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DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS
CENSUS OF INDUSTRY
MINING, METALLURGICAL AND CHEMICAL BRANCH
OTTAWA - CANADA

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ANNUAL INDUSTRY REPORT

IRON AND STEEL AND THEIR PRODUCTS GROUP

THE MACHINERY INDUSTRY, 1937.

In accordance with the provisions of the Statistics Act, each manufacturing concern in Canada submits to the Dominion Bureau of Statistics at Ottawa a yearly report covering such items as production, employment, capital, etc.. In most cases a manufacturer makes more than one product but is not asked to apportion these details between the different articles which he manufactures. It is impossible, therefore, except in a few cases, to compile detailed figures of employment, etc., for any single commodity.

For the presentation of these detailed statistics the Bureau has subdivided manufacturing into nine groups of industries, producing concerns being classified according to the principal component material of their major products. For example, the pulp and paper industry is classified under "Wood and Paper"; iron foundries under "Iron and Steel and Their Products", etc.. These main groups are further divided into industries to which the concerns are allotted according to the nature of their main products. The iron and steel group is subdivided into 17 industries, one being the Machinery Industry which is reviewed in this bulletin. This industry covers the operations of iron and steel works which were occupied chiefly in making industrial, household, office and business machinery. Farm implements and machinery and electrical machinery and supplies are covered by separate reports.

Some concerns in other industrial groups made machinery as secondary or minor products so the production figures for the Machinery Industry do not necessarily represent the total Canadian output of the commodities listed. Table 13 has been added to give the total machinery production as assembled from all industries; in 1937 the total for industrial, office, business and household machinery (including electrical machinery) was \$80,885,614 compared with \$59,743,451 in the previous year.

During the year under review a total of 214 concerns in Canada manufactured industrial, household, office and business machinery (except electrical machinery) as their principal products and were classified to the Machinery Industry. Their output valued at \$57,096,816 was the highest attained by the industry since the record of \$65,692,539 in 1929 and it exceeded by 38 per cent the 1936 total of \$41,447,473 which in turn was 26 per cent over the 1935 value of \$32,856,175.

Of the 214 establishments operating in this industry, 149 were located in Ontario, 36 in Quebec, 15 in British Columbia, 10 in Manitoba, 2 in Saskatchewan, and 1 in each of Alberta and Nova Scotia. Ontario firms accounted for about 67 per cent of the total production for the Dominion and concerns in Quebec accounted for 31 per cent. These manufacturers of machinery had a capital investment in Canada of \$66,325,206 and afforded employment to a monthly average of 12,638 people who were paid \$16,059,392 in salaries and wages. Their expenditures for manufacturing materials amounted to \$22,204,200 and for fuel and electricity to \$759,245.

Among the principal lines made in this industry were washing machines and ironers, sewing machines, cash registers, typewriters, air compressors, elevators, drills, scales, pulp and paper mill machinery, road making machinery, service station equipment, transmission machinery, water wheels and turbines, oil burners, mechanical stokers, pumps, wood and metal working machines of all kinds, etc.. Detailed production data for the industry are given in Table 12 and supplementary figures to show the total output from all industries are given in Table 13.

Imports of machinery into Canada (except agricultural and electrical) were appraised at \$46,426,523 during 1937 and exports during the same period were reported at \$10,837,419. Of the imports, \$3,832,235 came from Great Britain and \$41,261,366 from the United States and of the exports, \$4,613,149 went to Great Britain and \$242,101 to the United States.

This report is divided into three sections. The tables given under Section One refer only to the Machinery Industry and are similar to those given in separate bulletins for each of the other industries in the iron and steel group. Section Two consists of supplementary data covering machinery manufacturers in other industries and the total Canadian production of machinery, in detail. Section Three gives the imports and exports of machinery.

SECTION ONE

Table 1 - PRINCIPAL STATISTICS FOR THE MACHINERY INDUSTRY, 1929 - 1937.

Year	No. of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
1929	169	75,226,204	12,435	17,091,918	684,629	22,264,416	65,692,589
1930	174	69,454,103	11,044	15,089,887	623,671	18,326,621	53,749,482
1931	172	62,752,673	8,644	10,793,352	489,141	11,120,332	34,492,915
1932	179	57,753,031	7,191	7,894,912	470,060	7,731,233	22,270,195
1933	189	53,167,815	6,317	6,575,848	452,903	6,787,924	18,912,926
1934	198	53,311,396	7,526	8,265,101	537,585	10,391,964	26,072,269
1935	211	59,899,705	8,949	10,531,251	611,375	12,194,263	32,856,175
1936	218	61,206,866	10,277	12,305,422	680,763	15,761,565	41,447,473
1937	214	66,325,206	12,638	16,059,392	759,245	22,204,200	57,096,816
% change 1937 from 1936 ...	-1.4	+ 8.4	+ 25.0	+ 30.5	+ 11.5	+ 40.9	+ 37.8

NOTE - Profits or losses cannot be calculated from these figures because no data are collected for miscellaneous expense items such as insurance, taxes, advertising, depreciation, etc.

Table 2 - PRINCIPAL STATISTICS, BY PROVINCES, 1936 and 1937.

Province	No. of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
<u>1936</u>							
Quebec	36	19,600,145	3,391	4,072,211	280,912	4,580,848	11,524,968
Ontario	150	39,039,620	6,442	7,704,223	368,266	10,734,594	28,532,769
Manitoba ...	8	752,360	141	159,764	15,540	200,833	612,120
Alberta	4	151,860	42	43,479	936	25,558	91,250
Br. Columbia	17	1,245,719	188	253,962	9,613	148,697	501,021
Nova Scotia.	1)	417,162	73	71,783	5,496	71,035	185,365
Saskatchewan	2)						
CANADA ...	218	61,206,866	10,277	12,305,422	680,763	15,761,565	41,447,473
<u>1937</u>							
Quebec	36	21,831,966	4,263	5,477,090	311,586	6,295,151	17,791,198
Ontario	149	42,340,271	7,993	10,074,711	423,765	15,487,936	38,093,540
Manitoba ...	10	459,555	94	110,168	7,164	101,039	316,713
Br. Columbia	15	1,221,320	193	296,504	10,588	236,871	656,098
Nova Scotia.	1)	470,094	95	100,919	6,142	83,203	239,267
Saskatchewan	2)						
Alberta	1)						
CANADA ...	214	66,323,206	12,638	16,059,392	759,245	22,204,200	57,096,816

Table 3 - ESTABLISHMENTS GROUPED ACCORDING TO PRODUCTION, NUMBER OF EMPLOYEES and CAPITAL EMPLOYED, 1937.

	Number of plants	Capital employed	Average number of employees	Gross selling value of products at works
		\$		\$
(a) PRODUCTION				
Under \$25,000	57	1,423,542	330	707,123
\$25,000 to \$50,000	35	2,089,652	438	1,315,311
\$50,001 to \$100,000	29	3,867,426	529	2,100,777
\$100,001 to \$250,000	39	9,956,076	1,577	5,937,189
\$250,001 to \$500,000	24	8,087,631	1,712	8,594,527
\$500,001 to \$1,000,000	20	16,205,230	3,192	13,163,356
\$1,000,001 to \$5,000,000 ..	10	24,693,649	4,860	25,278,533
TOTAL	214	66,323,206	12,638	57,096,816
(b) NUMBER OF EMPLOYEES				
1 or 2	12	102,784	20	71,241
3 to 10	57	2,245,805	358	1,568,453
11 to 20	45	3,055,266	641	2,609,152
21 to 50	52	12,682,569	1,827	8,846,558
51 to 100	18	6,054,227	1,357	6,192,142
101 to 250	22	19,919,720	3,520	14,393,015
Over 250	8	22,262,835	4,916	22,416,255
TOTAL	214	66,323,206	12,638	57,096,816
(c) CAPITAL EMPLOYED				
Under \$25,000	48	632,323	260	720,485
\$25,000 to \$100,000	60	3,087,185	805	3,048,286
\$100,001 to \$1,000,000	92	29,447,249	5,905	25,863,444
Over \$1,000,000	14	33,156,449	5,668	27,464,601
TOTAL	214	66,323,206	12,638	57,096,816

Table 4 - CAPITAL EMPLOYED, BY PROVINCES, 1936 and 1937.

Province	Present value of lands, build- ings, fixtures, machinery and tools	Inventory value	Operating capital	TOTAL CAPITAL EMPLOYED
		of materials and products on hand and accounts and stocks in process	(cash, bills receivable, etc.)	
	\$	\$	\$	\$
<u>1936</u>				
Quebec	9,937,659	4,466,675	5,195,811	19,600,145
Ontario	19,655,279	9,704,025	9,689,316	39,039,620
Manitoba	354,911	246,184	151,265	752,360
Alberta	98,414	43,622	9,824	151,860
British Columbia .	694,498	332,139	219,082	1,245,719
Other provinces ..	81,503	131,297	204,362	417,162
CANADA	30,822,264	14,923,942	15,460,660	61,206,866
<u>1937</u>				
Quebec	9,954,717	5,988,750	5,888,499	21,831,966
Ontario	21,064,555	10,592,003	10,683,713	42,340,271
Manitoba	273,887	120,531	65,137	459,555
British Columbia .	693,506	254,078	273,736	1,221,320
Other provinces ..	101,685	137,407	231,002	470,094
CANADA	32,088,350	17,092,769	17,142,087	66,323,206

Table 5 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1936 and 1937.

Province	Average Number of Employees						Salaries	Wages	TOTAL SALARIES and WAGES
	On Salaries		On Wages		Male	Female			
	Male	Female	Male	Female		TOTAL			
<u>1936</u>							\$	\$	\$
Quebec	617	154	2,530	90	3,391	1,290,114	2,782,097	4,072,211	
Ontario	1,210	364	4,758	110	6,442	2,655,796	5,050,427	7,704,223	
Manitoba	24	9	108	...	141	57,119	102,645	159,764	
Alberta	7	2	32	1	42	12,514	30,965	43,479	
British Columbia.	46	9	130	3	188	92,436	161,526	253,962	
Other provinces .	15	2	55	1	73	24,473	47,310	71,783	
CANADA	1,919	540	7,613	205	10,277	4,130,452	8,174,970	12,305,422	
<u>1937</u>									
Quebec	591	141	3,423	108	4,263	1,249,788	4,227,302	5,477,090	
Ontario	1,340	432	6,047	174	7,993	3,189,786	6,884,925	10,074,711	
Manitoba	14	6	73	1	94	34,186	75,982	110,168	
British Columbia.	43	7	142	1	193	107,495	189,009	296,504	
Other provinces..	18	2	75	...	95	29,900	71,019	100,919	
CANADA	2,006	588	9,760	284	12,638	4,611,155	11,448,237	16,059,392	

Table 6 - WAGE-EARNERS, BY MONTHS, 1936 and 1937. (On 15th of each month)

Month	1 9 3 6			1 9 3 7		
	Male	Female	TOTAL	Male	Female	TOTAL
January	7,021	160	7,181	8,347	265	8,612
February	7,082	165	7,247	8,595	280	8,875
March	7,157	159	7,316	9,111	290	9,401
April	7,265	171	7,436	9,495	292	9,787
May	7,381	182	7,563	9,848	290	10,138
June	7,693	201	7,894	10,247	287	10,534
July	7,722	224	7,946	10,367	285	10,652
August	7,867	230	8,097	10,402	291	10,693
September	7,967	236	8,203	10,369	288	10,657
October	8,028	241	8,269	10,348	293	10,641
November	7,965	240	8,205	10,151	269	10,420
December	8,089	249	8,338	9,696	256	9,952
AVERAGE	7,613	205	7,818	9,760	284	10,044

Table 7 - REGULAR HOURS WORKED PER WEEK, 1936 and 1937.

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 hours or less	5.6	6.1	51 - 53 hours	1.6	2.4
41 - 43 hours .....	.6	.7	54 hours .....	.7	6.5
44 hours	24.6	21.8	55 hours	3.1	2.3
45 - 47 hours	10.3	9.4	56 - 59 hours	2.8	2.1
48 hours	18.7	11.8	60 hours and over	3.0	3.9
49 - 50 hours	28.9	32.9			

Table 8 - FUEL AND ELECTRICITY USED, 1936 and 1937.

Kind	Unit of measure	1 9 3 6		1 9 3 7	
		Quantity	Cost at works	Quantity	Cost at works
		\$	\$		\$
Bituminous coal - Canadian ...	short ton	11,991	76,328	14,564	80,684
Imported ...	short ton	23,166	151,349	22,728	146,986
Anthracite coal	short ton	11,322	62,225	9,698	54,055
Lignite coal	short ton	289	1,204	471	3,550
Coke	short ton	3,319	29,637	3,790	35,017
Gasoline	Imp. gal.	9,233	1,988	42,466	7,981
Kerosene	Imp. gal.	4,380	773	11,081	2,137
Fuel oil	Imp. gal.	409,881	31,863	509,254	44,197
Wood	cord	1,325	4,200	1,751	5,391
Gas - Manufactured	M cu.ft.	16,293	11,360	17,166	14,005
Natural	M cu.ft.	8,080	5,039	6,189	4,068
Other fuel .....	\$	...	1,128	...	1,343
Electricity purchased	K. W. H.	21,122,909	303,669	27,696,823	359,831
TOTAL .....	\$	...	680,763	...	759,245
Electricity generated for own use	K. W. H.	2,336,044	...	3,123,241	...

Table 9 - POWER EQUIPMENT, 1936 and 1937.

Kind	1 9 3 6		1 9 3 7	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and turbines	39	6,536	28	6,156
Diesel engines	1	36	2	212
Gasoline, gas and oil engines	2	19	1	4
Hydraulic turbines or water wheels	6	305	3	58
Total Primary Power	48	6,896	34	6,430
Electric motors run by purchased power ..	3,252	37,313	3,497	39,562
TOTAL	3,300	44,209	3,531	45,992
Electric motors run by primary power	292	4,255	338	4,889
Stationary boilers	120	11,513	106	10,435

Table 10 - POWER EQUIPMENT, 1937, CLASSIFIED ACCORDING TO - POWER ORDINARILY IN USE - and - POWER IN RESERVE OR IDLE.

Kind	Ordinarily in Use		In Reserve or Idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and turbines	21	3,811	7	2,345
Diesel engines	2	212	...	...
Gasoline, gas and oil engines	1	4	...	...
Hydraulic turbines and water wheels	3	58	1	35
Total Primary Power	27	4,085	8	2,380
Electric motors operated by purchased power	3,454	38,877	43	685
TOTAL	3,481	42,962	51	3,065
Electric motors operated by primary power	278	3,553	60	1,336
Stationary boilers	102	10,101	4	334

Table 11 - MATERIALS USED, 1936 and 1937.

Materials	Unit of measure	1 9 3 6		1 9 3 7	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Iron -			\$		\$
Pig iron	long ton	9,969	232,146	15,066	404,608
Castings	short ton	13,093	1,214,950	16,308	1,678,108
Steel -			\$		\$
Castings	short ton	2,903	544,533	3,266	945,443
Bars and rods	short ton	5,878	444,216	8,923	687,233
Forgings	short ton	1,064	189,667	1,933	411,162
Plates	short ton	4,746	256,568	7,542	477,808
Shafting	short ton	2,054	169,279	1,481	159,237
Sheets, plain	short ton	2,126	171,101	4,633	412,695
Sheets, galvanized	short ton	904	69,757	699	66,238
Strip	short ton	370	36,410	221	27,781
Structural shapes	short ton	3,484	211,983	5,319	354,912
Stampings	short ton	118	31,769	...	102,501
Wire	short ton	403	40,556	556	58,174
Alloy steels .....	\$	...	236,060	...	288,368
Scrap iron or steel	short ton	13,499	172,605	19,961	308,282
Other iron or steel .....	\$	...	136,805	...	86,129

Table 11 - MATERIALS USED, 1936 and 1937. (concluded)

Materials	Unit of measure	1 9 3 6		1 9 3 7	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Other metals, including scrap -					
Aluminium	pound	797,893	215,828	861,141	253,491
Brass and bronze castings ...	pound	1,073,469	212,778	2,383,736	591,873
Brass and bronze sheets	pound	308,317	61,821		
Copper	pound	872,193	176,924	1,253,276	288,438
Lead	pound	101,961	6,220	151,369	10,784
Nickel	pound	41,461	12,679	93,334	30,734
Tin	pound	37,966	19,166	59,743	32,065
Zinc	pound	730,895	57,125	714,875	72,538
Babbitt metals and solders ..	pound	383,576	67,927	524,044	94,354
Other metals .....	\$	...	106,273	...	209,271
Other materials and supplies -					
Parts for machines or vehicles	\$	...	4,962,359	...	7,500,071
Iron and steel pipe, tubes and fittings .....	\$	...	545,828	...	718,125
Bolts, nuts, rivets and screws	\$	...	348,018	...	310,784
Electrical goods, including					
motors .....	\$	...	1,331,163	...	1,559,163
Paints, oils and varnishes ..	\$	...	173,982	...	216,231
Rubber and leather goods .....	\$	...	375,080	...	472,152
Foundry coke (cupola)	short ton	5,837	63,138	9,492	106,849
Moulding sands	short ton	8,151	29,007	13,498	47,892
Core sands	short ton	1,702	4,543	2,776	6,600
Silica sand for sand blasting	short ton	161	1,305	389	2,136
Other foundry sands	short ton	31	169	178	801
Starch	pound	9,000	450	1,680	98
Plumbago	pound	55,211	2,584	65,946	3,788
Other foundry facings	pound	285,676	6,350	826,507	18,336
Patterns and models .....	\$	...	43,341	...	71,322
Lumber	M cu.ft.	12,067	430,169	16,700	622,874
Firebrick	number	203,530	15,860	202,974	18,663
Fireclay	short ton	552	6,126	878	8,195
Cupola blocks .....	\$	...	16,604	...	2,929
Core oil	Imp. gal.	15,821	11,026	24,951	17,520
Core compound	pound	256,667	6,331	447,914	9,337
Shipping materials .....	\$	...	101,735	...	99,536
All other materials .....	\$	...	2,191,471	...	2,338,571
TOTAL .....	\$	...	15,761,565	...	22,204,200

Table 12 - PRODUCTS MADE BY THE FIRMS INCLUDED IN THE MACHINERY INDUSTRY, 1936 and 1937.

NOTE - Data given in this table cover only the production of the firms which made machinery as their chief product and so have been included in the Machinery Industry. The output figures do not necessarily represent the total Canadian production of the listed items as they may have been manufactured as minor products by concerns in other industries. The total production of industrial, business and household machinery has been assembled from all industries and is shown in Table 13 in as much detail as possible.

Products	Unit of measure	1 9 3 6		1 9 3 7	
		Selling value		Selling value	
		Quantity	at works	Quantity	at works
Bakers' machinery -			\$	\$	\$
Mixing machines .....	\$	...	174,969	...	180,628
Ovens .....	\$	...	129,839	...	101,461
Other bakery equipment .....	\$	...	116,697	...	260,589
Blowers for domestic furnaces	Number	127	7,068	45	4,680
Boilers, heating and power .....	\$	...	146,860	...	340,902
Bottling machinery .....	\$	...	2,210	...	17,725
Canning machinery .....	\$	...	124,990	...	130,844
Cleaning and pressing machinery ....	\$	...	170,553	...	158,523
Coal cleaning and pulverizing machinery .....	\$	...	36,277	...	21,600
Concrete-making machinery, including mixers .....	\$	...	82,015	...	342,561
Conveying and elevating machinery ..	\$	...	867,407	...	840,051
Dairy and creamery machinery .....	\$	...	276,694	...	279,567
Elevators, freight and passenger ...	Number	416	1,478,729	...	1,031,490
Elevator parts .....	\$	...	343,588	...	578,164
Engines - Steam .....	\$	...	36,632	...	38,915
Diesel and gasoline .....	\$	...	8,307	...	14,963
Engine parts .....	\$	...	...	...	54,400
Flour and grist mill machinery .....	\$	...	41,229	...	109,434
Grain elevator machinery .....	\$	...	342,478	...	262,301
Hoisting machinery (except mine hoists) .....	\$	...	345,700	...	972,668
Household machinery -			\$	\$	\$
Washing machines, domestic -					
Hand	Number	7,953	87,518	9,200	92,655
Electric	Number	81,243	3,954,797	105,357	4,906,452
Gasoline	Number	1,629	115,624	5,534	398,849
Wringers, clothes	Number	24,152	98,610	49,039	166,448
Ironers, electric -					
Operated by own motor	Number	5,356	306,714	3,622	224,369
Attached to washing machines ...	Number	3,391	61,769	1,101	30,608
Other household machinery, includ-					
ing sewing machines .....	\$	...	1,867,440	...	2,495,894
Laundry machinery .....	\$	...	747,138	...	909,321
Leather-working machinery .....	\$	...	231,308	...	317,488
Machinery parts .....	\$	...	651,329	...	1,205,295
Metal-working machinery -					
Boring machines	Number	3	23,631	7	66,814
Drilling machines .....	\$	...	5,554	...	4,428
Grinders .....	\$	...	77,596	...	59,927
Lathes .....	\$	...	120,969	...	254,196
Pipe cutting and threading machines	\$	...	47,050	...	61,925
Planers	Number	6	22,540	...	17,742

Table 12 - PRODUCTS MADE BY THE FIRMS INCLUDED IN THE MACHINERY INDUSTRY, 1936 and 1937 (continued)

Products	Unit of measure	1 9 3 6		1 9 3 7	
		Quantity	Selling value	Quantity	Selling value
Metal-working machinery (continued) -					
Power presses	Number	34	43,277	16	33,458
Rolls .....	\$	...	30,738	...	68,059
Shapers	Number	...	39,877	27	66,006
Other metal-working machinery .....	\$	...	352,498	...	303,412
Mining and metallurgical machinery, including hoists, drills, vibrating screens, crushers, etc.					
	\$	...	3,135,181	...	3,423,721
Office and business machinery -					
Adding machines	Number	4,042	387,947	4,187	493,214
Scales - Domestic and office	Number	9,460	762,146	9,951	894,662
Truck	Number	241	70,298	463	224,329
Typewriters	Number	27,926	1,463,524	55,079	2,437,267
Other office and business machinery including cash registers, meat slicers, etc.					
	\$	...	4,723,863	...	5,825,593
Packing-house machinery .....	\$	...	49,864	...	63,541
Printing machinery .....	\$	...	17,034	...	...
Pulp and paper machinery .....	\$	...	1,409,607	...	4,062,814
Pumps - Centrifugal .....	\$	...	346,478	...	619,221
Hand (iron and steel) .....	\$	...	148,904	...	135,081
Power .....	\$	...	386,193	...	252,860
Other .....	\$	...	14,756	...	5,400
Water pumping systems for country homes .....	\$	...	87,510	...	333,194
Pump parts, including repair parts .....	\$	...	...	...	165,802
Refrigeration and ice-making machinery					
Road-making machinery .....	\$	...	418,511	...	207,375
Rubber-mill machinery .....	\$	...	491,118	...	1,097,753
Saw-mill machinery .....	\$	...	224,247	...	272,203
Service station and garage equipment -					
Gasoline-measuring pumps	Number	1,474	574,792	2,991	920,440
Other service station and garage equipment .....	\$	...	235,178	...	96,653
Ships' machinery and fittings .....	\$	...	93,281	...	114,545
Stokers, mechanical	Number	2,008	600,444	320	211,949
Stoker parts .....	\$	...	103,308	...	71,055
Textile machinery .....	\$	...	44,724	...	43,659
Transmission machinery .....	\$	...	1,038,914	...	1,903,595
Ventilating systems (fans, motors, ducts, etc.) .....	\$	...	125,111	...	263,830
Water wheels and turbines .....	\$	...	172,414	...	632,471
Well-drilling machinery .....	\$	...	9,803	...	12,383
Wood-working machinery -					
Band sawing machines	Number	13	3,821	28	30,161
Boring machines	Number	12	3,715	22	8,617
Lathes	Number	6	2,779	15	5,977
Matchers	Number	11	22,256	14	20,409
Moulders	Number	28	42,913	28	36,982
Rip and crosscut saws	Number	42	16,939	76	32,824

Table 12 - PRODUCTS MADE BY THE FIRMS INCLUDED IN THE MACHINERY INDUSTRY, 1936 and 1937. (concluded)

Products	Unit of measure	1 9 3 6		1 9 3 7	
		Quantity	Selling value at works	Quantity	Selling value at works
		\$		\$	
Wood-working machinery (concluded) -					
Sanders	Number	12	10,209	18	12,311
Shapers and jointers	Number	20	9,043	33	21,694
Surfacers	Number	34	31,420	33	39,810
Tenoners and mortisers	Number	21	12,390	17	5,912
Other woodworking machinery .....	\$	...	31,714	...	25,832
All other machinery, including items reported by one or two firms only	\$	...	2,693,195	...	3,742,894
Boiler feed water heaters .....	\$	...	275,665	...	386,947
Castings, gray iron	Short ton	1,908	188,298	3,911	423,999
Hardware .....	\$	...	129,895	...	12,948
Oil burners	Number	1,896	124,827	2,102	145,110
Tools .....	\$	...	287,993	...	438,405
Trucks, factory, warehouse and office .....	\$	...	95,528	...	88,915
Unit heaters, all types .....	\$	...	21,799	...	68,865
Valves, iron body .....	\$	...	42,441	...	43,767
Wheelbarrows	Number	10,345	57,832	14,535	75,083
Receipts from custom work and repairs .....	\$	...	2,616,126	...	3,898,200
All other products .....	\$	...	3,865,219	...	5,046,487
TOTAL .....	\$	...	41,447,473	...	57,096,816

DIRECTORY OF FIRMS IN THE MACHINERY INDUSTRY, 1937.

NOTE - Machinery was made also by concerns in other industries as a secondary or minor product - see supplemental list following Table 13.

<u>Name of Firm</u>	<u>Location of Plant</u>
<u>NOVA SCOTIA</u> -	
Oxford Foundry and Machine Co. Ltd.	Oxford
<u>QUEBEC</u> -	
Allaster, Wm.	408 Bonsecours St., Montreal
Bailey Meter Co. Ltd.	980 St. Antoine St., Montreal
Barry Steel Products Ltd.	957½ St. James St. W., Montreal
Braidwood, John, & Sons	40 Nazareth St., Montreal
Canadian Allis-Chalmers Co. Ltd.	25 St. Joseph St., Lachine
Canadian Duff-Norton Co. Ltd.	Cutting St., Coaticook
Canadian Ingersoll Rand Co. Ltd.	Rue Des Forges, Sherbrooke
Canadian Lift Truck Co. Ltd.	754 St. Paul St. W., Montreal
Canadian Pneumatic Tool Co.	757 St. Antoine St., Montreal
Canadian Vickers Ltd.	4970 Notre Dame St. E., Montreal
Chalifoux et Fils Ltée.	111 rue Ste. Anne, St. Hyacinthe
Crammond Machinery Co.	4857 Dagenais St., Montreal
Dominion Engineering Works, Ltd.	1st Avenue, Lachine
Fairbanks, E. & T., and Co. Ltd.	Belvidere St., Sherbrooke
Fournier, O.	St. Charles de Bellegesasse
Hardware & Woodenware, Ltd.	330 Water St., Coaticook
Hydraulic Machinery Co. Ltd.	1972 Tansley St., Montreal

DIRECTORY OF FIRMS IN THE MACHINERY INDUSTRY, 1937. (continued)

<u>Name of Firm</u>	<u>Location of Plant</u>
<u>QUEBEC</u> (concluded) -	
Jeffrey Mfg. Co. Ltd.	300 St. Patrick St., Ville La Salle
La Compagnie J. A. Gosselin Ltd.	Hebert St., Drummondville
La Fonderie de Plessisville	Plessisville
Linde Canadian Refrigerator Co. Ltd.	355 St. Peter St., Montreal
Miller Bros. and Sons, Ltd.	45 Des Seigneurs St., Montreal
O'Neill European Machine Co. of Montreal, Canada	
Paquin, Alp.	Sterling Ave., Ville La Salle
Providence Machinery Co. Ltd.	34 rue St. Antoine, Joliette
Royal Typewriter Co. Ltd.	St. Hyacinthe
Sherbrooke Machineries, Ltd.	731 Bourget St., Montreal
Souey, Adelard	Randrill St., Sherbrooke
	4 Temiscouata, St. Ludger, Riviere du Loup
Singer Mfg. Co.	165 St. Paul St., St. Johns
Superheater Co. Ltd.	14 Drummond Road, Sherbrooke
Underwood, G. W., and Co.	1971 William St., Montreal
United Shoe Machinery Co. of Canada, Ltd.	2610 Bennett Ave., Montreal
Valois & Valois	907 St. Alexander St., Montreal
Vessot, S., et Cie., Ltd.	104 Querbes Blvd., Joliette
Victory Tool Co.	250 Rose de Lima St., Montreal
Wilson Machine Co. Ltd.	161 Nazareth St., Montreal
<u>ONTARIO</u> -	
Adams, J.D., Ltd.	Paris
Albany Pump Co.	112 Adelaide St. E., Toronto
All-Weld Co. Ltd.	82 Chestnut St., Toronto
Alsop Process Co. of Canada	304 George St., Toronto
American Can Company	Lewis St., Niagara Falls
Armstrong, S.A., Ltd.	720 Bathurst St., Toronto
Atlas Engineering & Machine Co. Ltd.	28 Eastern Ave., Toronto
Aylmer Pump & Scale Co.	102 Center St., St. Thomas
Barber, C., and Sons	Meaford
Barnes Products Inc.	253 Sandwich St. W., Windsor
Barton, F. C.	219 Egerton St., London
Bawden Machine Co. Ltd.	163 Sterling Road, Toronto
Beatty Bros. Ltd.	Fergus
Beaver Laundry Machinery Co. Ltd.	393 Sorauren Ave., Toronto
Berkel Products Co. Ltd.	533 College, Toronto
Bertram, John, & Sons Co. Ltd.	Hatt St., Dundas
Better Packages of Canada, Ltd.	345 Adelaide St., Toronto
Bickle-Seagrave Ltd.	12 Young St., Woodstock
Binks Mfg. Co. of Canada, Ltd.	920 Mercer St., Windsor
Blakeslee & Co. Ltd.	313 Euphemia St., Sarnia
Bowser, S. F., Co. Ltd.	68 Fraser St., Toronto
Bramham, John, Dairy Machinery	175 Munro St., Toronto
Brantford Oven & Rack Co. Ltd.	Brock and Campbell Sts., Brantford
Brantford Washing Machine Co. Ltd.	14 Grey St., Brantford
Brown Boggs Foundry & Machine Co. Ltd.	37 Victoria Ave. N., Hamilton
Brunner Mfg. Co. of Canada, Ltd.	283 King St. E., Toronto
Burnside, Harry	422 King St. W., Toronto
Burroughs Machines, Ltd.	804 McDougall St., Windsor

DIRECTORY OF FIRMS IN THE MACHINERY INDUSTRY, 1937. (continued)

Name of Firm	Location of Plant
ONTARIO (continued) -	
Canada Machinery Corp. Ltd.	19 Concession St., Galt
Canada Vulcanizer and Equipment Co. Ltd.	1109 York St., London
Canadian Elevator and Equipment Co. Ltd.	2 River St., Toronto
Canadian Hoffman Machinery Co. Ltd.	50 Coleman Ave., Toronto
Canadian Ice Machine Co. Ltd.	65 Villiers St., Toronto
Canadian Ironing Machine Co. Ltd.	1151 Queen St. W., Toronto
Canadian Laundry Machinery Co. Ltd.	47 Sterling Road, Toronto 3
Canadian Longyear Ltd.	Regina St., North Bay
Canadian Rhodes Mfg. Co. Ltd.	243 College St., Toronto
Canadian Scale Co. Ltd.	41 Ossington Ave., Toronto
Canadian Sirocco Co. Ltd.	300 Banwell St., Windsor
Canadian Toledo Scale Co. Ltd.	Howard and Essex Terminal Ry., Windsor
Canners Machinery Ltd.	Sydenham St., Simcoe
Clark Machine Co.	Front St., Thorold
C. L. C. Machinery Co.	196 Grant Ave., Hamilton
Climax Baler Co. Ltd.	43 Burton St., Hamilton
Cober Elevator Mfg. Co.	35 Front St. E., Toronto
Cockram Machinery Corp. Ltd.	12 Brock St., Woodstock
Coffield Washer Co. Ltd.	77-91 Niagara St., Hamilton
Connor, J. H., and Son, Ltd.	10 Lloyd St., Ottawa
Corman Engineering Co.	81 Portland, Toronto
Cooke and Denison Machine & Tool Works	31 Yarmouth St., Guelph
Cowan & Co. of Galt, Ltd.	81 North Water St., Galt
Deer Fixture Co. Ltd.	91 Jarvis St., Toronto
Delamere & Williams, Ltd.	18 Hook Ave., Toronto 9
Denver Equipment Co., Canada, Ltd.	45 Richmond St. W., Toronto
Dominion Government Marine Dept.	Prescott
Dominion Road Machinery Co. Ltd.	East St., Goderich
Dominion Rubber Co. Ltd.	Elm St., Kitchener
Dowswell Lees and Co. Ltd.	193 Elgin St., Hamilton
Easy Washing Machine Co. Ltd.	Miranda and Schell Aves., Toronto 10
Factory Equipment, Ltd.	Berczy St., Aurora
Fairgrieve and Son, Ltd.	50 Dovercourt Rd., Toronto
Fletcher Mfg. Co. Ltd.	883 Dundas St. E., Toronto
Ford-Smith Machine Co. Ltd.	Cavell Ave., Hamilton
Foreman Marine Equipment Ltd.	49 Leslie St., Toronto
Foster Wheeler, Ltd.	Westchester Ave., St. Catharines
Gas Accumulator Co. (Canada) Ltd.	451 King St. W., Toronto
Gilbert & Barker Mfg. Co. Ltd.	207 Geary Ave., Toronto
Goode, Howard	1344 Dundas St. N., Toronto
Goodwin Machine Tool Co.	298 Edinburgh St., Peterborough
Greely, Wm. and J. G.	56 Esplanade, Toronto
Gurney Scale Co. Ltd.	James and Colborne Sts., Hamilton
Hall Gear & Machine Co. Ltd.	110 Elm St., Toronto
Hall and Quick	39 Wentworth Ave. N., Hamilton
Hamilton Gear and Machine Co.	76 Van Horne St., Toronto
Hamilton Oven Works	217 King St. E., Toronto
Harley-Kay, Ltd.	Water St., Georgetown
Hobart Mfg. Co. Ltd.	119 Church St., Toronto
Hubbard Portable Oven Co. Ltd.	103 Bathurst St., Toronto
Huntley Mfg. Co. Ltd.	Tillsonburg
International Business Machines Co. Ltd.	300 Campbell Ave., Toronto

DIRECTORY OF FIRMS IN THE MACHINERY INDUSTRY, 1937. (continued)

<u>Name of Firm</u>	<u>Location of Plant</u>
ONTARIO (continued) -	
Jackson-Cochrane, Ltd.	16 Victoria St., Kitchener
Jardine, A. B., & Co. Ltd.	Avenue St., Hespeler
Kennedy, Wm., & Sons, Ltd.	1st Avenue West, Owen Sound
Ker & Goodwin Machinery Co. Ltd.	256 Colborne St., Brantford
Kribs, W. A., Co. Ltd.	Guelph Ave., Hespeler
La France Fire Engine & Foamite, Ltd.	195 Weston Rd., Toronto
Leitch, Arthur S., Co. Ltd.	148 Harrison St., Toronto
Link-Belt Ltd.	791 Eastern Ave., Toronto, and Elmira
Lock, J. H., and Sons, Ltd.	221 Sterling Rd., Toronto
London Concrete Machinery Co. Ltd.	Cor. Cabell and Kitchener Ave., London
Long, E., Ltd.	Orillia
Mahaffy Iron Works, Ltd.	145 Kendal Ave., Toronto
Mathews Conveyor Co. Ltd.	S. John St., Port Hope
Maxwell's Ltd.	St. Mary's
McCaskey Systems, Ltd.	Beverley St., Galt
McDougall, R., Co. Ltd.	Chapman St., Galt
McInnis, C. H., Co.	729 Caron Ave., Windsor
McKenzie, D., Machinery Co.	9 Nottingham St., Guelph
Meaford Steel Products	Marshall St., Meaford
Morris, Herbert, Crane and Hoist Co. Ltd.	Stanley Ave., Niagara Falls
Mott, H. E., & Co. Ltd.	Wellington St., Brantford
National Cash Register Co. of Canada, Ltd.	222 Lansdowne Ave., Toronto 3
National Equipment Co. Ltd.	41 Wabash Ave., Toronto
Northern Crane & Hoist Works, Ltd.	Argyle Road, Walkerville
Northern Machine & Tool Co.	278 King St. E., Toronto
Oil Well Supply Co. Ltd.	Robert St., Petrolia
Otis-Fensom Elevator Co. Ltd.	Victoria Ave. N., Hamilton
Paterson Engineering Co. of Canada, Ltd.	58 Pelham Ave., Toronto
Pendrith Machinery Co. Ltd.	775 King St. W., Toronto 2
Perrin, William R., Ltd.	530 King St. E., Toronto
Plant, W. P., Estate	Box 32, Hastings
Pollard Mfg. Co. Ltd.	564 Ferguson Ave., Niagara Falls
Preston Woodworking Machinery Co. Ltd.	Railway St., Preston
Pumps & Softeners, Ltd.	Dundas St. E., London
Remington Rand, Ltd.	301 Sherman Ave., Hamilton
Richardson, C., and Co. Ltd.	24 Wellington St., St. Mary's
Roberts, F. W., Mfg. Co. of Canada	695 Buttrey Ave., Niagara Falls
Roelfson Elevator Co. Ltd.	289 Sumach St., Toronto
Sawyer Massey Ltd.	Wellington St. N., Hamilton
Service Station Equipment Co. Ltd.	101 Hanson St., Toronto
Shelton, W. G., Co. of Canada, Ltd.	428 Cannon St., Hamilton
Shenton, H. E.	110 Aikman Ave., Hamilton
Smart-Turner Machine Co. Ltd.	191 Barton St. E., Hamilton
Smillie Steel Products Co.	130 Liberty St., Toronto
Smith, L. C., & Corona Typewriters of Canada, Ltd.	
Stephens-Adamson Mfg. Co. of Canada, Ltd.	35 Front St. E., Toronto
Stevens Co. of Galt, Ltd.	30 Franklin St., Belleville
Thor-Canadian Co. Ltd.	10 Rose St., Galt
Toronto Textile Machinery Co.	1244 Dufferin St., Toronto
Turnbull Elevator Co. Ltd.	25 St. Patrick St., Toronto
Underwood Elliott Fisher Mfg. Co. Ltd.	126 John St., Toronto
United Steel Corp. Ltd.	354 Victoria St., Toronto
	58 Pelham Ave., Toronto, and Windsor (2 plants)

DIRECTORY OF FIRMS IN THE MACHINERY INDUSTRY, 1937 (concluded)

<u>Name of Firm</u>	<u>Location of Plant</u>
<u>ONTARIO</u> -	
Viking Pump Co. of Canada, Ltd.	661 Grove Ave., Windsor
Walker, Wallace, Ltd.	17 Cornwall St., Toronto
Wallace & Tierman, Ltd.	350 Sorauren Ave., Toronto
Waterous, Ltd.	South Market St., Brantford
Wayne Forge & Machine Co. Ltd.	193 Adelaide St. W., Toronto
Weaver Industries Ltd.	341 Richmond St., Chatham
Webster Air Equipment Co.	1161 King St., London
Welland Machine & Tool Co.	Victoria St., Welland
Westco Pump & Engineering Ltd.	220 King St. W., Toronto
Whitehall Machine & Tools Ltd.	Beverley St., Galt
Williams Machines Ltd.	311 Montrose St., Preston
Williams Tool Corp. of Canada, Ltd.	32 Bridge St., Brantford
Wood Hydraulic Hoist & Body Co. Ltd.	857 Tecumseh Blvd. E., Windsor
Woodstock Machinery Ltd.	655 Center St., Woodstock
Yates, P. B., Machine Co. Ltd.	Cavell Ave., Hamilton
<u>MANITOBA</u> -	
Alpha Mfg. Co.	797 Notre Dame Ave., Winnipeg
Acme Fan and Blower Co. Ltd.	868 Arlington St., Winnipeg
Brandon Machine & Implement Works	14th St. and Rosser Ave., Brandon
Derby Specialty Mfg. Co.	376 Donald St., Winnipeg
Forever Industries Ltd.	154 Princess St., Winnipeg
Guarantee Laundry Machinery Co.	840 Winnipeg St., Winnipeg
Kipp-Kelly, Ltd.	68 Higgins Ave., Winnipeg
Roberts, Wm., & Son	120 Lombard St., Winnipeg
Schwartz Mfg. Co.	424 Union St., Winnipeg
Strong-Scott Mfg. Co. Ltd.	772 Dufferin Ave., Winnipeg
<u>SASKATCHEWAN</u> -	
Richardson Road Machinery Co. Ltd.	112 Avenue I South, Saskatoon
Western Machine and Iron Ltd.	Cor. 6th Avenue and Scarth St., Regina
<u>ALBERTA</u> -	
Coutts Machinery Co. Ltd.	10569 - 95th St., Edmonton
<u>BRITISH COLUMBIA</u>	
Allard Machine Works Ltd.	1031 Quebec St., New Westminster
Almond's Supply House	400 E. Pender St., Vancouver
Barbour & Elgie	222 West 5th St., Vancouver
Empire Manufacturing Co. Ltd.	1201 West 6th St., Vancouver
Golightly Bros. Ltd.	263 E. 7th Avenue, Vancouver
Heaps Engineering Co. Ltd.	Ewen Ave., New Westminster
Lawrence Mfg. Co.	290 Industrial Ave., Vancouver
Mabury Engineering Corp. Ltd.	1375 Franklin St., Vancouver
Marine Iron Works, Ltd.	515 Pembroke St., Victoria
Murray-Lata Machine Co. Ltd.	311 - 2nd Ave. W., Vancouver
Opsal Steel Co. Ltd.	97 East 2nd Ave., Vancouver
Pumps and Power Ltd.	40 Cordova St. E., Vancouver
Tyee-Machinery Co. Ltd.	Lot 71, Granville Island, Vancouver
Vancouver Machinery Depot Ltd.	1155 West 6th Ave., Vancouver
Wagstaff Hoist Ltd.	904 Kingsway, Vancouver
Webb & Gifford Ltd.	222 Front St., New Westminster

SECTION TWO - Supplementary data covering machinery manufacturers in other industries, and the total Canadian production of machinery from ALL INDUSTRIES

In 1937, a total of 171 establishments in other industries reported a production of industrial, office or household machinery. Included in this number were the concerns in the Electrical Apparatus Industry which manufactured motors, generators, vacuum cleaners, etc., and also the firms in other groups which made machinery as secondary products of their operations. The principal statistics covering the entire manufacturing operations of these 171 factories are given below for 1937. The value of machinery made in these works was \$34,417,524 in 1937 and \$26,070,306 in 1936. Farm implements, automobiles, bicycles, locomotives have not been included.-

Number of establishments	171
Capital employed	\$ 149,302,152
Number of employees	29,780
Salaries and wages	\$ 36,990,448
Cost of fuel and electricity	\$ 2,314,614
Cost of materials at works	\$ 54,337,571
Selling value at works of all products	\$ 119,757,617
 Selling value at works of machinery only	\$ 34,417,524
Selling value at works of products other than machinery	\$ 85,340,093

Table 13 - TOTAL PRODUCTION IN CANADA OF INDUSTRIAL, HOUSEHOLD AND BUSINESS MACHINERY,
1936 and 1937. (DATA ASSEMBLED FROM ALL INDUSTRIES)

Item	1936		1937	
	Number	Selling value at works	Number	Selling value at works
Air compressors	\$ (x)	...	\$ (x)
Bakers' machinery -				
Mixing machines	180,201	...	180,628
Ovens	136,887	...	105,461
Other bakers' machinery	119,287	...	267,799
Baling machines	(x)	...	(x)
Blowers for domestic furnaces	1,909	68,459	2,413	73,539
Bottling machinery	2,210	...	19,525
Canning machinery	133,990	...	149,584
Cheese factory machinery	13,339	...	18,686
Chlorinators and chlorine control apparatus	(x)	...	(x)
Cleaning and pressing machinery	204,746	...	178,935
Coal-cleaning and coal-pulverizing machinery	127,651	...	195,335
Concrete-making machinery, including mixers	82,015	...	344,345
Conveying and elevating machinery	892,208	...	860,905
Cream separators	10,902	710,003	10,893	676,976
Dairy and creamery machinery, except cream separators, but including milking machines, churns, pasteurizers, etc.	634,718	...	840,589
Electric appliances, motor driven, not elsewhere specified	501,377	...	312,395

Table 13 - TOTAL PRODUCTION IN CANADA OF INDUSTRIAL, HOUSEHOLD AND BUSINESS MACHINERY,
1936 and 1937 (DATA ASSEMBLED FROM ALL INDUSTRIES) (continued)

Item	1 9 3 6		1 9 3 7	
	Selling value		Selling value	
	Number	at works	Number	at works
	\$		\$	
Elevators, freight and passenger, and parts	...	1,926,201	...	1,773,060
Engines -				
Steam, including steam turbines .....	...	79,905	63	71,474
Gasoline (except auto) -				
Marine type, outboard and other	4,751	548,741	6,540	817,663
Stationary type	1,992	86,563	1,535	41,275
Aeroplane, hand car and railway motor car	196	145,571	253	420,508
Type not specified .....	...	50,691	361	61,719
Diesel .....	...	119,806	...	157,278
Automobile engines	121,762	(xx)	149,588	(xx)
Fire engines .....	...	(x)	...	(x)
Flour mill and grist mill machinery .....	...	60,104	...	119,994
Fog-signalling apparatus .....	...	(x)	...	(x)
Generators and parts, electric, A.C. and D. C.....	...	1,167,453	...	1,314,403
Glass-blowing machinery, automatic .....	...	(x)	...	(x)
Grain-elevator machinery .....	...	342,478	...	262,301
Hoisting machinery, including chain blocks, monorail electric hoists, overhead cranes, etc., but excluding mine hoists .....	...	581,718	...	1,464,648
Ice-making and refrigerating machinery (except electric refrigerators) .....	...	418,511	...	207,375
Household machinery -				
Washing machines, hand	11,557	142,474	12,248	139,899
Washing machines, electric	89,334	4,331,912	115,385	5,414,315
Washing machines, other power	1,747	126,244	5,842	401,390
Wringers, clothes	24,152	98,610	49,039	166,448
Ironers	8,826	372,078	4,723	254,977
Refrigerators, electric, and condensing units	46,325	5,934,962	65,018	7,131,036
Vacuum cleaners, electric -				
Floor models	40,621	1,473,656	44,721	1,701,307
Hand models	7,058	109,214	4,017	41,743
Attachments and parts .....	...	347,276	...	293,270
Other household machinery (including sewing machines) .....	...	1,867,440	...	2,581,813
Laundry machinery .....	...	752,638	...	938,090
Lawn mowers	36,903	223,198	39,687	239,093
Leather-working machinery .....	...	233,408	...	318,066
Logging machinery .....	...	(x)	...	154,622
Machinery parts (specified as such) .....	...	1,151,471	...	2,298,404
Metal-working machinery -				
Boring machines	3	23,631	7	66,814
Drills .....	...	5,554	...	4,428
Grinders .....	...	81,376	...	64,091
Lathes .....	...	120,969	...	254,196
Milling machines	3	59,815	...	1,770
Pipe-cutting and pipe-threading machines.	...	47,050	...	61,925
Planers	6	22,540	2	17,742
Presses.....	...	56,009	...	37,648

Table 13 - TOTAL PRODUCTION IN CANADA OF INDUSTRIAL, HOUSEHOLD AND BUSINESS MACHINERY,
1936 and 1937 (DATA ASSEMBLED FROM ALL INDUSTRIES) (continued)

Item	1 9 3 6		1 9 3 7	
	Selling value		Selling value	
	Number	at works	Number	at works
		\$		\$
Metal-working machinery -				
Rolls .....	...	30,738	...	68,059
Shapers .....	...	39,877	27	66,006
Other metal-working machinery .....	...	292,099	...	273,474
Mining and metallurgical machinery .....	...	3,721,085	...	4,260,471
Motors, electric, and parts .....	...	4,616,337	...	7,946,054
Motor-generator sets, electric	105	523,450	...	376,344
Office and business machinery -				
Adding machines	4,042	387,947	4,187	493,214
Scales, domestic, office and truck	9,701	832,444	10,434	1,150,441
Typewriters	27,926	1,463,524	55,079	2,437,267
Other, including account registers, cash registers, time recorders, meat slicers, etc. .....	...	4,822,979	...	5,771,686
Oil burners -				
Atmospheric, gravity feed type	5,063	80,953	2,133	58,971
Power type	1,136	168,990	1,483	174,514
Oil burner parts .....	...	18,898	...	16,603
Packing-house machinery .....	...	49,864	...	63,541
Permanent wave machines and hair dryers ..	...	163,944	...	99,499
Printing machinery .....	...	22,184	...	...
Paint-spraying equipment .....	...	(x)	...	(x)
Pulp-making and paper-making machinery ...	...	1,555,408	...	4,381,306
Pumps -				
Centrifugal .....	...	519,456	...	966,479
Power .....	...	238,397	...	231,477
Hand (iron and steel) .....	...	205,115	...	200,801
Other .....	...	372,482	...	463,688
Water pumping systems for country houses.	...	107,644	...	335,294
Road-making machinery .....	...	695,395	...	1,145,533
Rolling-mill machinery .....	...	(x)	...	(x)
Rubber-working machinery .....	...	224,247	...	272,205
Sawmill machinery .....	...	180,586	...	436,287
Service station and garage machinery -				
Gasoline dispensing pumps	1,474	574,792	2,991	920,440
Other .....	...	217,398	...	172,153
Ships' machinery and fittings .....	...	128,657	...	331,968
Shovels, power .....	...	(x)	...	(x)
Stone-working machinery .....	...	(x)	...	(x)
Stokers, mechanical	2,438	836,161	2,356	852,575
Stoker parts .....	...	129,893	...	169,837
Textile machinery and parts .....	...	108,034	...	98,303
Transmission machinery, including brackets, hangers, shafting and other parts .....	...	1,076,779	...	1,949,564
Ventilating and dust-collecting systems (fans, motors, ducts, etc.) .....	...	425,147	...	744,684
Vulcanizers .....	...	(x)	...	(x)
Water wheels and turbines .....	...	172,414	...	632,471
Water softeners .....	...	(x)	...	(x)
Welding machinery, including arc welders, etc. .....	...	308,245	...	276,000

Table 13 - TOTAL PRODUCTION IN CANADA OF INDUSTRIAL, HOUSEHOLD AND BUSINESS MACHINERY,
1936 and 1937 (DATA ASSEMBLED FROM ALL INDUSTRIES), (concluded)

Item	1 9 3 6		1 9 3 7	
	Number	Selling value at works	Number	Selling value at works
		\$		\$
Well-drilling machinery .....	...	(x)	...	(x)
Wood-working machinery -				
Band sawing machines	13	3,821	28	30,161
Boring machines	12	3,715	22	8,617
Lathes	6	2,779	...	5,977
Matchers and planers	11	22,256	14	20,409
Moulders	28	42,913	28	36,982
Rip and cross-cut saws	42	16,939	76	32,824
Sanders	12	10,209	18	12,311
Shapers and jointers	20	9,403	33	21,694
Surfacers	34	31,420	33	39,810
Tenoners and mortisers	21	12,390	17	5,912
Other wood-working machinery .....	...	50,030	...	59,390
All other machinery, not separately specified .....	...	1,060,589	...	1,879,326
Items reported by only one or two firms as indicated by (x) above .....	...	6,249,166	...	9,254,823
TOTAL MACHINERY AND PARTS .....	...	59,743,451	...	80,885,614

(xx) Value not available.

SUPPLEMENTARY LIST OF FIRMS (other than those listed under the Machinery Industry)
which reported a PRODUCTION OF INDUSTRIAL, OFFICE OR HOUSEHOLD MACHINERY IN 1937.

<u>Name of Firm</u>	<u>Location of Plant</u>
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PRINCE EDWARD ISLAND -

Bruce Stewart & Co. Ltd.

6 George St., Charlottetown

NOVA SCOTIA -

Acadia Gas Engines Ltd.

Bridgewater

Coal-O-Matic Co.

138 Hollis St., Halifax

Cummings, J. W., Manufacturing Co. Ltd.

New Glasgow

Hawboldts Gas Engines

Chester

Matheson, I., & Co. Ltd.

New Glasgow

NEW BRUNSWICK -

McLennan Foundry & Machine Works

Water St. W., Campbellton

St. John Iron Works Ltd.

Vulcan and Charlotte Sts., Saint John

Wallace Manufacturing Co. Ltd.

Winter St., Sussex

QUEBEC -

Bruleur Desro Star Enrg.

Three Rivers

Canadian Pratt & Whitney Aircraft Co. Ltd.

Lorne Ave., Longueuil

Canadian National Foundry

Grand'Mere

Canadian Vickers Ltd.

497 Notre Dame St. E., Montreal

Canadian Wright Ltd. or Aero Engines of
Canada, Ltd.

6259 Notre Dame St., Montreal

Cote Bros. & Burritt

1260 rue Conde, Montreal

Darling Brothers Limited

140 Prince St., Montreal

Desjardins Ltée.

St. Andre de Kamouraska

Dominion Bridge Co. Ltd.

Lachine

SUPPLEMENTARY LIST OF FIRMS (Other than those listed under the Machinery Industry)
WHICH REPORTED A PRODUCTION OF INDUSTRIAL, OFFICE or HOUSEHOLD MACHINERY in 1937.
(continued)

<u>Name of Firm</u>	<u>Location of Plant</u>
QUEBEC (concluded) -	
Dussault et Lamoureux, La Cie	St. Hyacinthe
Electrolux (Canada) Ltd.	1725 Basin St., Montreal
Engineering Products of Canada, Ltd.	6359 Notre Dame St., Montreal
La Cie de Machineries Mercier	1721 St. Laurent St., Levis
La Compagnie F. X. Drolet	206 rue du Pont, Quebec
La Fonderie Bourget Enrg.	East Windsor
La Fonderie de L'Islet Ltee.	L'Islet
La Fonderie de Joliette Ltee.	Joliette
La Fonderie de Ouellet Enrg.	St. Leonard d'Acton
La Fonderie Rigaud	Rigaud
La Fonderie de Robertsonville	Robertsonville
La Fonderie de Anselme Ltd.	St. Anselme Station
La Fonderie de Thetford Ltd.	Thetford Mines
Johnson Wire Works Ltd.	4760 Dagenais St., Montreal
Macdonald Metal Products Ltd.	Waterloo
McOuat, T., & Son	Lachute Mills
Mitchell, The Robert, Co. Ltd.	750 Belair Ave., Montreal
Montreal Locomotive Works, Ltd.	Notre Dame St. E., Montreal
National Electric Refrigerator Ltd.	Montmagny
Northern Electric Co. Ltd.	1261 Shearer St., Montreal
Pyle-National Company of Canada, Ltd., The	4857 Acorn Ave., Montreal
Schick Shaver Limited	St. Johns
Sorel Mechanical Shops Co. Ltd.	Sorel
Terreau et Racine Ltee.	137 St. Andre St., Quebec
Trottier & Savageau	St. Casimir
ONTARIO -	
Automatic Electric Sales & Service	104 Jarvis St., Toronto
Babcock-Wilcox and Goldie-McCulloch Ltd.	Galt
Beach Foundry Ltd.	Hinton Ave., Ottawa
Beath, W. D., & Son Ltd.	394 Symington Ave., Toronto
Bishop, T. G., Engineering Co.	Kingston
Bond Engineering Works Ltd.	Villiers St., Toronto
Branston, Chas. A., Ltd.	58 Stewart St., Toronto
Braun & Bonnick Ltd.	22 Orillia St., Toronto
Breuls Manufacturing Co.	384 King St. W., Orillia
Bryant Pattern & Mfg. Co. Ltd.	469 East Shepherd St., Windsor
Buchanan, F. L., Ltd.	131 Front St., Orillia
Caloric Furnace Co. Ltd.	Alliston
Canada Foundries & Forgings Ltd.	Brockville
Canada Ingot Iron Co. Ltd.	Guelph
Canadian Blower & Forge Co. Ltd.	Kitchener
Canadian Curtis Refrigeration Co. Ltd.	212 George St., Hamilton
Canadian General Electric Co. Ltd.	Peterborough
Canadian Fitzgerald Ltd.	468 Wellington St., Toronto
Canadian Locomotive Co. Ltd.	Kingston
Canadian Westinghouse Company Ltd.	Sanford Ave. and Myler St., Hamilton
C. K. Industries	59 Ontario St. N., Kitchener
Century Electric Devices Ltd.	360 Dufferin St., Toronto
Commonwealth Electric Corporation Ltd.	Welland

SUPPLEMENTARY LIST OF FIRMS (Other than those listed under the Machinery Industry)
 WHICH REPORTED A PRODUCTION OF INDUSTRIAL, OFFICE or HOUSEHOLD MACHINERY in 1937
 (continued)

Name of Firm	Location of Plant
ONTARIO (continued)	
Continental Electric Co. Ltd., The	30 Duncan St., Toronto
De Laval Co. Ltd.	Peterborough
Dill Manufacturing Co. of Canada, Ltd.	489 King St., Toronto
Dominion Bridge Co. Ltd.	1139 Shaw St., Toronto
Dominion Electrohome Industries Ltd.	Kitchener
Dominion Refrigeration Company, Ltd.	457 King St. W., Toronto
Draft King Blowers	1960 Yonge St., Toronto
Doret, Arnold M.	102 Lombard St., Toronto
Elgin Electric Co.	170 Portland St., Toronto
English Electric Co. of Canada, Ltd.	George St., St. Catharines
Erie Iron Works Ltd.	116 Talbot St., St. Thomas
Eureka Planter Co. Ltd.	Woodstock
Fleck, Alexander, Ltd.	416 Wellington St., Ottawa
Flexible Shaft Company Ltd.	321 Weston Road, Toronto
Fruit Machinery Co. Ltd.	368 Front St., Belleville
Frigidaire Corporation	35 Fraser Ave., Toronto
Frost & Wood Co. Ltd.	Smiths Falls
General Motors of Canada, Ltd.	Walkerville
Gilson Manufacturing Co.	Guelph
Green, G. Walter, Co. Ltd.	Peterborough
Hamilton Machine Co.	11-13 Ferguson Ave., Hamilton
Hepburn, John T., Limited	18-60 Van Horne St., Toronto
Hoover Co. Ltd., The	Gage and Barton Sts., Hamilton
Igloo Refrigeration Co. Ltd.	103 Bathurst St., Toronto
Iron Fireman Mfg. Co. of Canada, Ltd.	602 King St. W., Toronto
Jones & Moore Electric Co. Ltd.	296 Adelaide St., Toronto
International Harvester Co. of Canada, Ltd.	Sherman Ave. N., Hamilton
Kelvinator of Canada, Ltd.	London
Kermath Mfg. Co. of Canada, Ltd.	619 King St. W., Toronto
Kirkwood Engineering Co.	25 Kent St., Simcoe
Kolelectric Underfeed Stoker Co. Ltd.	245 Kenilworth Ave. S., Hamilton
Leland Electric, Canada, Limited	9 Duke St., Toronto
Lincoln Electric Company of Canada, Ltd.	65-67 Bellwoods Ave., Toronto
Livingstone Stoker Co. Ltd.	78 Catherine St. N., Hamilton
McRae, John, Machine and Foundry Co.	Lindsay
McKinnon Columbus Chain Ltd.	St. Catharines
McKinnon Industries Ltd.	St. Catharines
Massey-Harris Co. Ltd.	915 King St. W., Toronto
Modern Tool Works	15 Van Horne St., Toronto
Moffats Ltd.	Denison Road E., Weston
Monarch Oil Burner Co.	101 St. Clair St. W., Toronto
Muskoka Foundry	Bracebridge
New Idea Furnaces Ltd.	Ingersoll
Northern Foundry & Machine Co. Ltd.	457 Bay St., Sault Ste. Marie
Ontario Malleable Iron Co. Ltd.	Oshawa
Orme Ltd.	175 Sparks St., Ottawa
Outboard, Marine & Manufacturing Co. of Canada, Ltd.	Peterborough
Payette, P., Co.	Penetanguishene
Pease Foundry Co. Ltd.	227 Victoria St., Brampton

SUPPLEMENTARY LIST OF FIRMS (Other than those listed under the Machinery Industry)
 WHICH REPORTED A PRODUCTION OF INDUSTRIAL, OFFICE or HOUSEHOLD MACHINERY IN 1937.
 (continued)

<u>Name of Firm</u>	<u>Location of Plant</u>
<u>ONTARIO</u> (concluded) -	
Peerless Engineering Co.	11 Charlotte St., Toronto
Philip Gies Foundry Ltd.	Kitchener
Plate and Structural Steel Products Co.	48 Abell St., Toronto
Port Arthur Shipbuilding Co. Ltd.	Port Arthur
Premier Automatic Coal Burners	1260 Bloor St. W., Toronto
Premier Vacuum Cleaner Co. Ltd.	18 Breadalbane St., Toronto
Renfrew Machinery Co. Ltd.	Renfrew
Robbins & Myers Co. of Canada, Ltd.	40 Morrell St., Brantford
Rolled Metal Products	2368 Dundas St. W., Toronto
Rosejoli Co. of Canada	48 Elm St., Toronto
Russell Brothers Ltd.	Owen Sound
Sangamo Company Limited	183 George St., Toronto
Sawyer-Massey Ltd.	Wellington St. W., Hamilton
Service Station Equipment Ltd.	10 Hanson St., Toronto
Shaver Heating Specialties Ltd.	331 Laurier Ave. W., Ottawa
Sparton of Canada, Ltd.	London
Sheldon's Limited	Galt
Star Electric Fixtures Ltd.	107 Church St., Toronto
Sylvester Mfg. Co. Ltd.	Lindsay
St. Lawrence Engine Co. Ltd.	Brockville
Taylor-Forbes Ltd.	Guelph
Timken Silent Automatic of Canada, Ltd.	Walkerville
Universal Cooler Co. of Canada, Ltd.	Brantford
Victoria Foundry Co.	44 Booth St., Ottawa
Wabi Iron Works Ltd.	New Liskeard
Wests Company	Simcoe
Wilson & Cousins Ltd.	33-35 McCaul St., Toronto
White, George, & Sons Co. Ltd.	London
Woods, W. C., Ltd.	2480 Dundas St. W., Toronto
Yale & Towne Mfg. Co.	St. Catharines
<u>MANITOBA</u> -	
Electric Heating & Mfg. Co. Ltd.	902 Horne St., Winnipeg
Manitoba Bridge & Iron Works Ltd.	875 Logan Ave., Winnipeg
Monarch Machinery Co. Ltd.	902 Horne St., Winnipeg
Neufeld, W. H.	771 Archibald St., St. Boniface
Prairie Industries Ltd.	Wawanesa
Vulcan Iron Works Ltd.	Pt. Douglas Ave., Winnipeg
Wahl Mfg. Co. of Canada	62 Albert St., Winnipeg
<u>SASKATCHEWAN</u> -	
Prince Albert Foundry Co.	17th and Central Sts., Prince Albert
<u>ALBERTA</u> -	
Calgary Iron Works Ltd.	410 .. 9th Ave. E., Calgary
Canadian Risdon Stoker Co. Ltd.	10235 .. 103rd St., Edmonton
Nichols Bros.	10103 .. 95th St., Edmonton
Riverside Iron Works Ltd.	803 .. 24th Avenue S.E., Calgary
Standard Iron Works Ltd.	121st Street and 106th Avenue, Edmonton

SUPPLEMENTARY LIST OF FIRMS (Other than those listed under the Machinery Industry WHICH REPORTED A PRODUCTION OF INDUSTRIAL, OFFICE or HOUSEHOLD MACHINERY IN 1937.
(concluded)

Name of Firm	Location of Plant
BRITISH COLUMBIA -	
Canadian Sumner Iron Works Ltd.	1214 East Pender St., Vancouver
Easthope Brothers	1747 W. Georgia St., Vancouver
Electric Panel Mfg. Co. Ltd.	1250 Richards St., Vancouver
Letson & Burpee Ltd.	172 Alexander St., Vancouver
Nelson Iron Works Ltd.	Nelson
North Vancouver Ship Repairs Ltd.	Rogers St. N., Vancouver
Progressive Engineering Works Ltd.	360 West 1st Avenue, Vancouver
Simplex Engine & Mfg. Co. Ltd.	1963 W. Georgia St., Vancouver
Terminal City Iron Works	1949 Franklin St., Vancouver
Victoria Brass & Iron Works Ltd.	620 Pioneer St., Vancouver
Victoria Machinery Depot Co. Ltd.	343 Bay St., Victoria
Vivian Gas Engine Works	1090 West 6th Street, Vancouver
Vancouver Engineering Works	519 .. 6th Avenue W., Vancouver

SECTION THREE

Table 14 - IMPORTS INTO CANADA OF MACHINERY (Except Agricultural and Electrical), 1937. (Extracted from the Trade of Canada - Calendar Year 1937).

Item	Number	\$
Household machinery -		
Carpet sweepers	9,343	11,282
Cleaners, electric vacuum	16,655	285,944
Cleaners, hand vacuum, and attachments and complete parts for all vacuum cleaners .....	...	479,267
Clothes wringers and metal parts, for domestic use .....	...	49,520
Sewing machines	16,179	654,976
Sewing machine attachments .....	...	91,942
Sewing machine parts .....	...	384,654
Washing machines, domestic, and parts	16,965	726,062
Water pumps, hand or power, for domestic purposes only ..	6,579	62,880
Mining and metallurgical machinery -		
Articles for use exclusively in the metallurgy or smelt- ing of iron .....	...	47,676
Blowers, of iron and steel, for use in the smelting of ores; rotary kilns, roasters, etc.; furnace slag trucks and slag pots, and parts for all the foregoing .....	...	209,224
Bundles, vanners, slime or concentrating tables and integral parts thereof .....	...	5,254
Car-loading machines and complete parts thereof for use exclusively for loading coal into box cars .....	...	11,128

Table 14 - IMPORTS INTO CANADA OF MACHINERY (Except Agricultural and Electrical),
1937. (Extracted from the Trade of Canada - Calendar Year 1937) (continued)

Item	Number	\$
Mining and Metallurgical machinery (concluded) -		
Coal heading machines, electric or magnetic machines for concentrating or separating iron ores, automatic scales for use with conveyors, miners' lamps, automatic ore samplers, automatic feeders, retorts, mercury pumps, pyrometers, bullion furnaces, amalgam cleaners, furnaces for smelting ores, converting apparatus for metallurgical processes, machinery for the extraction of precious metals, blast furnace blowing engines, and integral parts for all the foregoing	968,819
Diamond drills and core drills, not including motive power, and electrically operated coal drills and coal cutting machines, n.o.p., and parts	198,426
Face loading machines, shaker trough or belt trough conveyors, air engines, flame-proof enclosed driving motors, and parts	223,212
Machinery and appliances of iron and steel of a class or kind not made in Canada, and elevators and machinery of floating dredges when for use exclusively in alluvial gold mining	153,343
Machinery, n.o.p., for the concentration or separation of ores, metals or minerals (flotation machines, vibrating screens, magnetic separators, etc.)	105,709
Machinery furnaces and appliances of a kind not made in Canada and parts thereof for use in the refining of metals and for the production of anodes, cathodes, slabs, pigs, or ingots, in such refining processes	58,390
Ore crushers, rock crushers, stamp mills, grinding mills, n.o.p., and complete parts	951,683
Percussion coal cutters, coal augers, rotary coal drills and complete parts	16,510
Pumps and vacuum pumps and complete parts for use exclusively in the extraction of precious metals by the chlorination or cyanide process	31,246
Rock drills, n.o.p., and complete parts	756	785,099
Well-drilling machinery and apparatus	2,565,586
Office or Business machinery -		
Adding book-keeping, calculating and invoicing machines and complete parts, n.o.p.	6,712	1,272,935
Cash registers	52,551
Complete parts of cash registers for use exclusively in the manufacture of cash registers	561,181
Dictating, transcribing and cylinder shaving machines and complete parts including cylinders and unfinished wax blanks	111,213
Typewriters	7,826	246,191
Typewriter parts	1,005,453

Table 14 - IMPORTS INTO CANADA OF MACHINERY (Except Agricultural and Electrical),
1937. (Extracted from the Trade of Canada - Calendar Year 1937) (continued)

Item	Number	\$
Printing and Bookbinding machinery -		
Flat bed cylinder printing presses, to print sheets of a size 25 by 38 inches or larger and complete parts; machines designed to fold or sheet-feed paper or cardboard and complete parts	52	63,380
Offset presses; lithographic presses; printing presses and typemaking accessories for same, n.o.p.; complete parts of the foregoing not to include saws, knives and motive power	2,147	1,229,604
Machinery, being presses for use in the printing of newspapers, of not less value by retail than \$1,500 each, of a kind not made in Canada, and complete parts, not to include saws, knives and motive power	38	663,827
Typecasting and typesetting machines and parts .....	...	429,743
Typemaking accessories for printing presses and parts .....	...	26,207
Printing and bookbinding machinery and apparatus, n.o.p....	...	1,267,294
Other machinery -		
Air-compressing machinery, n.o.p. ....	...	676,469
Automatic machines for making and packaging cigarettes ...	...	261,517
Bakery machinery and apparatus .....	...	232,407
Coal carbonizing machinery .....	...	3,107
Cement-making machines, n.o.p. ....	...	2,752
Clay products machinery and parts, of a class not made in Canada (blungers, pugging machines, etc.) .....	...	12,996
Coal, coke and gas machinery for use exclusively in washing or dry-cleaning coal at coal mines or coke plants, in producing coke or gas, and in the distillation of coal or gas, and complete parts .....	...	111,467
Machinery and apparatus, n.o.p., and complete parts, for the recovery of solid or liquid particles from flue or other waste gases .....	...	44,932
Coal handling machines, n.o.p. ....	...	1,156
Concrete mixing machines, n.o.p.	50	71,465
Cranes and derricks, n.o.p.	586	642,161
Dental engines, electric	65	6,304
Fire extinguishing machines, hand fire extinguishers and sprinkler heads for automatic sprinkler systems .....	...	65,437
Fish meal and fertilizer machinery and parts .....	...	80,894
Ice-making and refrigerating machinery, n.o.p. ....	...	599,333
Lawn mowers	5,389	84,393
Leather machinery and parts, of a kind not made in Canada.	...	131,541
Logging machinery and parts .....	...	828,483
Metal working machinery -		
Drilling and boring machines .....	...	785,012
Grinding machines .....	...	705,977
Lathes .....	...	902,416
Milling machines .....	...	488,026
Planers .....	...	21,272
Presses .....	...	292,052
Rolling mill machines, n.o.p. ....	...	276,870
Shapers and slotters .....	...	112,340
Other .....	...	3,277,072

Table 14 - IMPORTS INTO CANADA OF MACHINERY (Except Agricultural and Electrical),
1937. (Extracted from the Trade of Canada - Calendar Year 1937)(concluded)

Item	Number	\$
Other machinery (concluded) -		
Moving picture projectors, n.o.p.	321,924
Net making machinery of a kind not made in Canada	7,154
Ozone generators or airifiers and parts, of a kind not made in Canada	3,312
Paper mill machines, n.o.p.	517,572
Pulp mill machines, n.o.p.	78,678
Pumps, power, n.o.p.	5,540	764,586
Concrete road-paving machines, self-propelled and end-loading type; concrete and asphalt road finishing machines; form graders; sub-graders; backfilling machines; steam or air-driven pile hammers or extractors; well points; truck turn-tables; all of a kind not made in Canada, and parts for same	556,649
Trench and ditch excavating machines and parts	60,030
Rollers, street or road, and parts	65	100,455
Rolling mill rolls for use in rolling metals or the manufacture of paper	565,509
Sawmill machinery and parts	93,741
Scrapers, railway and road	43,106
Shoe machinery, n.o.p.	176,739
Shovels, steam, electric or other power, and parts	160	1,291,493
Stave making machinery	1,940
Sugar manufacturing machinery of a kind not made in Canada.	18,704
Veneer drying machines and machines for the manufacture of veneers and plywoods	119,535
Water meters, n.o.p.	204	22,540
Water turbines, n.o.p.	41,261
Wire stitchers and staplers, hand or power	62,231
Yarn, cordage and fabric machinery and parts, of a kind not made in Canada	4,591,567
All other machinery and complete parts	10,462,505
TOTAL MACHINERY	46,426,523
From - United Kingdom	3,832,235
United States	41,261,366



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Table 15 - EXPORTS FROM CANADA OF MACHINERY (Other than Agricultural and Electrical),
1937. (Extracted from the Trade of Canada - Calendar Year 1937).

Item	Number	\$
Electric vacuum cleaners and parts	5,769	169,701
Sewing machines and parts .....	...	2,513,775
Washing machines, domestic, and wringers	26,866	1,287,092
Adding and calculating machines and parts	2,662	971,491
Typewriters and parts	24,561	1,632,301
Other office machinery and parts .....	...	2,737
Linotype and monotype machines and parts .....	...	247
Lawn mowers	3,460	19,359
Metal-working machinery .....	...	83,895
Wood-working machinery .....	...	88,000
Other machinery and parts .....	...	4,068,821
TOTAL MACHINERY .....	...	10,837,419
To - Great Britain .....	...	4,613,149
United States .....	...	242,101