Published by Authority of the HON. JAMES A. MacKINNON, M.P. 25-28-1-44 Minister of Trade and Commerce

Price -25 cents

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

STATISTICS

18 1987

LIBRARY BIBLIOTHEQUE

Dominion Statistician: S. A. Cudmore, M.A. (Oxon.), F.S.S., F.R.S.C. Chief - Mining, Metallurgical and Chemical Branch: W. H. Losee, B.Sc. Statistician - Metal and Chemical Products: H. McLeod. B.Sc.

ANNUAL INDUSTRY REPORT

IRON AND STEEL AND THEIR PRODUCTS GROUP

THE BRIDGE BUILDING AND STRUCTURAL STEEL WORK INDUSTRY, 1942

The value of work done by concerns in the Bridge Building and Structural Steel Work Industry amounted to \$63,383,569 in 1942 compared with \$58.355.506 in the previous year.

This industry includes all concerns which were occupied chiefly in fabricating or erecting steel for bridges, buildings, etc., and in 1942 covered the operations of 22 plants of which 12 were located in Ontario, 5 in Quebec, 2 in British Columbia, 2 in Manitoba and 1 in Alberta.

These firms had a capital investment in Canada in land, buildings, machinery, supplies, etc., of \$46,787,155 and afforded employment to a monthly average of 9,117 people who were paid \$19,028,035 in salaries and wages. Fuel and electricity cost \$713,367 and expenditures for materials for use in manufacturing amounted to \$28,528,769.

Munitions, parts for ships and other special war contracts accounted for about half of the output in 1942. Apart from this work the principal products were: 1,193 tons of bridges at \$286,557; 114,698 tons of other structural work, such as. buildings, transmission towers, etc., at \$19,744,293; plate and tank work at \$1,071,949; and mechanical work, including cranes, trolleys, etc., at \$4,951,203. Sales of plain material were reported at 43,314 tons worth \$4,144,767.

Table 1 - PRINCIPAL STATISTICS OF THE BRIDGE BUILDING AND STRUCTURAL STEEL WORK

			Average		Cost of		Gross sell-
	Number	Capital	number	Salaries	fuel and	Cost of	ing value
Year	of	employed	of em-	and	electricity	materials	of products
	plants		ployees	wages	at works	at works	at works
for the state of			THE R	\$	\$	\$	\$
1932	18	24,872,219	2,193	3,635,213	240,236	4,109,142	7,385,013
1933	18	22,905,185	1,433	2,002,483	155,721	1,806,451	5,616,430
1934	18	19,947,521	1,659	2,089,552	170,764	2,765,535	4,700,143
1935	18	18,935,273	2,056	2,742,956	181,024	3,901,609	7,597,599
1936	18	19,672,350	2,567	3,686,714	206,549	5,355,196	11,913,918
1937	19	21,200,308	3,418	5,004,456	247,801	8,657,728	16,850,324
1938	21	20,425,317	3,245	5,097,158	252,789	8,006,023	14,817,901
1939	21	19,246,277	2,949	4,546,648	232,377	6,786,893	15,840,592
1940	22	24,848,485	4,409	7,478,171	388,958	16,158,502	31,230,062
1941	22	31,508,621	7,162	12,566,538	576,908	20,861,731	58, 355, 506
1942	22	46,787,155	9,117	19,028,055	713,367	28,588,769	63,383,569
Per cent							
change,							
1942 from							
1941	0 9 9 9	+48.4	+27.3	+51.4	+22.0	+36.8	+8.6

NOTE: Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as, interest, rent, depreciation, taxes, insurance, advertising, etc.

Table 2 - PRINCIPAL STATISTICS, BY PROVINCES, 1941 and 1942

Table 2 - FR	INCIPAL	STATISTICS	-	VINCES, 194			
			Average		Cost of		Gross sell-
	Number	10-	number	Salaries	fuel and	Cost of	ing value
Province	of	employed	of em-	and	electricity	y materials	of products
	plants	3	plovees	wages	at works	at works	at works
		\$		\$	\$	\$	\$
1941							
Quebec	5	11,086,831	2,646	4,886,811	224,764	6,859,522	22,543,780
Ontario	12	13,299,460	3,425	5,748,292		10,819,639	20,113,109
Manitoba	2)						
Alberta	1)	7,122,331	1.091	1,931,435	108,428	3,182,570	15,698,617
British)						
Columbia	2)						
CANADA	22	31,508,621	7,162	12,566,538	576,908	20,861,731	58,355,506
1942							
Quebec	5	16,990,650	2,802	6,765,534	318,128	7,731,108	18,992,429
Ontario	12	19,029,759	4,108	7,953,226	253,662	13,983,985	26,545,886
Manitoba	2)	20,020,100	1,100	1,900,000	200,	10, 500, 505	20,010,000
Alberta	1)	10,766,746	2,107	4,309,295	141,577	6,813,876	17,845,254
British	1	20,700,720	29 101	1,000,000	1419011	0,010,070	11,040,004
Columbia	2)						
OJEGIIOZG -	61						
CANADA	22	46,787,155	9,117	19,028,055	713,367	28,528,769	63,383,569

Table 3 - CAPITAL			VINCES, I			on the		of the year
		value			rories	_		MOMAT
		build-	Raw mat			_	al(cash,	TOTAL
	ings, fi		ials and			bills		CAPITAL
Province	machiner	y, tools	other s	ip- Prod	ducts	accour	its re-	EMPLOYED
		r equip-	plies a			ceival	le.	
	men		stocks			eto	. "	
	11.02.		proces					
	9	1	p10005		1		3	\$
2047	4	,	Ψ	,	HP .	4	9	₩
1941								10 000 000
Quebec	2,68	8,213		316			50,411	11,086,831
Ontario	4,60	7,348	3,241,	479 1,76	65,840	3,68	34,793	13,299,460
Other provinces	2,77	0,243	2,862,8	395	11,528	1,47	77,654	7,122,330
CANADA		5,804	10,690,				2,868	31,508,621
1942	T7 A 5	0 257	7 500	200	4 500	6 02		16 000 650
Quebec		22,553	7,509,		4,500		3,617	16,990,650
Ontario		9,081	7,840,		58,255		02,043	19,029,759
Other provinces	2,85	7,897	5,898,	714	1,621	2,00	8,514	10,766,746
CANADA	. 11,00	9,531	21,249,	074 6	64,376	13,88	4,174	46,787,155
Table 4 - EMPLOYE	CES SALAF	RIES AND	WAGES B	Y PROVI	NCES 194	41 and 1	942	
10010 1 - 1111 11011		Number	Name and Address of the Owner, where the Party of the Owner, where the Party of the Owner, where the Owner, which is the Owner, where the Owner, which is th		1020, 10	33. 0110. 2	. V 2-64	TOTAL
Dunminan				y ees	Calani		Wagas	SALARIES
Province	On Salari			Total	balar.	ies	Wages	
	Male Fema	ile Mal	e Female					and WAGES
1941					\$		3	\$
Quebec	378	2,17	1	2,646	1,143,	,392 3,	743,419	4,886,811
Ontario	451 9	5 2,87	9	3,425	1,093	,824 4,	654,468	5,748,292
Other provinces	157 2	8 90	6	1,091	420	,107 1,	511,328	1,931,435
CANADA	986 22	0 5,95	6	7,162	2,657	323 9	909,215	12,566,538
	300 55	,,,,,,	0 0 0 0	3200	23,00	1000	, 000 31120	20,000,000
1942								
Quebec	327 13	6 2,32	1 18	2,802	1,478	709 5	286,825	6,765,534
Ontario	404 14			4,108			726,683	7,953,226
Other provinces	166 5	,		2 207			803, 153	
CANADA		1 7,78						19,028,055
1								
Table 5 - WAGE-EA	ARNERS, BY		1941 and	1 1942	(On the		9 4 2	of each month
Month			tal		Male		Female	TOTAL
							9	
January			026		6,311			6,320
February		_	056		6,425		10	6,435
March			316		6,796		10	6,806
April		5,	300		7,382		10	7,392
May		5.	699		7,727		11	7,738
June			980		7,992		11	8,003
July			116		3,259		11	8,270
August			335		3,292		121	8,413
							191	
September			358		3,351			8,542
October			613		3,412		206	8,618
November			822		3,665		241	8,906
December		6,	874		3,827		270	9,097
AVERAGE .	0 0 0 0 0 0 0 0 0 0	5,	956		7,787		92	7,879
	-	-		-				-

Table 6 - HOURS WORKED PER WEEK BY WAGE-EARNERS, 1941 and 1942 (In one week of month

		st employ er of	ment; overtime included) Number of
Hours worked per week		earners 1942	Hours wage-earners worked per week 1941 1942
Under 30 hours 31 - 43 hours 44 hours 45 - 47 hours 48 hours 49 - 50 hours	274 308 1,092 558 510 1,203	475 715 476 283 1,238 1,888	51 - 54 hours 266 443 55 hours 288 399 56 - 64 hours 1,093 2,030 65 hours and over . 1,390 1,434 Total 6,982 9,381 Total wages paid in selected week. \$ 241,954 \$ 376,222

Table 7 - FUEL AND ELECTRICITY USED, 1941 and 1942								
		1 9 4	1	1 9 4	1 9 4 2			
Kind	Unit of		Cost at		cost at			
	Measure	Quantity	works	Quantity	works			
			\$		\$			
Bituminous coal - Canadian	ton	12,617	91,569	13,475	104,331			
Imported	ton	1,898	15,863	2,366	22,847			
Anthracite coal - Imported	ton	1,213	11,477	1,521	13,925			
Coke	ton	538	5,712	901	9,458			
Gasoline	Imp.gal.	250,238	64,143	169,192	51,268			
Kerosene	Imp.gal.	3,769	482	1,734	366			
Fuel oil	Imp.gal.	1,362,168	116,126	2,361,922	197,007			
Wood	cord	17	167	50	650			
Gas - Manufactured		29,784	18,132	32,663	20,740			
Natural		57,164	25,553	55,600	26,775			
Electricity purchased		23,527,466	225,616	28,935,465	261,025			
Other fuel		***	2,068		4,975			
TOTAL			576,908	+ 0 *	713,367			

Table 8 - POWER EQUIPMENT, 1941 and							
	The second secon	ly in Use	In Reserve or Idle				
	Number	Total rated	Number	Total rated			
	of units	horse power	of units	horse power			
1 9 4 1							
Steam engines and turbines	14	540	2	45			
Gasoline, gas and oil engines	40	1,352	4	80			
Total Primary Equipment	54	1,892	6	125			
Electric motors run by purchased							
power	1,932	27,548	134	1,966			
TOTAL	1,986	29,440	140	2,091			
Electric motors run by above primary units	83	1,158	• • •				
Stationary boilers	43	3,182	26	1,328			

Bridge Building		- 5 -						
Table 8 - POWER EQUIPMENT, 19	41 and 1							
		Ordinarily in Use Number Total rated				In Reserve or Idle Number Total rated		
		of units		se power		horse power		
2 0 4 0		01 011100		, po., to 2				
1 9 4 2								
Steam engines and turbines		18	7	766	3	60		
Gasoline, gas and oil engines		38		,635	4	80		
Total Primary Equipment		56	2	,401	7	140		
Electric motors run by purcha power		2,098	29	424	146	2,189		
TOTAL		2,154	31	,825	153	2,329		
Electric motors run by above primary units		93	1	,185	3	35		
Stationary boilers		45	3,	236	26	1,306		
	Unit of measure	Stock on ha Jan. 1942	nd 1,	Purchases 1942	Stocks on hand Dec. 31, 1942	TOTAL MATERIALS USED 1942		
Structural Steel - Shapes, including channels, beams, columns, angles,								
joists, tees and zees	ton	41,8		160,680	49,988	152,507		
Plates and sheets	\$ ton	2,580,8		9,791,446	3,167,930	9,204,342		
riates and sheets	\$	785,6		8,062,158	1,997,561	6,850,265		
Miscellaneous - including bars, billets, slabs, rounds, squares and sheet piling	ton		.23	45,914 1,992,016				
Other Materials Used During the Year -								
Electrical apparatus and supplies	\$	1,0	000	866,597	1,200	866,397		
Other complete parts pur- chased (such as, engines,								
boilers, instruments,	\$	27 6	00	5 091 050	57 991	5 079 160		
Lumber		37,5		5,091,958	57,291	5,072,167		
THILLY CT	\$	15,0		152,913	14,479	153, 452		
Other miscellaneous stores .	\$	381,7		4,853,821	537,537	4,698,044		

TOTAL MATERIALS ... \$ 4,344,360 30,806,099 6,621,690 28,528,769

Table 10 - PRODUCTS MADE, 1941 and 1942

	1	9 4 1	1	9 4 2
Product	Quantity	Selling value at works	Quantity	Selling value at works
	Tons	\$	Tons	\$
Bridges	3,034	475,795	1,193	286,557
Structural work (buildings, transmission towers, etc.)	158,063	24,802,013	114,698	19,744,293
Plate and tank work, including tanks, hoppers, digesters, etc.	• • •	6,389,739	0 0 0	1,071,949
Mechanical work, including cranes, trolleys, etc	o • 6	5,195,309	\$ € €	4,951,203
Sales of plain material	66,249	5,596,748	43,314	4,144,767
Custom work and repairs	O @ U	433, 298	0 0 0 ·	1,195,058
Other products (x)	Φ m Q	15,462,604	0 * *	31,989,742
TOTAL	• • •	58,355, 506	0 . 6	63,383,569

⁽x) Includes munitions, sections for ships, etc.