other countries in the South American continent, but attention has recently been directed to the possibility of developing the trade with Europe, and particularly with Great Britain.

The number of Argentine cattle imported into the United Kingdom in 1890 was 653, out of 150,003, the total export. This, in 1894, increased to 9,546, out of a total export of 220,490. In the three months ending March, '95, 5,005 head of cattle from Argentina were received in the United Kingdom, as compared with an entry of 3,174 head in the first quarter of 1894.

Besides the trade in live cattle, large quantities of beef, preserved in various ways, are exported from the Republic, of which the larger portion is shipped to Cuba and Brazil, in the form of jerked or "tasajo."

The cattle are largely fattened on alfalfa or lucern, either in the form of pasture or hay. In 1893 the estimated area under this crop was about 3,000,000 acres. It is claimed that four acres of good lucern will support two animals in winter and four in summer, which numbers may be largely increased after heavy rain. With a suitable subsoil, good crops of alfalfa have been obtained for twenty years in succession, yielding five cuttings and upwards annually.

In addition to the benefits derived from the abundance of cheap and excellent forage in the shape of alfalfa, the pastoralist in the Argentine Republic possesses a further advantage in the circumstances that owing to the favorable climate of the country cattle require neither housing or hand feeding.

Steers sent to England are usually over 1,320 pounds live weight, for which efforts are being made to secure better accommodation and attend ance on ships, so that the cattle may arrive in European ports in prime condition. The voyage to Europe by cattle ships is calculated to occupy twenty-eight days.

#### Periods of Gestation.

The following table will be found valuable if made use of. It should be preserved, and kept where it can be readily referred to:—

Time of service.		Mares. 340 Days.		Cows. 283 Days.		Ewes. 150 Days.		Sows.	
Jan.	1 1	Dec.	6	Oct.	10	May	30		22
**	6	11	11	- 11	15	June	4	Mar	27
***	11 16	"	16 21	"	20 25		9 14	May	2 7
11	21	**	26	11	30	11	19	"	12
***	26	11	31	Nov.	4		24	11	17
- 11		Jan.	5	11	9		29	11	22
Feb.	5 10	**	10	**	14		4	Jüne	27 1
11	15	"	15 20	"	19 24		14	June	6
11.	20	11	25	11	29		19	***	11
	25	11	30	Dec.	4	,,	24	**	16
Mar.		řeb.	4	1.6	9		29	"	21
11	$\frac{7}{12}$	11	9 14	11	14 19	Aug.	3	July	26 1
-11.	17	,,	19	"	24		13	11	6
	22	11	24	.01	29	"	18	**	11
. "		Mar.		Jan.	3	11	23	"	16
April	1	11	6 11	11,	8	Sont	28		21 26
11	$\frac{6}{11}$	11	16	"	18	Sept.	$\frac{2}{7}$	"	31
,,	16	11	21	**	23	,,		Aug.	5
**	21	11	26	11	28	11	17	11	10
7.5	26		31	Feb.	2		22	11	15 20
May	$\begin{array}{c c} 1 & A \\ 6 & \end{array}$	April	5 10	11	$\frac{7}{12}$	Oct.	27 2	"	25
	11	11	15		17	"	7	**	30
11	16	11	20	**	22	***	12	Sept.	4
71	21	11	25	3.5	27	23	17	11	9
11	26 31 N	ľау	30 5	Mar.	4 9	"	22 27	"	14 19
June	5	nay	10			Nov.	1		24
"	10	12	15	11	19	"	6	11	29
11	15	91	20	10	24	110		Oct.	4
11	$\frac{20}{25}$	11	25 30	Amnil	29 3	11	16 21	"	9 14
**	$\frac{25}{30}$ J	une	4	April	8	**	26	12	19
July	5	11	9	11	13	Dec.	1	**	24
11	10	11	14	11	18	**	6	. "	29
111	15	11	19	11	23	**		Nov.	$\frac{3}{8}$
11	20 25	10	24	May	28 3	11	16 21	11	13
"		uly	4	vi a y	8	"	26	11	18
Aug.	4	11	9	ñ	13	**	31	**	23
11	9	11	14	11. B.	-18	Jan.	5	."	28
. H 9	14	11	19 24	**	23	**	10 . 15	Dec.	<b>3</b> 8
11	19 24	11	24	June	20	11	20	"	13
11		ug.	3	"	7	71	25	,,	18
Sept.	3	"	8	11	12		30	2.2	23
11	8	110	13	11		Feb.	9.	Jan.	28 2
**	13 18		18 23	**	22 27	"	14	11	7
	23	11	28 .	July	2		19	***	12
	28 S	ept.	2 7	.,	7		24	11	17
Oct.		11	7	11	12	Mar.	1	11	22
11	8 13	10	12		17 22	"	. 6 11 l	Feb.	1
	18		22		27		16	"	6
11	23	11		Aug.	1	**	21		11
**		ct.	2	11	6	25	26	11	16 21
Nov.		11	12	* *	11 16	April	31 5	11	26
**		11	17	.,	91	April		Mar.	3
	17	11	22	11	26	11	1.5	11 %	8
cc	22	11 8	27		31	**	20	200	13
	28 N	OV		sept.	5	**	25 30	10	18 23
Dec.	2 7	, Caroli	6		10 15	May	30 5		28
11	12	,	16	11	20	11	10 2	April	2
	17		21	11	25	**	15	23	7
**	22		26	11	30	**	20	* *	12 17
2.2	27 De	ee.	1.0	ct.	5	**	25	* *	91

Mr. W. S. Hawkshaw, of Glanworth, Ont. reports great success this season with rape, in proof which he showed us a sample stalk some 45 inches long. He turned 120 of his fine Shrop-shire sheep, and lambs upon nine acres of it when they were hungry, and though considering it some what venturesome, realized no ill results, and the flock was doing well at last accounts.

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#### FARM.

#### British Columbia Experimental Farm.

The illustration on the opposite page represents a view of the Experimental Farm and buildings at Agassiz, B. C., under the able superintendence of Mr. Thos. A. Sharpe.

### Experience with Rye.

J. H. Berryman, Allen Co., Ohio, relates the following experience with this crop, in the Ohio Farmer:

"By good luck, or good management, I seeded fifty acres to rye last fall. I pastured sixty ewes that had yeaned in February, giving us ninety lambs upon the rye all through the spring, and never did lambs do better. They average now eighty pounds. Sixteen lambs ran on it all fall and as soon as it would do to turn them out in the spring, and they did excellently. About the middle of April I turned the cows in, fifty head, and by the addition of a little ensilage the milk flow was immense. Twenty acres we shut the stock off from about the 10th of May and allowed it to grow, expecting to harvest it; but the failure of the hay crop compelled me to cut it for hav when the grain had formed, but before it was ripe. It made from one to two and a-half tons to the acre. I count it as good as timothy hay; have been feeding it to the farm teams for two weeks and they are doing first-rate. Fifteen acres the cows have had access to all summer, in connection with blue grass pasture, and they have kept the flow of milk fully up to the average season, and the rye is still sprouting and growing green from the roots. This field is bottom land. Fifteen acres that I had on a rented farm was too unhandy to pasture; have cut it for seed. The May frost damaged it one-half, which would not have happened could I have pastured it and kept it back. I would advise every farmer to plan to sow some rye for early spring pasture. Should it be an open winter the rye would afford forage for light stock, and be available for all stock one or two months before the grass. My time for seeding to rye is the last of August or first of September, right after the corn is removed for the silo; I sow everything to rye. We find that it will not do to sow in the corn during the drouthy seasons in July, for the seed perishes. If the drouth continues two months longer we will have no corn. If rye be sown, generally it will be worth millions to the farmers and help to tide them over a bad place in their experience.

# How to Save Corn Fodder.

SIR,-In regard to our method of handling and preserving corn fodder I would like to state, first, that we grow ordinary hill corn and feed it to fattening cattle, ears and all, without husking. When the corn is ready it is cut by hand and laid down in bunches; four hills to a bunch if the crop is good. After wilting for a day, more or less, it is bound (stalks being used as ties) and shocked; twelve bunches to the shock. If the shocks are too big the corn moulds; if too small they don't stand well. After standing for a month or six weeks the corn is fit to be hauled off and stacked. In preparing for a stack a pole about fifteen feet long is set he ground two and a-half feet, and rails, from four to six feet long, are laid on the ground around the pole and crossed in such a way that the centre is considerably the highest. stacker stands close to the pole, with his left arm around it to hold himself on, and lays the corn bunches,—butts away from the pole, the tops reaching past the pole on the side next himself two feet or more, according to the length of the corn. So he goes on, bunch after bunch, round and round, going against the sun, until he is high enough to suit himself, when the last four or five bunches are placed with their tops up the pole and firmly tied, and the stack is finished. About twelve shocks are put into each stack. We find that the greater the diameter of the stack the more danger there is of heating and moulding. As the stacks settle the heating and moulding. As the stacks settle, the centre alone being tramped, the outside droops more and more; so that they are absolutely weather-proof.

The advantages claimed for this method as compared with that of putting the corn on end in a barn-mow are that the stalks do not get so dry, and the mice do not work in them nearly so much, eat-

ing the corn and spoiling the flavor. If hill corn is to be husked I put thirty-six hills (six each way) in one shock, and, without cutting, tie the four centre ones together diagonally. Such shocks do not fall. I much prefer this plan to using a wooden horse. The four centre hills are cut at husking time. The stalks are tied in small bundles and stacked just as above described.

Middlesex Co., Ont. THOMAS BATY.

"L. S. H.," in Practical Farmer, suggests that much valuable time, and worry, could be saved by charging a brother farmer up with everything that he borrows, and give him credit for it on its return. The practice of continually borrowing plows, cultivators, saws, etc., has very little to commend it, and, indeed, is often a great nuisance. Remember that "the borrower is servant to the lender."

## Toronto Industrial Exhibition.

Toronto, Monday, Sept. 9th. The Industrial Exhibition of 1895 was duly opened last week, and is now in full swing, with a largely increasing attendance of visitors daily. Great improvements in the way of buildings, etc., are noted in several departments. The magnificent display of exhibits is indeed a wonderful tribute to the breeding, agricultural, manufacturing, and artistic capabilities of Canada. There is an immense turn-out of pure-bred stock, for which, long ago, Canada became famous throughout the world, and the quality of which, as seen here, still entitles her to a position of pre-eminence. Detailed reports will be given in our next issue.

A GLANCE AT THE AGRICULTURAL MACHINERY. The Fair might give to the casual annual visitor an impression that the whole Machinery Hall contained the show of last year, running as it did then, but a careful examination shows improvements in very many lines. More attention is being given to shallow-cultivating implements, disc harrows, etc., year by year. Each season brings about lighter, handier and more complete implements than have previously been seen. It seems a great pity that farmers have not always the ready cash to be able to secure the most improved labor-saving machines, which not only make the work of the farm lighter and more pleasant, but also far better done, and

more remunerative, because more rapidly executed. Coulthard & Scott's (Oshawa) stand contained a nice display of cultivating and seeding machinery. Their spring-tooth riding cultivator has a movable tongue to allow three horses, if necessary, to walk between the wheels. The drill and seeder combined are fitted with hoes, spring-teeth and diamond-pointed teeth to suit them to any ground desired. These machines can be held at any depth desired with a spring adjusted by a lever. They also exhi-bited disc and diamond-frame harrows.

The Cockshutt Plow Co., Brantford, made an extensive display of plows, both walking, sulky and twin; also Manitoba breakers and stubble plows, potato diggers and root cultivators. Their Western corn cultivator and bean harvester is a complete machine.

The Wilkinson Plow Co., Toronto Junction, filled a good large stand with a varied assortment of plows, single, twin, three and four-furrowed; also Manitoba breakers. We were particularly im-Manitoba breakers. pressed with the brilliancy of the mouldboards, which are made of American soft-centred steel. Their potato digger has a round coulter arranged to prevent clogging with tops. The bars at the back, while at work, are continually jumping to shake the potatoes free from soil. They also exhibited straw-cutters, root pulpers and slicers, wide and narrow scrapers, steel rollers and scufflers.

T. T. Coleman, Seaforth, had an interesting and well-filled stand. Their root pulper has a simple but valuable attachment in the shape of a pair of blunt prodders which, at each revolution of the wheel, bob up and shake the roots loose from clogging in the hopper. Their two-furrowed gang plows are fitted with slip axles, which can be renewed, when worn out, for a few cents. They also have long mouldboards. The roller grain crusher cannot be unevenly adjusted. The corn cultivators exhibited in this stand have round-shanked teetl so that they can be easily set square to their work when working wide or narrow rows. The steel roller is admirably suited to uneven surfaces. Mr. Coleman has the sole agency in Western Ontario for Matthew Moody & Sons' (Terrebonne, Quebec) machinery.

Copp Bros., Hamilton, exhibited, besides a com plete set of plows, spring-tooth and diamond-frame narrows, a potato digger and a Champion road machine, which has become very popular. Root and corn cultivators, with different sets of teeth for different purposes, were also to be seen in this  $\operatorname{space}$ 

J. W. Provan, Oshawa, did not fill much space, but his exhibit—slings and forks, running on steel, iron and wooden tracks,—was worthy of much praise, so completely do they do their work.

The Verity Plow Co., Brantford, filled a good

large space with a fine exhibit of plows. Their line of root and corn cultivators have numerous varied

attachments.
Watson M'f'g. Co., Ayr, showed a fine display of ensilage and straw cutters. They have the concave, convex and cylinder knives, and carriers to any desired length. Their root pulper and slicer combined is a good machine. They also exhibited a grain crusher, and a corn and cob crusher. Their wheeled feed carrier, with box and barrel attachment, is a handy contrivance for any stock farm.

Cossit Bros. Co., Brockville, always had a crowd around their exhibit, viewing and asking questions about the Bindlochine, a singularly constructed binder, which has just one canvas, that being on the table. Although it looks somewhat complicated, it is said to draw lightly and do good work. They also exhibited horserakes, mowers, single

reapers, as well as disc and spring-tooth harrows.

David Maxwell & Sons, St. Mary's, occupied their accustomed stand, besides a considerable addition, all of which was well-filled - not with a lot of duplicates, but a full line of harvesting and hay-