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DOMINION BUREAU OF STATISTICS
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IRON AND STEEL AND THEIR PRODUCTS

THE AGRICULTURAL IMPLEMENTS INDUSTRY, 1933.

Production by the factories in Canada which were engaged chiefly in the manufacture of farm implements and machinery was valued at \$5,326,416 in 1933 compared with corresponding figures of \$5,510,078 in 1932, \$11,175,404 in 1931, \$26,902,139 in 1930 and \$40,659,479 in 1929.

Only 40 factories were in operation in this industry in 1933; 31 were in Ontario, 6 in Quebec, 2 in Manitoba, and 1 in Prince Edward Island. In 1932 there were 47 plants in this group and in 1931 reports were received from 57 establishments.

Capital employed was reported at \$63,903,380 in 1933 including \$18,384,793 for the value of land, buildings and equipment, \$14,390,135 for inventories of finished products, \$4,789,643 for inventories of materials on hand and stocks in process, and \$26,338,809 for cash, bills and accounts receivable, etc. The total capital was nearly \$10 millions below the 1932 figure and \$21 millions below 1931.

The average number of employees on the pay rolls during 1933 was 3,039 but many of these worked on short time for the greater part of the year. Salaries and wages for the year totalled \$3,047,501.

Imports of agricultural machinery were valued at \$2,290,401 in 1933 compared with \$2,204,646 in 1932. Exports and re-exports amounted to \$1,510,795 in 1933 and \$1,595,815 in 1932.

The apparent Canadian consumption of agricultural machinery as determined by adding production and imports and deducting exports totalled \$6,106,022 in 1933 compared with corresponding figures of \$6,118,909 in 1931, \$12,129,909 in 1931, \$38,410,397 in 1930 and \$52,385,827 in 1929. In the latter year the Canadian production was valued at \$40,659,479, imports at \$31,845,326 and exports at \$20,118,978.

Table 1 - PRINCIPAL STATISTICS OF THE AGRICULTURAL IMPLEMENTS INDUSTRY, 1929-1933.

Years	No. of plants	Capital employed	Average number of employees	Salaries and wages	Cost of materials at works	Selling value of products at works	Value added by manufacturing
			\$	\$	\$	\$	\$
1929	62	103,356,773	11,408	14,775,889	19,016,981	40,659,479	21,642,498
1930	57	98,684,828	7,405	9,564,049	11,353,523	26,902,139	15,548,616
1931	57	84,501,405	4,471	4,997,732	3,597,534	11,175,404	7,577,870
1932	47	73,576,979	2,758	3,097,975	1,907,768	5,510,078	3,602,310
1933 -							
Quebec	6	368,746	80	54,273	36,636	112,917	76,281
Ontario	31	62,966,381	2,892	2,924,181	2,087,148	4,989,927	2,902,779
Prince Edward Island	1)	568,253	67	69,047	91,247	223,572	132,325
Manitoba	2)						
CANADA	40	63,903,380	3,039	3,047,501	2,215,031	5,326,416	3,111,385

Table 2 - CAPITAL EMPLOYED, BY CLASSES AND BY PROVINCES, 1932 and 1933.

Provinces	Present value of lands, build- ings, fixtures, machinery and tools	Inventory value of materials on hand and stocks in process	Inventory value of finished products on hand	Operating capital (cash, bills and accounts re- ceivable, etc.)	TOTAL CAPITAL EMPLOYED
	\$	\$	\$	\$	\$
<u>1932</u>					
Prince Edward Island					
and Quebec...	198,174	93,190	56,740	201,153	549,257
Ontario	19,221,720	5,149,089	14,547,934	33,500,999	72,419,742
Manitoba	240,426	251,166	3,100	113,288	607,980
CANADA	19,660,320	5,493,445	14,607,774	33,845,440	73,576,979
<u>1933</u>					
Quebec	133,968	55,202	23,450	156,126	368,746
Ontario	18,022,066	4,671,909	14,205,902	26,066,504	62,966,381
Other provinces	228,759	62,532	160,783	116,179	568,253
CANADA	18,384,793	4,789,643	14,390,135	26,338,809	63,903,380

Table 3 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1932 and 1933.

Provinces	AVERAGE NUMBER OF EMPLOYEES						TOTAL SALARIES AND WAGES	
	On salaries		On wages		Salaries	Wages		
	Male	Female	Male	Female				
<u>1932</u>								
Prince Edward Island								
and Quebec	23	2	75	...	100	32,932	48,775	
Ontario	506	143	1,919	33	2,601	1,257,267	1,689,008	
Manitoba	13	4	40	...	57	32,168	37,825	
CANADA	542	149	2,034	33	2,758	1,322,367	1,775,608	
<u>1933</u>								
Quebec	19	1	60	...	80	21,011	33,262	
Ontario	446	129	2,275	42	2,892	1,041,934	1,882,247	
Other provinces.	17	3	47	...	67	31,935	37,112	
CANADA	482	133	2,382	42	3,039	1,094,880	1,952,621	

Table 4 - WAGE-EARNERS, BY MONTHS, 1932 and 1933.

Months	1 9 3 2			1 9 3 3		
	Male	Female	TOTAL	Male	Female	TOTAL
January	2,032	38	2,070	2,052	42	2,094
February	2,560	37	2,597	2,296	43	2,339
March	2,670	38	2,708	2,412	42	2,454
April	2,450	40	2,490	2,377	46	2,423
May	2,363	36	2,399	2,551	44	2,595
June	2,176	29	2,205	2,973	47	3,020
July	1,776	26	1,802	2,966	48	3,014
August	1,689	31	1,720	2,525	45	2,570
September	1,558	30	1,588	2,196	32	2,228
October	1,622	27	1,649	1,883	27	1,910
November	1,747	33	1,780	2,084	41	2,125
December	1,763	36	1,799	2,217	43	2,260
AVERAGE	2,034	33	2,067	2,382	42	2,424

Table 5 - WAGE-EARNERS IN MONTHS OF HIGHEST EMPLOYMENT, ACCORDING TO REGULAR HOURS WORKED PER WEEK, 1932 and 1933. (Overtime not included)

Regular hours worked per week	Number of wage-earners		Regular hours worked per week	Number of wage-earners	
	1932	1933		1932	1933
40 hours or less	2,097	1,745	51 - 53 hours	23	21
41 - 43 hours .....	...	3	54 hours	7	...
44 hours	183	165	55 hours	24	5
45 - 47 hours	88	939	56 - 59 hours	58	38
48 hours	15	26	60 hours	13	10
49 - 50 hours	424	483	Over 60 hours	31	36

Table 6 - FUEL AND ELECTRICITY USED, 1932 and 1933.

Kinds	Unit of measure	1 9 3 2		1 9 3 3	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal - Canadian ..	short tons	1,460	\$ 9,592	641	\$ 4,653
Imported ..	short tons	19,972	98,756	24,299	113,918
Anthracite coal	short tons	105	1,108	108	1,133
Coke ..	short tons	511	4,368	164	1,502
Gasoline	Imp. gal.	15,044	3,140	9,973	2,191
Kerosene	Imp. gal.	620	105	660	115
Fuel oil	Imp. gal.	286,175	22,944	498,588	38,841
Wood	cords	1,040	2,910	602	2,096
Gas - Manufactured	M cu.ft.	15,476	7,194	35,154	13,683
Natural	M cu.ft.	2,093	1,411	2,981	1,813
Other fuel	xxx	...	...	...	24
Electricity	K.W.H.	6,839,267	111,043	7,119,885	103,779
TOTAL	xxx	...	262,571	...	283,748

Table 7 - POWER EQUIPMENT, 1932 and 1933.

	1 9 3 2	1 9 3 3		
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and steam turbines	26	4,937	25	3,390
Gasoline, gas and oil engines	16	167	11	85
Hydraulic turbines or water wheels ...	4	119	4	121
Total Primary Equipment	46	5,223	40	3,596
Electric motors run by purchased power	1,056	18,556	1,200	18,243
Total Power Equipment	1,102	23,779	1,240	21,839
Electric motors run by power generated by above primary units	152	690	10	72
Total Electric Motors	1,208	19,246	1,210	18,315
Boilers	56	6,635	52	6,290

Table 8 - MATERIALS USED IN MANUFACTURING, 1932 and 1933.

Materials	Unit of measure	Total cost		Total cost	
		Quantity at works	\$	Quantity at works	\$
Iron and Steel -					
Pig iron	long ton	4,427	92,603	4,974	100,897
Wrought iron bars, etc.	short ton	59	3,739	56	3,796
Malleable iron bars, etc.	short ton	26	3,577	198	24,333
Iron castings, all kinds	short ton	1,173	121,488	816	96,544
Steel (other than special alloy steel) -					
Castings purchased	short ton	384	29,114	193	18,163
Ingots, blooms and billets	short ton	32	1,950	15	900
Bars and rods	short ton	3,926	208,280	6,520	322,424
Shafting	short ton	326	24,118	256	19,440
Plates	short ton	495	39,848	454	41,845
Sheets, plain	short ton	187	13,403	936	64,201
Sheets, galvanized	short ton	488	39,418	488	35,420
Structural shapes (angles, channels, etc.)	short ton	384	21,071	609	28,225
Wire	short ton	110	6,312	395	25,790
Alloy steel	short ton	9	1,922	...	2,311
Scrap iron and steel of all kinds	short ton	2,161	26,492	2,335	24,724
Other iron and steel	xxx	...	16,828		13,647
Other metals -					
Aluminium	lb.	35,896	7,472	18,267	2,850
Brass and bronze castings	lb.	75,297	13,471	54,941	8,976
Brass sheets, bars, etc.	lb.	12,177	2,528	10,307	2,152
Copper	lb.	55,226	10,039	53,662	13,301
Lead	lb.	10,623	505	7,727	455
Tin	lb.	11,568	2,968	57,936	8,032
Zinc	lb.	79,588	4,124	59,398	2,857
Babbitt metals and solder	lb.	21,653	4,032	26,157	5,028
Other metals	xx	...	3,890	...	4,798
Articles used for further manufacture -					
Parts for machines or vehicles	xx	...	325,251	...	278,824
Iron and steel pipes, tubes and fittings	xx	...	23,970	...	29,961
Bolts, nuts, rivets and screws	xx	...	48,482	...	44,888
Electrical goods	xx	...	65,130	...	60,170
Paints, oils and varnishes	xx	...	37,597	...	49,195

Table 8 - MATERIALS USED IN MANUFACTURING, 1932 and 1933. (concluded)

Materials	Unit of measure	1 9 3 2		1 9 3 3	
		Total cost Quantity at works	Total cost Quantity at works	\$	\$
Articles used for further manufacture (concluded) -					
Rubber and leather goods	xx	... 44,850	... 45,899		
Wheels - wooden	No.	... 2,223	7,022		
Wheels - metal	No.	13,792 40,817	8,869 27,250		
Separator parts	xx	... 157,833			
Cotton, duck and other textiles	xx	... 33,854	... 42,848		
Accessories and equipment for tractors and engines	xx	... 41,820	... ...	
Other articles of this class	xx	... 80,705	... 52,665		
Other material -					
Foundry coke (used in cupola; not for heat or power)	short ton	2,400 25,905	2,789 26,637		
Moulding sands	short ton	1,622 6,744	1,685 5,141		
Plumbago	lb.	2,145 149	1,710 126		
Other foundry facings	lb.	70,786 993	92,590 1,393		
Patterns and models	xx	... 546	... 125		
Lumber	M ft.b.m.	3,829 216,022	3,977 231,262		
Firebrick	M	42 2,268	72 4,799		
Fireclay	short ton	183 2,736	333 2,251		
Cupola blocks	No.	2,547 437	1,916 329		
Core oil	Imp. gal.	2,857 1,428	4,842 1,850		
Core compounds	lb.	2,516 96	5,715 250		
Shipping containers	xx	... 2,234	... 2,080		
All other materials	xx	... 206,562	... 271,121		
TOTAL	xx	... 1,907,768	... 2,215,031		

Table 9 - PRODUCTS MADE, 1932 and 1933.

Products	1 9 3 2		1 9 3 3	
	Number	Selling value at works	Number	Selling value at works
Agricultural implements, horse and power -				
Tillage implements -				
Cultivators	1,223	86,301	888	43,108
Harrow sections	3,009	11,066	3,446	9,022
Harrows, disc	1,335	46,788	1,313	103,327
Harrows, spike tooth	234	3,549	570	3,445
Harrows, spring tooth	1,218	18,027	1,213	17,730
Harrows, kind not specified	41	1,025	...	...
Hoes, horse	252	2,872	19	211
Land rollers, land packers and plough packers	557	10,875	173	4,796
Ploughs, disc	851	173,183	1,098	172,061
Ploughs, single, walking	9,753	96,284	10,952	105,355
Ploughs, single, sulky	314	11,088	213	7,234
Ploughs, gang, walking	535	17,822	620	21,228
Ploughs, gang, sulky	1,086	55,775	276	11,933
Ploughs, gang, tractor	608	57,977	402	26,437
Ploughs, hillside	210	3,132	841	9,504
Ploughs, all other	329	28,366	367	34,701
Scufflers	1,908	12,486	3,166	20,081
Weeders	62	3,846	353	14,811

Table 9 - PRODUCTS MADE, 1932 and 1933 (concluded)

Products	1 9 3 2		1 9 3 3	
	Selling value		Selling value	
	Number	at works	Number	at works
	\$		\$	
Agricultural implements, horse and power -				
Planting and seeding machines -				
Drills	716	92,462	256	33,622
Planters, corn	12	392	125	2,391
Other planting and seeding machines .....	...	643	47	3,367
Harvesting machines -				
Binders, grain	2,402	369,810	6,317	815,380
Threshers and reaper-threshers	403	373,876	340	242,686
Other harvesting machines including reapers, corn binders, etc. .....	...	2,366	...	23,310
Haying machines -				
Hay forks, carriers and slings	116	1,105	...	3,300
Hay loaders	357	24,733	230	13,541
Hay rakes	1,149	31,537	1,613	39,410
Hay rakes, side delivery and tedder combined	69	5,134	21	1,471
Mowers	4,155	209,832	3,796	202,955
Other haying machines .....	...	...	...	524
Other farm equipment -				
Ensilage cutters and straw cutters	108	4,062	79	3,346
Fanning mills, grain cleaners and grain blowers .....	...	117,434	...	106,310
Manure spreaders	504	55,860	498	43,564
Potato diggers	301	17,264	18	925
Pulpers and slicers	145	2,199	423	6,661
Sprayers, power	628	61,390	98	28,395
Grain grinders	797	60,152	1,241	43,160
Dairy equipment -				
Cream separators	3,324	203,201	6,364	402,470
Other dairy equipment including milking machines, churns, etc. .....	...	274,662	...	249,813
Parts and accessories for agricultural implements .....	...	893,296	...	683,889
All other farm implements and machinery .....	...	311,761	...	214,811
Received for custom work and repairs .....	...	528,016	...	927,858
All other products (x) .....	...	1,227,929	...	628,338
TOTAL .....	...	5,510,078	...	5,326,416

(x) Includes miscellaneous articles which were mostly reported by only 1 or 2 firms in this group such as: warm air furnaces, stoves, electric refrigerators, washing machines, road machinery, pumps, iron castings, etc.

Table 10 - PRODUCTION IN CANADA OF CERTAIN AGRICULTURAL MACHINERY, 1929 - 1933.

Products		1929	1930	1931	1932	1933
Cultivators	No.	14,420	12,914	3,518	1,223	939
	\$	1,002,398	741,441	279,564	86,301	44,128
Drills, seeding	No.	20,184	14,035	2,819	716	256
	\$	3,176,755	2,224,235	457,707	92,462	33,622
Harrows	No.	44,561	23,614	8,678	3,088	3,296
	\$	1,812,195	937,533	280,576	89,389	132,182
Binders, grain	No.	24,783	17,541	3,485	2,402	6,317
	\$	4,044,375	2,775,147	586,133	369,810	815,380
Mowers	No.	23,628	17,675	8,340	4,155	3,796
	\$	1,366,087	1,026,677	511,392	209,832	202,955
Ploughs	No.	75,461	77,525	22,862	14,505	15,669
	\$	4,771,511	3,895,136	884,877	463,627	413,839
Threshers and reaper-threshers	No.	6,717	2,076	918	418	351
	\$	6,358,514	1,624,717	830,202	389,174	250,921

Table 11 - IMPORTS INTO CANADA, EXPORTS AND RE-EXPORTS OF AGRICULTURAL IMPLEMENTS AND MACHINERY, BY PRINCIPAL COUNTRIES, 1932 and 1933.

Countries	I	M	P	O	R	T	S	EXPORTS AND RE-EXPORTS
	1932	1933	1932	1933	1932	1933	1932	1933
Argentina			18,705	12,190	185,106	164,798		
Australia			2,204	2,982	66,744	83,635		
Belgium	3,774	5,998	3,560		
British South Africa	83	434,537	357,903		
Chile	2,650	5,948		
Denmark			1,287	1,704	5,646	13,747		
Finland			4,525	1,304	233	150		
France			1,347	1,739	75,403	75,403		
French Africa	37,193	9,348		
Germany			29,187	21,870	21,091	20,013		
Great Britain			99,600	116,802	203,382	276,235		
Irish Free State			4,466	794	4,537	6,611		
Italy			18	10	3,917	6,405		
Mexico	623	793		
Morocco	23,169	10,097		
New Zealand	54,743	99,936		
Norway	4,572	7,233		
Sweden			75,936	77,881	10,356	5,662		
United States			1,963,257	2,042,538	328,771	285,566		
Uruguay	3,029	5,398		
Other countries			4,114	6,730	124,115	72,304		
TOTAL			2,204,646	2,290,401	1,595,815	1,510,795		

LIST OF FIRMS INCLUDED IN THE AGRICULTURAL IMPLEMENTS AND MACHINERY INDUSTRY IN CANADA,
1933.

<u>Names of Firms</u>	<u>Location of Plants</u>
<u>PRINCE EDWARD ISLAND -</u>	
Hall Manufacturing & Cold Storage Co. Ltd.	Summerside
<u>QUEBEC -</u>	
Desjardins, Ltee.	St. Andre de Kamouraska
Dion et Frere	Ste. Therese de Blainville
La Cie Godbout Ltee.	Massueville
La Cie Jutras, Ltee.	Victoriaville
Moody, Matthew, & Sons Co. Ltd.	Terrebonne
Omega Machinery Ltd., The	42 Rue Mondor, St. Hyacinthe
<u>ONTARIO -</u>	
Bissell, T.E., Company Ltd.	Elora
Brown, Robert H., Co.	Armstrong and Hamilton Sts., Ottawa
Canadian Potato Machinery Co. Ltd.	16 Cooper St., Galt
Cockshutt Plow Co. Ltd.	Mohawk St., Brantford
De Laval Company Ltd., The	113 Park St., Peterborough
Ebersol, John R.	Mill St., Milverton
Empire Farm Machinery Co. Ltd.	114 L'Esperance Road, Tecumseh
Erie Iron Works Ltd., The	116 Talbot St., St. Thomas
Goodison, John, Threshing Machine Co. Ltd., The	
Fleury's, J., Sons Ltd.	Essex and Mitton Sts., Sarnia
Frost and Wood Co. Ltd., The	Wellington St., Aurora
Gilson Mfg. Co. Ltd.	25 Chambers St., Smiths Falls
Goold, Shapley & Muir Co. Ltd.	240 York Rd., Guelph
Hamilton, Peter, Co. Ltd., The	Wellington St., Brantford
Hergott Company	277 George St., Peterborough
International Harvester Co. of Canada, Ltd.	Mildmay
Jamesway Ltd.	Sherman Ave. N., Hamilton
Massey-Harris Company Ltd.	Rosemount Ave. and Dufferin St., Weston
Massey-Harris Company Ltd. (Verity Works)	915 King St. W., Toronto (Head office)
Massey-Harris Company Ltd.	Brantford
New Perfection Sprayer Co.	Market St., Brantford
Percival Plow & Stove Co. Ltd.	65 Main St., Galt
Renfrew Machinery Co. Ltd., The	Merrickville
Sawyer-Massey, Ltd.	Lochiel St., Renfrew
Sunshine Waterloo Company Ltd.	Wellington St. N., Hamilton
Tweed Foundries Limited	Sunshine Ave., Waterloo
Waterloo Manufacturing Co. Ltd., The	Tweed
Watson, John, Mfg. Co. Ltd., The	67 King St., Waterloo
White, George, & Sons Co. Ltd.	Ayr
Wood, W. C., Co. Ltd.	Cabell St., London
	2067 Dundas St. W., Toronto
<u>MANITOBA -</u>	
Gregg Mfg. Co. Ltd.	601 Bowman Ave., Winnipeg
Hart-Emerson Company Ltd., The	1425 Whyte Ave., Winnipeg