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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 RAILWAY ROLLING STOCK INDUSTRY, 1937

Production from the Railway Rolling Stock Industry during 1937 was valued at $93,854,555, an increase of 64.7 per cent over the 1936 value of $56,969,453 which in turn was 38 per cent greater than the $41,213,039 reported for 1935. The 1937 value was the highest since 1930.

Included in this industry are those factories which are engaged chiefly in the making or repairing of railway cars and locomotives, or in making car and locomotive parts such as wheels, tires, brakes, springs, etc. In 1937, as in the next preceding year, there were 37 plants in this category, including 15 in Ontario, 11 in Quebec, 4 in Manitoba, 3 in Nova Scotia, 3 in Alberta, and 1 in New Brunswick.

Employees averaged 21,496 in number for the year and salaries and wages totalled $29,187,157, compared with 18,633 employees and $22,161,277 for salaries and wages in 1936. Plants in Quebec gave work to an average of 9,531 people, in Manitoba to 4,514, in Ontario to 4,173, in Alberta to 1,393 and in the Maritimes to 1,885 persons.

The manufacture and general maintenance of railway rolling stock, as carried on in these works, required materials costing $56,191,146 in 1937 as against $30,486,569 in 1936, while expenditures for fuel and electricity amounted to $2,090,074 compared with $1,781,825 in 1936.

Included in the products made during the year were 7,399 new freight cars at $25,327,878, 46 new locomotives at $4,862,925, 105 new passenger cars at $3,499,300, car wheels at $3,570,015 and tires for wheels at $308,234. The value of repairs on cars and locomotives totalled $30,473,106.

Imports of railway rolling stock and equipment during 1937 included 17 tank cars at $21,233,312; box and flat cars at $311,521; 7 passenger cars at $93,922; 160 other cars at $30,124; 22 railway motor cars and parts at $45,699; tires in the rough for railway vehicles at $669,271; 51 locomotives and motor cars for mining operations at $182,205; 34 other railway locomotives at $362,095; axles or axle blanks for railway vehicles at $26,839; wheels for railway rolling stock at $138,063; and other parts for cars and locomotives at $1,308,871.

Table 1 - PRINCIPAL STATISTICS, 1925 - 1937

Years	No. of plants	Capital employed	Average number of employees	Salaries and wages	Cost of materials at works	Gross selling value of products at works
		$		$	$	$
1925	35	78,039,179	20,202	26,580,356	25,895,490	53,050,665
1926	36	82,024,510	22,286	30,721,743	38,053,559	72,706,052
1927	35	81,519,950	21,436	30,269,896	38,518,449	74,466,912
1928	35	89,053,842	22,417	32,452,781	38,110,053	73,422,057
1929	35	94,415,563	25,488	38,311,179	74,156,037	126,487,037
1930	37	95,785,640	25,952	37,625,050	60,289,445	104,922,701
1931	38	97,484,985	21,773	28,111,765	35,335,573	67,865,070
1932	38	87,289,160	15,612	17,460,142	14,101,765	32,465,192
1933	37	86,509,047	16,172	14,584,021	13,574,592	29,672,265
1934	37	82,897,836	16,095	16,312,271	16,756,285	34,352,911
1935	37	86,547,010	16,921	18,785,671	20,769,208	41,213,039
1936	37	83,258,169	18,633	22,161,277	30,486,569	56,969,453
1937	37	88,426,476	21,496	29,187,157	56,191,146	93,854,555
% increase 1937 over 1936	-	+ 6.2	+ 15.4	+ 31.7	+ 84.3	+ 64.7

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

Province	No. of plants	Capital employed	Average number of employees	Salaries and wages	Cost of materials at works	Gross selling value of products at works
1936		$		$	$	$
Nova Scotia and New Brunswick ..	4	7,440,440	1,411	1,623,560	3,301,220	5,295,514
Quebec	11	35,808,519	8,255	10,215,364	14,350,747	26,154,991
Ontario	15	19,311,141	3,003	3,585,217	6,216,141	11,617,280
Manitoba	4	13,878,759	4,475	5,111,843	5,363,231	10,916,608
Alberta	3	6,819,310	1,489	1,625,293	1,255,230	2,985,060
CANADA	37	83,258,169	18,633	22,161,277	30,486,569	56,969,453
1937						
Nova Scotia and New Brunswick ..	4	8,044,372	1,885	2,407,553	6,806,774	10,278,301
Quebec	11	37,019,987	9,531	13,641,516	27,481,375	45,313,773
Ontario	15	22,032,424	4,173	5,514,523	13,649,342	21,820,963
Manitoba	4	14,345,375	4,514	5,888,408	6,703,777	13,058,914
Alberta	3	6,984,318	1,393	1,735,157	1,549,878	3,382,604
CANADA	37	88,426,476	21,496	29,187,157	56,191,146	93,854,555

Table 3 - SIZE OF ESTABLISHMENTS ACCORDING TO PRODUCTION, NUMBER OF EMPLOYEES AND CAPITAL EMPLOYED, 1937

	No. of plants	Capital employed	Average number of employees	Gross selling value of products at works
		$		$
(a) PRODUCTION				
Under $100,000	3	133,147	16	148,994
$100,000 to $500,000 ..	9	5,135,823	642	2,557,738
$500,001 to $1,000,000 .	6	4,470,520	1,209	4,697,069
Over $1,000,000	19	78,686,986	19,629	86,450,754
TOTAL	37	88,426,476	21,496	93,854,555
(b) EMPLOYEES				
Under 25	4	195,699	17	249,878
25 to 50	3	516,530	104	810,574
51 to 100	5	3,316,068	378	1,769,582
101 to 250	4	4,119,407	784	2,894,361
251 to 500	5	8,839,807	1,715	5,667,800
501 to 1,000	7	23,374,265	5,333	34,653,549
Over 1,000	9	48,064,700	13,165	47,808,811
TOTAL	37	88,426,476	21,496	93,854,555
(c) CAPITAL				
Under $250,000	8	712,229	2,732	10,472,123
$250,000 to $1,000,000 .	8	4,462,900	1,237	4,749,265
$1,000,001 to $3,000,000	9	18,213,783	4,515	17,512,356
Over $3,000,000	12	65,037,564	13,012	61,120,811
TOTAL	37	88,426,476	21,496	93,854,555

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

Provinces	Present value of lands, buildings, machinery, tools and other equipment	Inventory value of materials, supplies and finished products on hand and stocks in process	Operating capital (cash, bills and accounts receivable, etc.)	TOTAL CAPITAL EMPLOYED
1 9 3 6	$	$	$	$
Nova Scotia and New Brunswick .	5,270,677	1,168,635	1,001,128	7,440,440
Quebec	30,963,260	4,075,497	769,762	35,808,519
Ontario	16,098,489	1,403,194	1,809,458	19,311,141
Manitoba	11,400,764	2,297,995	180,000	13,878,759
Alberta	6,071,539	747,771	...	6,819,310
CANADA	69,804,729	9,693,092	3,760,348	83,258,169
1 9 3 7				
Nova Scotia and New Brunswick .	5,150,199	1,314,325	2,574,741	8,044,372
Quebec	31,080,449	4,721,800	1,217,738	37,019,987
Ontario	16,290,975	3,591,421	2,150,028	22,032,424
Manitoba	11,459,030	2,686,345	200,000	14,345,375
Alberta	6,108,682	875,636	...	6,984,318
CANADA	70,089,335	13,189,527	5,147,614	88,426,476

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

Provinces	Average number of employees					Salaries	Wages	TOTAL SALARIES AND WAGES
	On salaries		On wages					
	Male	Female	Male	Female	TOTAL			
1 9 3 6						$	$	$
Nova Scotia and New Brunswick ..	97	1	1,309	4	1,411	203,727	1,419,833	1,623,560
Quebec	588	30	7,615	22	8,255	1,214,139	9,001,225	10,215,364
Ontario	276	26	2,701	..	3,003	611,059	2,974,158	3,585,217
Manitoba	234	13	4,228	..	4,475	491,167	4,620,676	5,111,843
Alberta	87	..	1,402	..	1,489	185,737	1,439,556	1,625,293
CANADA	1,282	70	17,255	26	18,633	2,705,829	19,455,448	22,161,277
1 9 3 7								
Nova Scotia and New Brunswick ..	97	1	1,780	7	1,885	228,010	2,179,543	2,407,553
Quebec	612	34	8,865	20	9,531	1,372,197	12,269,319	13,641,516
Ontario	327	33	3,809	4	4,173	782,048	4,732,475	5,514,523
Manitoba	234	13	4,267	..	4,514	524,555	5,363,853	5,888,408
Alberta	87	..	1,306	..	1,393	197,307	1,537,850	1,735,157
CANADA	1,357	81	20,027	31	21,496	3,104,117	26,083,040	29,187,157

Table 6 - WAGE-EARNERS, BY MONTHS, 1936 and 1937.

Months	1 9 3 6			1 9 3 7		
	Male	Female	TOTAL	Male	Female	TOTAL
January	17,980	27	18,007	17,301	32	17,333
February	18,839	33	18,872	18,469	35	18,504
March	19,058	33	19,091	19,669	35	19,704
April	18,827	28	18,855	20,774	36	20,810
May	18,245	28	18,273	21,970	35	22,005
June	18,021	28	18,049	22,153	32	22,185
July	17,369	25	17,394	20,169	28	20,197
August	16,225	21	16,246	20,524	31	20,555
September	15,282	21	15,303	20,988	30	21,018
October	15,435	20	15,455	19,900	26	19,926
November	15,707	20	15,727	19,654	26	19,680
December	16,068	26	16,094	18,784	29	18,813
AVERAGE	17,255	26	17,281	20,027	31	20,058

Table 7 - REGULAR HOURS WORKED PER WEEK BY WAGE-EARNERS (OVERTIME NOT INCLUDED) 1936 AND 1937.

(Based on data for month of highest employment)

Regular hours worked per week	Per cent of wage-earners 1936	1937	Regular hours worked per week	Per cent of wage-earners 1936	1937
40 hours or less ..	67.9	57.8	51 - 53 hours ...	0.3	1.0
41 - 43 hours ...	0.9	0.9	54 hours	0.5	0.4
44 hours	12.6	10.9	55 hours	0.3	0.5
45 - 47 hours	12.8	20.3	56 - 59 hours ...	0.3	0.7
48 hours	2.4	4.2	60 hours and over.	0.7	1.4
49 - 50 hours	1.3	1.9			

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

Kinds	Unit of measure	1936 Quantity	1936 Cost at works	1937 Quantity	1937 Cost at works
			$		$
Bituminous coal - Canadian	short ton	88,141	340,854	94,731	383,413
Imported	short ton	69,096	334,499	66,567	326,581
Anthracite coal	short ton	200	2,202	275	2,896
Lignite coal - Canadian ..	short ton	80,966	225,461	86,622	234,492
Coke	short ton	1,645	16,498	1,612	15,898
Gasoline	Imp. gal.	40,414	7,947	53,478	10,743
Kerosene	Imp. gal.	2,174	371	2,893	504
Fuel oil	Imp. gal.	2,823,209	214,641	5,078,779	358,878
Wood	cord	426	2,296	965	4,449
Gas - Manufactured	M cu. ft.	51,160	37,057	124,072	62,564
Natural	M cu. ft.	1,281	512	1,207	483
Other fuel	$	...	79	...	60
Electricity purchased	K. W. H.	89,762,413	559,408	103,721,743	689,113
TOTAL	$	...	1,781,825	...	2,090,074
Electricity generated for own use	K. W. H.	6,018,373	...	...	...

Table 9 - POWER EQUIPMENT, 1936 and 1937.

Kinds	1936 No. of units	1936 Total rated horse power	1937 No. of units	1937 Total rated horse power
Steam engines and steam turbines	50	19,640	48	19,175
Gasoline, gas and oil engines	4	1,030	7	1,075
Hydraulic turbines and water wheels .	...	...	3	25
Total Primary Equipment	54	20,670	58	20,275
Electric motors run by purchased power	5,721	96,658	5,792	97,425
Total Power Equipment	5,775	117,328	5,850	117,700
Electric motors run by power generated by above primary units	608	8,247	607	7,937
Total Electric Motors	6,329	104,905	6,399	105,362
Boilers	113	61,153	110	34,373

Table 10 - POWER EQUIPMENT SHOWING "ORDINARILY IN USE" SEPARATELY FROM "IN RESERVE OR IDLE" - 1937.

Kinds	Ordinarily in Use No. of units	Ordinarily in Use Total rated horse power	In reserve or idle No. of units	In reserve or idle Total rated horse power
Steam engines and turbines	37	13,188	11	5,987
Gasoline, gas and oil engines	3	25	4	1,050
Hydraulic turbines or water wheels ..	3	25	...	...
Total Primary Equipment	43	13,238	15	7,037
Electric motors run by purchased power	5,701	95,386	91	2,039
Total Power Equipment	5,744	108,624	106	9,076
Electric motors run by power generated by above primary units	598	7,204	9	733
Total Electric Motors	6,299	102,590	100	2,772
Boilers	102	32,123	8	2,250

Table 11 - MATERIALS USED, 1936 and 1937.

Materials	Unit of Measure	1936 Quantity	1936 Cost at works	1937 Quantity	1937 Cost at works
			$		$
Iron and steel -					
Pig iron	long ton	16,362	358,420	21,921	635,617
Iron castings	short ton	6,878	436,225	9,877	765,919
Forgings	short ton	4,382	399,899	8,276	919,627
Bars and rods, steel	short ton	26,650	1,057,945	30,482	2,176,721
Wire, steel	short ton	250	24,697	287	30,018
Shafting, steel	short ton	135	16,828	10,355	624,380
Plates, steel	short ton	28,151	1,359,777	56,984	3,326,069
Sheets, steel	short ton	3,050	223,607	28,996	1,805,487
Strip, steel	short ton	27	2,148	25	2,595
Structural shapes, steel	short ton	11,256	569,712	33,258	1,772,726
Castings, steel	short ton	25,380	1,542,327	16,702	2,946,377
Alloy steel	short ton	437	97,750	531	54,337
Scrap iron and steel	short ton	84,988	947,447	118,313	1,610,091
Other iron and steel	short ton	4,564	245,557	13,467	747,277
Non-ferrous metals -					
Aluminium	pound	29,506	8,602	87,816	27,572
Brass and bronze castings	pound	3,464,129	566,257	4,024,092	786,696
Brass and bronze sheets, etc.	pound	66,168	11,014		
Copper	pound	102,396	22,013	147,990	36,973
Lead	pound	102,886	6,666	252,022	14,653
Nickel	pound	6,232	2,214	15,310	5,004
Tin	pound	34,499	17,575	43,292	22,700
Zinc	pound	12,545	830	137,344	8,757
Babbitt metal and solder	pound	160,700	38,917	178,747	60,252
Other metals	$	154,412	6,361	156,737	4,873
Other materials and supplies -					
Iron and steel pipe, tubes and fittings	$	...	473,391	...	781,798
Bolts, nuts, rivets and screws	$	...	745,550	...	1,277,129
Electrical goods	$	...	219,885	...	513,844
Paints, oils and varnishes	$	...	491,070	...	901,145
Centres	number	...	44,875	...	84,454
Tires	number	...	628,622	20,133	901,661
Wheels	number	54,681	711,381	70,015	945,735
Springs	...	...	...	...	504,339
Parts for cars, engines, etc.	$	...	3,101,369	...	4,598,193
Foundry coke	short ton	17,013	197,654	24,781	307,109
Moulding and core sands	short ton	11,763	48,033	20,689	89,165
Foundry facings	$	...	20,909	...	31,945
Lumber	M bd. ft.	27,058	981,290	39,521	2,636,798
Firebrick and cupola blocks	number	...	28,501	...	54,511
Fireclay	short ton	...	15,250	2,866	24,112
Core oil and core compounds	$	...	16,693	...	19,267
All other materials	$	...	14,799,308	...	24,133,220
TOTAL	$	...	30,486,569	...	56,191,146

Table 12 - PRODUCTS MANUFACTURED, 1936 and 1937.

Products	Unit of measure	1936 Quantity	1936 Selling value at works	1937 Quantity	1937 Selling value at works
			$		$
Brakes, brake beams, brake shoes and parts	$	...	456,032	...	786,668
Cars, standard steam railway, complete -					
Passenger	number	38	1,460,456	105	3,499,300
Freight	number	2,078	8,069,985	7,399	25,327,878
Cars, narrow gauge for mines, quarries, etc.	number	660	156,550	663	215,354
Locomotives, new	number	23	2,367,414	46	4,862,925
Tires for railway car wheels	pound	3,608,348	185,669	5,820,625	308,234
Wheels for railway cars	$	...	2,179,990	...	3,570,015
Castings and forgings (sold)	short ton	29,894	1,846,449	34,820	2,470,102
Other parts for cars and locomotives	$	...	2,532,213	...	7,169,786
Scrap iron and steel	short ton	46,002	459,863	48,136	717,910
Repairs on freight cars	$	...	7,611,461	...	10,440,340
Repairs on passenger cars	$	...	7,109,302	...	9,041,276
Repairs on locomotives	$	...	9,735,161	...	10,991,490
Receipts from other custom and repair work	$	...	2,312,505	...	2,828,218
All other products	$	...	10,465,075	...	11,625,059
TOTAL	$	...	56,969,453	...	93,854,555

Table 13 - PRODUCTION IN CANADA OF RAILWAY CAR WHEELS, RAILWAY CARS AND LOCOMOTIVES, 1923 - 1937

Year	Railway car wheels	Standard Railway Cars Number	Standard Railway Cars Selling value at works	Locomotives Number	Locomotives Selling value at works
	$		$		$
1923	3,731,738	7,856	29,967,400	138	7,666,531
1924	4,291,857	4,544	15,943,719	84	5,678,620
1925	3,547,542	1,435	3,415,475	8	342,000
1926	3,893,942	3,335	17,438,251	57	3,316,348
1927	4,235,349	5,005	14,640,385	57	4,417,770
1928	4,292,045	3,058	11,286,155	48	3,086,266
1929	4,978,633	13,242	53,933,537	98	8,389,781
1930	3,687,847	8,348	34,533,255	108	6,772,938
1931	2,457,989	5,288	19,782,973	26	1,897,493
1932	1,694,440	282	358,287	3	61,072
1933	952,971	589	1,726,227	...	...
1934	1,860,603	31	150,315	...	...
1935	1,942,603	550	2,017,841	4	111,500
1936	2,179,990	2,116	9,530,441	23	2,367,414
1937	3,570,015	7,504	28,827,178	46	4,862,925

Table 14 - PRODUCTION IN CANADA OF TIRES FOR RAILWAY CAR WHEELS, 1924 - 1937.

Year	Selling value at works	Year	Selling value at works
	$		$
1924	456,315	1931	1,145,744
1925	251,741	1932	214,186
1926	252,544	1933	839,038
1927	359,357	1934	184,817
1928	315,134	1935	205,407
1929	463,761	1936	185,669
1930	351,969	1937	308,234

Table 15 - PRODUCTION IN CANADA OF FINISHED RAIL FASTENINGS, 1927 - 1937.

Year	Tie plates			Fish plates and angle splice bars		
	Quantity made	Factory Sales		Quantity made	Factory Sales	
		Quantity	Income from sales		Quantity	Income from sales
	Long tons	Long tons	$	Long tons	Long tons	$
1927	50,632	49,864	2,623,839	9,159	9,282	594,939
1928	70,613	71,523	3,910,522	17,549	15,179	957,447
1929	60,191	59,323	3,168,851	18,626	18,853	1,188,486
1930	42,205	43,017	2,359,710	12,245	13,277	849,507
1931	30,402	31,661	1,691,098	8,616	9,357	591,407
1932	7,047	6,982	353,714	2,120	1,574	103,241
1933	4,071	4,074	229,942	4,903	1,085	78,047
1934	16,003	16,482	834,258	3,190	3,499	224,457
1935	18,232	18,438	944,342	5,458	5,370	344,711
1936	23,418	22,831	1,136,175	5,030	5,189	333,712
1937	20,789	21,780	1,123,923	6,362	6,411	430,204

Table 16 - PRODUCTION IN CANADA OF RAILWAY SPIKES(x), 1926 - 1937.

Year	Tonnage made	Tonnage sold	Income from sales
	Long tons	Long tons	$
1926	...	8,067	613,833
1927	...	11,483	851,386
1928	...	17,348	1,258,906
1929	15,206	14,680	1,059,175
1930	10,465	11,378	804,780
1931	8,461	8,670	606,522
1932	2,331	2,517	178,154
1933	3,086	2,996	215,776
1934	6,148	6,035	393,799
1935	5,746	5,869	398,691
1936	7,026	6,731	445,891
1937	7,218	7,487	559,997

(x) Includes some pressed spikes prior to 1934.

LIST OF FIRMS INCLUDED IN THE RAILWAY ROLLING STOCK INDUSTRY, 1937.

NOTE - This Directory carries only the names of concerns which the Bureau has classified, for statistical purposes, to the Railway Rolling Stock Industry. It is not intended to be a complete list of the concerns which manufacture materials or parts for railway rolling stock.

NAMES	LOCATION OF PLANTS
NOVA SCOTIA -	
Canadian Car & Foundry Co. Ltd.	Lusby St., Amherst
Dominion Wheel & Foundry Co. Ltd.	New Glasgow
Eastern Car Co. Ltd.	Trenton
NEW BRUNSWICK -	
Canadian National Railways	Moncton
QUEBEC -	
Canadian Car & Foundry Co. Ltd.	Ville St. Pierre, Montreal and Cote St. Paul, Montreal
Canadian National Railways	Pointe St. Charles, (Montreal), Riviere du Loup and St. Malo (Quebec)
Canadian Pacific Railway Company	Montreal
Canadian Steel Tire & Wheel Co. Ltd.	299 Marien Ave., Montreal East
Coghlin, B. J., Co. Ltd.	3320 Ontario St. E., Montreal
Montreal Locomotive Works Ltd.	5781 Notre Dame St. E., Montreal
ONTARIO -	
Buffalo Brake Beam Company	21 Dunbar St., Hamilton
Canada Iron Foundries Limited	Fort William, Hamilton, and St. Thomas
Canadian Locomotive Co. Ltd.	Ontario St., Kingston
Canadian National Railways	Leaside, London, and Stratford
Dominion Brake Shoe Co. Ltd.	1000 Talbot St., St. Thomas
Dominion Wheel & Foundries Ltd.	Cobourg and Toronto
Fairmont Railway Motors Ltd.	58 Pelham Ave., Toronto
Hammant Steel Car & Engineering Works	29 Dunbar Ave., Hamilton
National Steel Car Corp. Ltd.	Kenilworth Ave. N., Hamilton
Ottawa Car Mfg. Co. Ltd.	301 Slater St., Ottawa
MANITOBA	
Canadian National Railways	Transcona and Winnipeg
Canadian Pacific Railway Company	Winnipeg
Dominion Wheel & Foundries Limited	St. Boniface
ALBERTA	
Canadian National Railways	Edmonton
Canadian Pacific Railway Company	Calgary

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