared wild pasture upon farms, none equals much of what covers one-half of our high-ways. It is a close mat of the better native grasses with white clover, offering at all times a rich sweet bite for sheep, and is top-dressed every heavy rain by the washing from the traffic-manured centre. As each township on an average possesses about 250 miles of opened roads, of which one-half of the area is under such pasture, there are actually one thousand acres of an excellent sheep run able to maintain at least 1,000 head annually. This is no fancy, and I do not care though some sceptic halves it—say 500 head, therefore. There being 300 townships in older Ontario, we have the magnificent figure of 150,000 sheep that could, at the lowest estimate, be maintained, at no risk or annoyance to anybody, on our high-way pasture. By the August statistics of our Bureau of Industries, there are 2,000,000 sheep of all ages and kinds in Ontario—say 1,500,000 for the older parts

referred to—which shows that one-tenth of their number either are or should be kept upon the roads, allowance being made for the thoroughbreds that are not allowed such liberty. The annual value of this “commonly” cannot be put at less than \$300,000.

The Canadian ewe, on an average of localities, as influenced by great centres of long and short wool pure-breeds, is a mixture of Leicester, Cotswold, Lincoln and Southdown in all degrees of variety, but generally with a predominating Leicester type. She is roomy according to size, fairly well woolled, weak forequarters, ewe-necked, and combines hardiness with ability to raise a good lamb, and give above an average quality of mutton.

The Leicester.—After the Canadian, which traces so much to Leicester, the same Leicester deserves our next notice. Our experience has been nearly altogether with the Border type and not the English proper which, it is now well agreed, differ only as affected by conditions of upbringing, not in blood or original source. We have nothing in sheep life that can touch the Leicester in being early ready for any purpose—on getting what it likes. Breeding has not been so sure or prolific—about one lamb per head; they are but moderately good nurses, being too selfish in the disposal of their food; the Leicester is essentially a “bear” in character, laying on fat for hard times, and hence the abundant supply of milk is not prominent on an average. Lambs come with a delicate bearing, but once over the first month their progress is wonderful. Friend Bakewell’s soda-water bottle is still a feature in their build, and so also is the want of wool below, on young as well as old animals. Thus we have evidence of the prepotency of the Leicester. The fattened wether, with us is simply an extraordinary piece of mutton—I mean the shearing wether, as nothing else is admissible in these days of sharp profits—the immense depth, breadth, and prominence of the forequarters, the filling-in of the arms and thighs, and the general bunching of outside fat, is a fine piece of study, peculiar and curious. Who would eat it? Not many by choice, certainly, and very few by compulsion when the shearing weighs 307 lbs., as we had this year.

The Southdown.—England’s choice mutton—the great little breed of its chalk hills. We purposely place this after the Leicester, as, in our opinion, it is a Leicester in build and maturing. It is difficult to do justice to this breed with pen and ink, because it is easier to describe a faulty animal than a perfect one.

I desire to record, without any touch of doubt, that the Southdown is unmistakably our best friend at Guelph. I say Guelph, because as in any sheep life, conditions of climate, altitude, soil, vegetation and management affect so strongly that their conduct differs very strikingly, even on neighbouring farms. Friend here means one and one-half lamb per ewe—coming early, strong, plump, and with all the build of a mature animal. The average weight of a *newly-born* lamb is as heavy as the average of any other breed. The Southdown is a splendid mother, doing as well to two as the Cotswold does to one lamb; no doubt she does not do so on nothing, as in comparison with size she is a great forager. So prominent is this breed in milking properties that any difficulty we have had in udder affections has been with it. The Southdown do not go and come in flesh so much as any of the other breeds in our hands, and they are much less subject to disease, and when under any trouble they recover sooner and are more reliable afterwards; these are very marked facts in our experience—away above all doubt.

In regard to fattening, and the power of improving other breeds, or rather the production of wool and mutton with the common grade ewes of the country, it is on record elsewhere in this report that while less in weight there is a value of these products that places the Southdown second to nothing, and equalled only by the Shropshire.

The Cotswold.—We have had a larger flock of Cotswolds than others, and as true animals of their kind, as in any other. The gray face and the larger stamp

of the white faces have been handled here. One and one-fourth lamb per ewe is the average produce. They do not come so strong and so well made-up as the Downs; but once fairly into milk and extra food, make rapid progress. The ewes are moderate mothers and great eaters. We have no breed so liable to catarrh or "snifters" as this, and we hear the same complaint from other breeders. Sudden changes of weather, a wet bed, or any unusual climatic condition is sure to bring nose runnings; even the newly born lamb is sometimes affected. The Cotswold maintains wool in quantity and quality well, and longer than the Leicester. In fattening we cannot finish them so early as the Leicester, South Down or other Downs, and they are slower at taking on the "last dip," but for great weights nothing can beat them.

The Merino.—The extremes in sheep life with us are the Cotswold and Merino, the size and coarse wool of the one, against the size and fine wool of the other; they are alike in slower maturing—the Merino is too unsettled, and too much of the racehorse stamp to fill our views of a modern mutton producer. But practically our experience in pure breeding has been very limited—has been more in the line of testing the value of the offspring of a very fine French ram with the common ewes of the county. The marking in frame and wool is most striking—never doubtful even to the temper. Wool from hoof to horn—wool everywhere except a small part of the face and muzzle on the grade. The clip, in weight and quality stands high, and the fattened shearling wether has surprised us in weight and good handling, as to which see special notes in my Farm Report in killing of various grades.

The Shropshire.—We like this breed for several good reasons, as had by our own experience. It is reliable in breeding and prepotency, the ewes hold flesh easily and without danger, are average mothers—not equal to the Southdowns—prolific, one and one-half lamb; give a heavy close crop of medium long wool of fine texture and average lustre. In weight of carcass and wool it stands between South and Oxford Downs. In competition with the five other breeds, the Shropshire is equalled only by the Southdown in value of annual productions, and where extreme quality of flesh and wool is not the sole object of the flock-master, but more weight of both crops and somewhat less quality, then the Shropshire will lead in much of our future in Ontario.

The fattened grade wether is a nicely balanced piece of mutton, a little on the late side of maturing, not broad enough in the fore-quarters to some minds, and just a little leggy, but grand quality in bone, as well as handling.

The Oxford Down.—The most modern of improved sheep, and showing much of the size and nobility of one of their progenitors—the Cotswold. If it be true that the issue of a Cotswold ram with a Hampshire ewe was the origination of this breed then Cotswold power must be strong, because, as I have said, size holds, and the more open and coarse staple of wool also tells of Gloucestershire influence.

We hold the honour practically of introducing this breed to Canada, in 1876. when, advised to purchase Lincolns, we preferred to give the Oxford Down a place. Anticipations have been very satisfactorily realized. For early maturing, maintenance of weight, power to produce through the common Canadian, making good mothers, and giving *one and two-thirds* lamb per ewe, no other breed equals the Oxford Down, on an average. Value, in these times, of course, is not necessarily implied in such a strong statement as this, but, to those who desire a medium wool—on the long side, somewhat open and coarse, comparatively to other Downs—a heavy fleece, a strong square frame, early flesh of good quality, with ability to reproduce these through a common source, the Oxford Down must command a high place.

Sheep at Kingston.

Leicesters.—William Whitelaw, of Guelph, one of our earliest importers, and still a leader in the breeding of the Border type. I am confident in asserting that Mr. Whitelaw never exhibited anything but pedigree sheep; he would not even think of trying an English Leicester upon his Borders let alone other long wools. He is a true and reliable breeder, a systematic advocate of frequent use of new blood, and much of it from "home," as well as not afraid to show what the Leicester can do in carrying flesh when required. I like the quality of his flock, which is very even all over without any delicacy. He is particularly successful in maintaining wool both in quality and as an even crop over the carcass. This exhibit maintained these points in perfection.

John Kelly, jun., of Shakespeare, has a standing of twelve years among the Border Leicesters in Ontario, and a better practical judge of them is seldom met with. His acquaintance did not begin here, and his enterprise is not confined to what can be found here. His last importation was from Mr. A. R. Melvin, Midlothian, Scotland, among which some rams of rare merit are still in use, one of them being now at the Ontario Experimental Farm. There is plenty of character and no want of quality in the samples from Mr. Kelly's flock on exhibition. Andrew Murray, of Clanbrassel, is also an exhibitor of Leicesters, pure, strong and well wooled, from Bow Park herd.

Cotswolds.—Henry Arkell, of Arkell, a modern importer and breeder to a very considerable extent. A two shear ewe is very lengthy and a grand one all over, with the exception of somewhat open wool. His two shear ram from Gillet, of England, of the grey-faced type, is strongly built, and otherwise a fine animal, but with the like open and somewhat strong fleece. Mr. Arkell showed 16 Cotswolds.

Peter Arkell, of Teeswater, shows one grey-faced ram lamb, with a strong coat and a vigorous frame. The beginning of the flock goes back to the year 1866. James Main, of Milton, exhibited some good sheep of this breed.

Lincolns.—Andrew Murray, of Clanbrassel, had several Lincolns on Exhibition. The ram has the characteristic wool, is lengthy, strong of course, and generally good. There is a very fine ewe weighing 285 pounds, which, however, is weak-joined for the size.

Oxford Downs.—Henry Arkell, of Arkell, had twelve head of these in competition, the average stamp of which was first class; all were beautifully covered with wool in quality and texture, and indicated their character as early maturers of flesh by handling and general appearance. Some were rather strong in bone, and would be better with less leg.

Peter Arkell, of Teeswater, with fifteen head, had a shearling ram, more regular than his brother's, and even superior in wool, if possible. He has four specially fine shearling ewes, square, deep, compact, heavy, and stylish; as well as two ewe lambs of a particularly taking style.

Hampshire.—The county of Grenville is at present a centre of wealth by the enterprise of one man. W. T. Benson, of Cardinal, is an importer and breeder of Shorthorns, Herefords, Cotswolds, Oxford Downs, Shropshire and Hampshire and Hampshire Downs. He is the only exhibitor of this latter breed of Sheep, now so highly recommended for Ontario purposes. I do not like the two-shear ram under examination, he is an oddly long and narrow animal; a long neck also, the well-known strong head, but wool of grand texture and density. The shearling ewes are beautifully built, and compact.

South Downs.—The closest competition among sheep was with these, and between three of Ontario's best men. Robert Marsh, of Richmond Hill, is among our oldest, and one of the most eminent breeders of South Downs. Thirty-two

years is a long time—it is for all purposes the history of Ontario—to stick to one breed as he has done, always certain of his work, never despairing, and now reaping a golden harvest. He likes the Webb and Walsingham blood, and his flock at present number over one hundred head. His "Prince of Wales," from Sandringham, is a ram of fine quality and good substance, lengthy, and just a little pointy behind. The two shear ram "Henry Webb"—of famous South Down memory in England—is not so strong loined as the other, and yet of a stronger stamp otherwise. Two ewe lambs, from Coleman, of Norfolk, England, are unquestionably of remarkable quality and size—not a rough size, and there is wool everywhere—ears, and absolutely everywhere except the nostril.

John Jackson, of Abingdon, as already noticed, began breeding in 1862, and is now taking to the "Henry Webb" blood. He shows twenty-seven head in all—the largest on the ground. The two-shear ram "Colonel Webb, 45" is of the reachy stamp of South Downs—very fine no doubt, but somewhat lacking behind. Mr. Jackson is very enterprising, and not afraid to use good blood from any quarter, always pure and reliable.

Thomas Wilkinson, of Renton, shows twenty head. His flock is deep in Coleman blood by recent importations, and his work goes back to the year 1865. The shearling ram "Coleman, 1882" is a very lengthy sheep with a somewhat heavy head, and just a little slack-loined, but a fine one nevertheless. I was so taken with the ram-lamb as to secure it for the Ontario Experimental Farm; for size, style, wool and constitution, I did not see his equal. Shall I add that he is on the strong side for a Southdown? The Shearling ewes are simply perfect—vigor, room, and such fleeces.

Merino.—George Hood, of Guelph, shows a French Merino ram of the Ramboullia blood, the late French Royal farm flock. This is the heaviest of the kind, much over the Spanish or Saxony, and equally well woolled.

There was another exhibit of Merino—by whom I could not ascertain—of the American stamp. If they were so, pit the shepherds who have to do with such seraggy, dirty, long-tailed, small things—an irregular bunch of very fine wool, without carcass.

Fat Sheep.—Little competition, but large merit, Ontario would practically have no name in this line but for George Hood, of Guelph. No better judge of a sheep anywhere, few with equal enterprise, many less liberal, and none who has swept the American continent as he has for some years past with fat sheep. Mr. Hood, as I write (24th November, 1882), is again at the Chicago Fat Stock Show, and, with his own material and a draft from the Ontario Experimental Farm, has, I think, surprised himself. The Leicester grade, Cotswold grade, Oxford Down grade, Shropshire grade, South Down grade and Merino grade wethers in his hands are an exhibit rare and valuable of themselves—a study and a guide to the Ontario farmer who desires to know what to do.

III.—Herds and Flocks unrepresented at Kingston.

Many of our best herds and flocks were not represented at Kingston. As I have material wherewith to make a book, even were it necessary, upon what must always be an interesting and valuable subject, you will allow me to submit a running reference to some of the principal of these herds and flocks. I shall possibly overlook some that are more important than these because of want of personal knowledge of them, or that may be unknown to me by reputation. In this I trust those interested will be assured of my perfect disinterestedness, other than its national significance:

Take the northern section of the Province first. Our information leads as

far north as Maganetawan, where in the hands of Mr. Holditch "Royal Charlie" [1833 reg.] must be doing good Shorthorn work among the northern pioneers; this animal is from the herd of Mr. Bridges, Shanty Bay. Mr. Holditch, who has also some really good Cotswolds and Southdowns, deserves, of all men in Ontario, our heartiest "well done." Mr. Muntz, of Alport, Muskoka, was the first to introduce Herefords north of Orillia. His herd of thirteen include some animals of a type equal to any in the Province, and are principally from Mr. Bridges, Shanty Bay. His choice of England's famous grazier for meadow and rock was theoretically good, and it is to be hoped, is now practically realized. So also are his Southdowns from F. W. Stone of Guelph—as evidence, one hundred grades now luxuriating. A considerable patronage of Devons exists in Mara, per George Boulton, and with W. Calverley, of Orillia—the one from the herd of W. C. O'Brien, Shanty Bay, and the other from G. Rudd, Guelph—their success must be satisfactory, as both date back to 1876. Associated with these, in both cases, are flocks of Southdown from the old and careful breeder, Mr. Cuppage, Orillia, than whom few can talk Shortwools so well. In breeding of Herefords, C. A. Bridges, Shanty Bay, near Barrie, has ten years experience, and his present standing in merit, if not in numbers—40 head—is possibly unequalled on an average. Beginning with a draft from Mr. Stone, Guelph, he has since added materially to the herd by direct importations from England. Mr. Bridges is also high in Shropshire fever—the largest flock (109) of these in the province, I think, and in addition, has over 50 Southdowns of Marsh blood. Simcoe is more than well up in modern live stock; but these are not Simcoe's limit—Dr. Morton, of Bond Head, is a breeder of Shorthorns and Southdowns—"British Statesman" [8175] (42847) being at the top of his herd; E. D. Morton, of Barrie, is also a Shorthorn and Southdown patronizer of no little merit. "Baron Gano 2d" [4578] leads the herd, and Marsh prevails among the flock. Then there is first-class breeding of Shropshires by Dalton McCarthy, M. P., Southdowns and Shorthorns by John Srigley, of Allandale, and not least, though last named, is Walter Raikes, of Barrie, who has twenty-two years experience with Shorthorns, and holds at present "British Hero," (39506)—representation of a valuable and well-known family in England's live stock. Striking west to Grey County, near Owen Sound, we speak to W. J. Paterson about his Princess bull, "Rosy Prince 4th," [9280] and a score of good cows and heifers; then to Bruce, where Richard Rivers, of Walkerton, is nearly as bright in Shorthorns—having "Seraphinas Duke, 2d," [7846] with Southdowns from Stone and Anderson; Leicesters from Whitelaw, all of Guelph; and Cotswolds from the Snells of Brampton. Mr. Rivers goes back to 1867 as a flock master. Bruce has also Robert Gowanlock of Cotswold and Leicester renown, as well as James Thompson, Mildmay, who can speak of experience with Leicesters in 1850, and in closing the Northern trip we must not omit Henry McNally, of Maple Hill, as a Shorthorn advocate, as well as Robert B. Fleming in Leicesters.

I wish I were able to do justice to the west midland counties with all their age and wealth of cattle and sheep. In bearing south from Bruce we find R. & W. Scott, of Harriston, patronizing the Experimental Farm Leicesters, and Durham blood from James Brown, of Galt, near Alma, in Wellington county, also, we could profitably take a day with the Messrs. Hunter. These gentlemen take a high stand in the Province as careful breeders—men not afraid of England's Two Thousand Guinea yearling bulls and heifers, and believers in Booth with pedigree. It would make a big tree to trace all the Hunters have done for the Province since 1868. Their present bull "Socrates," (45640) is from the rich herd of Hugh Alymer, of Norfolk, England, which I have not seen since its introduction to the Alma herd, but opinion is high upon his merits, and breeding is vigorous. There is no want of field among the splendid lot of cows and heifers. The Hunters have

Royal Charlie" in pioneers; this ditch, who has men in Ontario, the first to introduce some animals of Bridges, Shanty was theoretic. So also are his grades now, per George herd of W. C. success must in both cases, ppage, Orillia, refords, C. A. present stand- an average. materially to igh in Shrop- and in addi- n well up in Bond Head, [42847] Shorthorn and [78] leads the breeding of ns by John es, of Barrie, s at present n family in nd, we speak and a score and Falkerton, is [7846] with of Guelph; to 1867 as a ster renown, ith Leices- y McNally, Leicesters. h all thea. e find R. & nd Durham y, also, we en take a and's Two a pedigree, Province l of Hugh ion to the There ters have

taken recently to Shropshire sheep, by importing from the Earl of Zetland and Lord Strathmore. Near neighbours and wholesome rivals to the last herd are J. & W. Watt, of Salem. I know of no men in Ontario who attain to so much success so quietly, and what they have done since 1864 must be wide and deep. To be Aberdeen Scotch may be something, but to be practical and thorough may be more in their business. Breeding Shorthorns that can safely (remember safely) lay on plenty of flesh are not plentiful in this country, and it is well known with these gentlemen that unless a large part of the pedigree is on the back of the animals, paper pedigree will not do. They possess a very fine herd, with "Barmpton Hero" [6595] who has swept the prizes of the Province again and again. What more need be said? Within gunshot of the Watts is Joseph Thomson with a large flock of Leicesters, and a good name as a beef maker by use of the best Shorthorn blood, where we note the "Bold Buecleugh" in possession.

Fergus has memorable surroundings, also—so many indeed, that I beg indulgence for what may be omitted—the Rennies, the Dows, and others; and then to the west the prominent breeder of—allow me to call them—Scotch Shorthorns, John S. Armstrong, of Speedside, with his clever sons. Mr. Armstrong is certainly the most cunning fattener of a steer in our province. By cunning I mean the knowing everything and not blazing it abroad, as some like to do for the sake of notoriety. To know what a calf will be exactly when three years old, is just what we would all like to attain to. Mr. Armstrong can do this, can give two thousand dollars for a bull calf when needed; the finest finished steer I have seen in Ontario came from here. He has a grand herd led by "Butterfly's Duke" [8190], and a very choice flock of over thirty head of Oxford Downs sheep. Southwards a piece we come to Armstrong's Mills, to Matthias Kirby of this place we have few equals in general knowledge of cattle and sheep; his Shorthorns are from F. W. Stone's herd, and Cotswolds from the Ontario Experimental Farm. He has a quarter of a century's experience in this country as a breeder of sheep. Down to Guelph, and among those not already mentioned in another part of Report we have Harold Sorby, a very prominent young leader in Cotswolds and Southdowns of the Swanwich, Gillett, Tombs, Jacobs and Experimental Farm blood—ninety head of such stamps mean a large interest. A gentleman, not much heard of in show circles by reason of choice, is John I. Hobson—now of prize farm judging fame—from whose herd of Shorthorns come some of the most fresh and serviceable bulls of the district. Eastward we touch E. H. Barclay's, near the Experimental farm, a late importer of Aberdeen polls, whose naturally quiet and safe judgment had been confirmed as a student of the Agricultural College. Another student of this college, already making his mark among Southdowns and Ayrshires, is the son of James Anderson, Puslinch. We cannot close Wellington county without calling upon Alexander Smith, of Aberfoyle, fairly up in Southdowns, and in possession of "Lord Knightly" from Stone, and upon J. B. Bessey & Bros., of Limehouse, where a score of very superior Ayrshire cattle have just been established.

In Waterloo county we have James Brown, of Galt, with the "Duke of Sharon, 10th" in a small but select herd of Shorthorns, and an unusually large flock of Leicesters. Mr. A. B. Snider, of German Mills, has had ten years handling of Shorthorns—taking renewals from the reliable herd of James Cowan, whose position has already been noted.

I feel rather diffident about entering Brant county, which has the honour of counting Bow Park among its stars. The highest compliment I can pay this institution is that it stands as an establisher of breeders. It is in fact the Kirk-livington, the Warlaby, the West Dereham Abby, of Canada—indeed of the American Continent. Its management is one of the most practical, far-seeing and

thorough character in the hands of Messrs. Clay & Hope—all honour to the memory of the Hon. George Brown, nevertheless. The great lesson of Bow Park to Ontario is the adaptability of the country, in healthy conditions, for the most complete development of England's great stall-feeding cattle—management allowed for, of course—and the lesson to every one is what one animal can *do when of the proper stamp*. I have not had the pleasure of seeing "Fourth Duke of Clarence" (33597) for some time, but, if now as then, England cannot beat him. The substance, the immense *vigorous* substance, with wealth of flesh, character and quality were to me most remarkable. Bring along the skeptic in blood and pedigree now; in all the possibilities of animal construction as influenced by man, what imagination could build this in a few years—a few years indeed:—the beginnings of this grand animal were as patent in 1782 as they exist to the eye in 1882, and had no *straight line* been kept during these one hundred years there would be no "Fourth Duke of Clarence."

In Halton County we have the energetic Green Brothers, of Oakville, with Shorthorn "Cavalier" [8214], from the Dryden herd, that has been giving excellent stock; and R. B. Ireland, of Nelson, with a large herd of Shorthorns and Lincoln sheep—"Mazurka Duke" [5703] being at present in use.

In Peel, Hugh Clark, of Brampton, has been among the Jerseys since 1871.

York County is still kept up in good old names. The Russells, of Richmond Hill, with seven score of the best Cotswolds England can offer, and a herd of Shorthorns of rare merit, at present led by "British Statesman" [8175] (42847). Twenty years of unflagging Shorthorn breeding have made the Russells a household word, and they well deserve it. Mr. Seth Hancock, of Kittleby, patronizes imported Shorthorns, and Southdowns from March, having a large number of each. Then Dr. Morton, of Toronto, claims a visit as a recent breeder of Ayrshire cattle and Southdown sheep. An Ontario leader in Jerseys is William Rolph, of Markham, who possesses a herd of two dozen very straight bred animals of the best type of the great creamers, and as many Shropshire Down sheep of recent importations.

Wellington is strong; Middlesex is not weak; York can speak, and Ontario County is not one whit behind any of them—so much field indeed in live stock virtues that the difficulty lies in avoiding offence giving. In order of age, we notice J. S. Thompson, of Whitby, as a breeder of Shorthorns, beginning in 1857, and now in possession of "Scarlet Velvet," [7833].

In connection with this preliminary effort of mine upon the Herds and Stocks of Ontario, J. I. Davidson, of Balsam, writes me:—"I think it will be valuable, if your time will permit, to do the subject justice, but if you were to give a description of them as H. H. Dixon did in *Field and Farm* you would require to make a personal inspection, and then you would do the breeders and their animals justice." Thanks, Mr. Davidson, and I conveyed your suggestion to the Council of the Agricultural and Arts Association, who highly approved of it, but felt unprepared to carry it out this year. Mr. Davidson goes away back to 1860 as a breeder of Shorthorns, and has imported no less than sixty from Aberdeenshire alone, knowing long ago, as the Americans are now realizing, that the Scotch stamp of the Shorthorn is better adapted to our continental conditions than the most of others. Chicago said so during the last Fat Stock Show. Mr. Davidson pays close attention to constitutional vigour, and is a thorough, practical and cautious handler of stock cattle for breeding. In 1864, the Drydens, of Brooklin, took a strong position among Shorthorn men, and have since shown no back-going. John Dryden, M.P.P., as the present proprietor, is firm and clear in all that belongs to such an interest—never doubting, and always reliable. He has of late made an important addition to the herd from Scotland, which now owns "Baron Surmise" [6620]

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28885. One of the largest, if not the largest, flock of Shropshire Down sheep is in Mr. Dryden's hands. In our previous notice of Mr. Guy's exhibition no mention was made of his flock of Leicesters and Southdowns. As a sheep breeder he dates back to 1862, and to 1864 in Ayrshire cattle. Arthur Johnston, of Greenwood, is certainly one of our most enterprising importers and breeders. Johnston and Cotswolds is now an old story, and his present flock of 120 is in high repute both in the States and Canada; these are of Gillett, Kilkenny and Farrington blood. Mr. Johnston has also a large herd of Shorthorns. James Miller, of Brougham, has not favoured me with a return of his herd, and therefore I cannot refer distinctly to age and numbers, but the Millers held no second place in Ontario records in breeding and feeding of Shorthorns, and I find many of our best breeders referring back to them as having started herds. At Ashburn, Wm. Heron & Son hold a more than average herd of Shorthorns under "2nd Prince of Springwood" [5978], and this was established from the Miller herd in 1868. The Messrs. Heron are recent importers of Shropshires from the Earl of Strathmore, Scotland. Another of the Brougham credits is the herd of James Graham, Port Perry, dating from 1871, and a Cotswold flock that cannot but stand high under such names as Tombs, Miller, Johnston, and Hodgson. We have, in closing Ontario county, a record of Hereford cattle in the herds of R. J. Mackie, of Oshawa, who took his first draft from F. W. Stone, of Guelph, in 1874, and subsequently, on two occasions, from the Ontario Experimental Farm. The stock bull here, "Duke of Argyle," an animal of particular quality, is from the latter place.

Durham and Victoria counties have not tempted me to say much, but, of course, the material may be there nevertheless. Mr. John Dix, of Little Britain, stands well in numbers of Shorthorn and Leicesters.

Peterborough can also tell of twenty years experience in Shorthorn and Leicesters—a herd of sixteen and a flock of fifty head belonging to Henry Collins, Warden of the county.

In Northumberland, I have pleasure in mentioning John Isaac, of Bomanton, with over twenty head of Aberdeenshire Shorthorns.

H. B. Rathbun & Son evidently make the county of Hastings their own in Shorthorns and Jerseys.

Joseph Youill, of Carleton Place, County Lanark, can not only count over thirty-five Ayrshire cattle, but is still in possession of "Carrick Lad" [58], winner of the Gold Medal, at Philadelphia, in 1876. There is a large flock of Leicesters here.

For twenty years, Wm. Rodden, of Plantagenet, Prescott county, has been a breeder of Ayrshires by direct importations, as also from the Dawes, of Lachine, and Sir W. Logan—now a very handsome herd of Scotland's heavy milkers. Mr. Rodden also patronizes Leicesters. He holds special and general awards from 1876, Philadelphia.

One touch of Glengarry, in the case of R. R. Sangster, of Lancaster, a breeder of Shorthorns and Leicesters, and we shall return to the west.

Norfolk Model Farm has not sent me a return—thinking, maybe, that Messrs. Hobson & Drury said enough in their report to you on prize farms. Mr. Carpenter is entitled to all you have heard of his establishment. H. Glagebrook, of Simcoe, is another of Norfolk's smart men—keen and enterprising, and, though a recent settler, is investing heartily in Shorthorns, Ayrshires, and Leicesters. He prefers Bow Park and Experimental Farm breeding.

Oxford county has many good men, and good herds and flocks. F. W. Dobbie, of Tilsonburg, can show many fine Leicesters, and a few Shorthorn cattle, dating from 1871. William Donaldson, of South Zorra, is a modern sheep fancier, having a very handsome collection of the Shropshire from Miller & Beattie, and

over a score of Shorthorns, with "Fancy Prince 2nd" [8557] in command. The Eastwood herd and flock are of themselves a big thing for Oxford and the Province. Mr. Pattison is a good judge of cattle and sheep, not to speak of horses—a fact not always following a writer and half city resident. His catalogue is evidence of careful work among Shorthorn, and many of his animals could stand beside the best we see at our principal exhibitions. Mr. Pattison is also a believer in Shrops, having, I think, the largest flock in the Province—over one hundred head. He likes their hardiness, their class of wool, and their power of producing quality of mutto nupon the common ewes of the country.

Should we cut a niche in the post at finding Ayrshires in Oxford? They are certainly outside of their warm ground, as told by the accompanying map. Mr. Thos. Nichol, of Plattsville, has a few, but is more prominent in Leicester sheep. Robert Williamson, of Ingersoll, has "Tam O'Shanter" from James Cowan, of Galt, a Shorthorn bull that should suit dairymen as against other strains.

The county of Perth can also quote Ayrshire to one considerable extent at least, as found with Michael Ballantyne, of St. Mary's, and George Rock, of Mitchell, holds a very handsome number of Shorthorns and Leicesters.

We have variety in Elgin county. Shorthorns with Archibald Brown, of Iona, who uses "Baron Constance," 37563, from J. Gibson, of Ilderton, and Leicesters from Simon Beattie, the well-known importer. William Woodham, of St. Thomas, is one of the few patronizers of Lincoln sheep, and Rock Bailey, of Union, is as special, in possessing over two hundred head of what he calls American Merino. I should like very much to have a thorough examination of those sheep, in order to ascertain whether, under Ontario conditions, there is much money with them as by any of our Downs.

Monck has one breeder at any-rate, and a good one—John Jackson, of Abingdon, with a few Shorthorns, is an old breeder of Southdowns. Beginning in 1862 with drafts from Shepherd, Renton, and Ash, he is now deep in imported material from Sandringham, and Henry Webb, of England, and should be second to nothing in Ontario.

Bothwell, per John Blue, of Duart, is a breeder of Ayrshire cattle, evidently under judicious management, where also is a small flock of Southdowns.

In Lambton, the Cotswold sheep have an unusually old patron. Henry McGurk, of Colinvile, began those long wools in 1856, from F. Dorechester, of Middlesex, and is now up to time with others from the Snells of Brampton.

Far west in Essex we come upon a choice herd of Shorthorns belonging to S. White, of Windsor, with the "6th Duke of Vinewood," 32444, a pure Bates bull.

Middlesex, if true to name, should be field agriculture and not so much live stock—garden more than grazing—by English type. But time may be wanting. Precedence by age gives us a start with J. S. Smith, of Maple Lodge. In 1854 he had England's early maturer of mutton, and can speak of families from Miller, Beattie, Smith, of Edmonston, and Patty, of Hensell, and also of Parkinson, Guelph, "Sixth Earl of Goodness," [8515] 32529, and thirty females must make a Shorthorn herd of some worth, and altogether a farm of an interesting kind. James Graham, of Ailsa Craig, has Lincoln and Shorthorn of 1865 and 1869, respectively. The stock bull is "Elvina's Oxford," 38768, and ram from John Henderson, of Lobo. In 1866, Richard Eady, of Granton, started a flock of Lincolns, and still believes in England's heaviest mutton. We have apparently in this county, the centre of Lincoln belief, as again Thos. Nicholson & Sons, of Sylvan, patronize to a very considerable extent, along with Bow Park Shorthorns, both of seventeen years standing. An energetic and business farmer is E. J. Yorke, of Wardsville. Beginning in 1869 he took to what is now the Ontario tax-payer in wool and

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nutton—the Southdown—choosing in these days from the Rev. J. T. Wright and
E. E. Irking, and now the Ontario Experimental Farm. Eight years afterwards
Mr. Yorke established a herd of Shorthorns, and still holds a few animals.

One of our far-seeing and active professional buyers and sellers lives at a
place called Ilderton, Middlesex. Well-known in England and the United States
—Richard Gibson has a fine eye for quality and character among all his Shorthorn
transactions, and though a young man, comparatively, has done a great deal for
our national status thus-wise. He is one of those who does one thing well—cattle
alone, not sheep also. Judge Morgan & Sons, of Kerwood, are among the Cots-
wolds and Durhams also, and prize takers at your 1881 exhibition. Shorthorns
appear to be in good repute with C. A. O'Malley at Wardville, where over thirty
head, with other valuable stock, make up an interesting exhibit. "Mazurka
Duke" [5703], 16523, is at present in use.

We make a particularly good closing for the west with the Geary Bros., of
London, whose exhibit reminds us, in a measure, of that of Mr. Whitfield, Quebec.
Aberdeen Polls, Herefords, Lincolns, and Shrops—in all 316 head. The Polls are
from herds of well-known Scotch merit—Ballindalloch, and Gavenwood; the
Herefords from C. B. Littlewood, W. Meredith, and E. Instone, of England. It
must be the wish of every patriotic Canadian that the enterprise of these gentle-
men be responded to on the part of our own people, and that we hear less than we
have done of such valuable stock leaving the country.

We have yet some notices to overtake in the midland-south portions of the
Province, and these very briefly.

C. S. Messacar, of Scotland, Brant, is not only a breeder of Herefords, as al-
ready stated, but possesses a large and important herd of Shorthorns, and flocks of
Leicesters and Southdowns. Daniel Perley, of Paris, goes back to 1852 with a
large flock of Southdown of English "Webb" and Stone, Guelph, pedigree. We
took note of Wm. Douglass, of Onondaga, and now make his herd of Shorthorns
up to seventy as begun in 1855, and a Leicester flock of six score that was started
in 1846. "Earl of Goodness 5th," [8514] 32519, from Bow Park is now the stock
bull. Mr. F. W. Smith, of Scotland, though recently among the Herefords has
not left the Shorthorns. Thos. Shaw, of Woodburn, a gentleman otherwise of
growing importance among cattlemen, holds "Prince Hopewell" [7656], among a
select number of Shorthorn cows, and has besides a large flock of Leicesters. An
Ayrshire herd, with services from Guy, of Oshawa, belongs to C. W. Ware, of
Hamilton,—twenty head in two years is a handsome beginning. Otherwise, the
county of Wentworth is strong in Ayrshire, and much could be said of the excel-
lent herds belonging to James McCormick, of Rockton; Joseph Cline, of Hamil-
ton, and John Carroll, of St. Catharines. St. Catharines has William Ash, old, as
previously mentioned, in sheep work, and Frank Wyatt, with Durhams, Leicesters,
Cotswolds, and Southdowns.

PRESENT POSITION OF ONTARIO IN REGARD TO THOROUGH-BRED CATTLE AND SHEEP.

It is not a matter of doubt, in any country, civilized or otherwise, that its
live stock interest should be fifty per cent. of its agriculture. Take an average of
the extremes of age, population and wealth, as existing at the present moment, in
the case of Britain and Canada. Every day of her life, for the last ten years, Eng-
land has been educating farmers to the fact that, even in their comparatively very
small area, more attention must be paid to the production of beef and mutton than
to grain. This is not by any means the natural issue of what is called their bad
times, but purely a line of work recognized by their best men as indispensable to

progress, as well as more independence. Of course, in this instance, independence implies a self-defence, by producing within themselves, as much as possible, of the main necessities of life.

The present position of Ontario, in this relation, is peculiar: She imports pure breeds from other countries; some of these are retained, others are handed over to our neighbours and even a few are returned to their original source; those that are retained are not widely scattered within the Province, but largely in sections, and in the hands of a few. It is plain, then, that the country is not yet fully awake to her duty in this fifty per cent. By fifty per cent. I mean this: Ontario ploughs—under rotation of crops—10,000,000 acres, on which, for the ordinary purposes of cultivation, including implements, horses, and common cows, there is an investment of only \$20 per acre. There are sixty per cent. of our farmers—not including those still building homes in newer townships—who take no interest in improved live stock, who are content with the good living they do make by growing and selling grain and fodder, and consequently their actual investment in the land is comparatively little—little, in comparison to those who maintain cattle and sheep, for the purpose of conserving the crops, maintaining fertility, and securing extra profits. These \$20 per acre should just be doubled by investment in live stock by those, as we have said, who have had time to settle down to national duties—the duty of conserving all our energies towards progress and permanency. The number of such farmers in our Province is at least 50,000, or one-half, who hold an average of 150 acres each under cultivation,—three-fourths of the whole cultivated area.

By the recent work of our Bureau of Industries, we are now in possession of what is undoubtedly very correct, as regards *total* in number of live stock. For sake of reference, take the following, from August returns of the present year:

CATTLE:

Common milch cows.....	680,652
Working oxen	14,245
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	694,897
Other cattle, young calves, &c.....	617,001
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	1,311,898
Store cattle, over two years.....	272,861
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	1,584,759
Pure breeds	23,297
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Total Cattle in Province.....	1,608,056

SHEEP:

Total	1,942,780
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I see no reason to doubt the total numbers of cattle and sheep, but there is no such number as 23,000 thoroughbred cattle in Ontario. From the returns obtained by myself—making a specialty of the case—there are evidently not more than 13,000. It is well known that farmers are very inaccurate—not purposely—in distinguishing exactly between a high graded animal and a thoroughbred, so that the official statistics cannot be held responsible for the distinction.

Now, with these and my own figures, how does the Province stand? Ten million acres growing food for man and beast; possibly one hundred thousand farms holding 1,608,000 cattle, and say 2,000,000 sheep, of all kinds. Actually, then, 16 head of cattle per farm of 100 acres; a very handsome representation indeed; most creditable to the country, because most other countries think themselves well when showing one cattle beast to every ten acres.

We start with the important and comfortable fact that, Ontario is well up in numbers of common cattle; that she has all the field required for beef and milk; but field is one thing, purity to give value is another, and an indispensable one. How many of the 272,000 store cattle, over two years old, now on hand, hold one cross of a thoroughbred bull of any kind?—not one-tenth of them. At the present moment there are, certainly, not 1,500 pure bred bulls in the whole land, or one to every 7,000 acres, or among fifty farmers. Is this private interest and national duty? Is it not a sad reflection on our enterprise that, for every 1,000 head of grade cattle we possess, but one pure bred, male or female, and that a very large proportion of these are allowed to be drafted out of the Province.

Altogether, therefore, the 50,000 farmers, who should be in possession of improved stock, to an additional, let us say \$10 in place of \$20 per acre, are keeping back the Province to a serious extent—an annual *interest* equal to \$6,000,000.

Other countries will be particularly surprised at the great disproportion between the cattle and sheep of Ontario. For any country to have nearly as many cattle as sheep, is unusual, indeed so much so, that it may be questioned whether another example like ours can be found. I submitted reasons for this, in my address at your annual meeting, in Kingston, in these words: "A forest country, an arable country, a grain-growing one, oxen for working, cows for milk, and the greater suitability of beef for human food, and for winter keep."

But, we are no longer babies in any of the science and practice of farming, and Ontario must be up and doing, in regard to mutton and wool, as much as in beef and grain. To be well up does not mean many, or any, more common sheep than now on hand, because there are about 20 head to each farm of 100 acres. With these as a base of operations, by use of the proper kinds of thoroughbred rams there is a wide enough field; but what agencies have we for such a purpose? Only 2,000 rams and 7,000 ewes pure bred of all classes, and some of the classes are not wanted; but grant these, and we have one ram to every fifty farmers; one to every thousand grade ewes. This gives us a painful idea of the utter unconcern of our people.

I have the honor to be, gentlemen,

Your obedient servant,

W. BROWN.

ONTARIO AGRICULTURAL COLLEGE,
November, 1882.

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