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CANADA
DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS

+++ *Census of Industry* +++

MINING, METALLURGICAL & CHEMICAL STATISTICS

THE
WHITE METAL PRODUCTS INDUSTRY
IN

CANADA



Price 25 cents

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Annual Industry ReportManufactures of the Non-ferrous Metals GroupTHE WHITE METAL PRODUCTS INDUSTRY, 1945

Statistics given in this report cover the operations of firms in Canada which were occupied chiefly in (a) the manufacture of white metal alloys, such as babbitt, solders, type and type metal; (b) the refining of scrap to recover white metals, such as lead, tin, zinc, etc.; and (c) the manufacture of products, such as lead sheet, lead pipe, antimonial lead, collapsible tubes, slide fasteners, castings, metal foil, etc., in which the white metals or their alloys are the principal materials. In some establishments all three of these operations were carried on, so it is not practical to make any subdivision of the industry.

Forty-one factories reported in this group in 1945 and the value of their output was \$23,222,129. This total was 9 per cent above the 1944 value of \$21,303,718.

Of the total output during the year under review, 75 per cent came from the 23 plants in Ontario, 19 per cent from the 12 plants in Quebec, and 6 per cent from 2 plants in Manitoba and 4 in British Columbia.

Employment was afforded to a monthly average of 2,929 people, including 468 on salaries and 2,461 on wages. Salaries for the year amounted to \$1,100,165 and wages to \$3,460,416, a total of \$4,560,581. In the previous year, the 2,911 workers were paid \$4,310,348 in salaries and wages.

Materials used in manufacturing, exclusive of fuel and electricity, cost \$13,718,455 delivered at the works. Included in these materials were about 32,203 tons of scrap metals at \$3,578,604; 33,152 tons of pig lead at \$3,484,516; 1,380 tons of pig tin at \$1,734,695; 1,010 tons of aluminum at \$552,542; 5,566 tons of zinc spelter at \$644,198, and other metals at \$2,240,168.

Production included 19,760 tons of refined metals (recovered from scrap) valued at \$3,112,637; 3,567 tons of solders at \$1,808,764; 3,282 tons of type and type metal at \$686,094; 2,141 tons of babbitt metal at \$919,249; die castings at \$1,940,758; 3,336 tons of lead pipe at \$544,918; 2,428 tons of lead sheets at \$409,884, and other lines, such as metal foil, slide fasteners, moulded shot, collapsible tubes, nickel-chrome tubing, etc.

Table 1 - PRINCIPAL STATISTICS, 1935-1945

Year	Number of plants	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
1935	32	797	911,644	83,503	3,993,110	6,182,402
1936	35	894	1,017,732	99,860	4,356,439	6,905,041
1937	38	1,222	1,360,216	108,519	5,749,842	9,011,283
1938	35	1,252	1,434,089	109,787	4,506,881	7,660,254
1939	35	1,347	1,586,182	121,185	4,927,693	8,937,165
1940	41	1,671	2,040,629	162,872	7,941,052	12,599,215
1941	43	2,343	3,114,179	273,427	13,795,427	21,307,949
1942	40	2,583	3,848,639	314,986	13,328,759	23,325,076
1943	36	2,790	4,120,334	336,494	12,495,881	22,231,960
1944	41	2,911	4,310,348	316,930	12,930,750	21,303,718
1945	41	2,929	4,560,581	343,085	13,718,455	23,222,129
Per cent change, 1945 from 1944 ....	..	+0.6	+5.8	+8.2	+6.1	+9.0

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, 1944 and 1945

Province	Number of plants	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>1944</u>						
Quebec ...	13	292	589,173	46,458	2,981,817	3,996,697
Ontario ..	22	2,523	3,548,806	244,306	8,960,603	15,949,240
Manitoba..	2)					
British Columbia.	)	96	172,369	26,166	988,330	1,357,781
CANADA..	4)					
CANADA..	41	2,911	4,310,348	316,930	12,930,750	21,303,718
<u>1945</u>						
Quebec ...	12	331	651,278	49,228	3,365,003	4,353,833
Ontario ..	23	2,484	3,710,638	261,352	9,238,446	17,336,030
Manitoba..	2)					
British Columbia.	)	114	198,665	32,505	1,115,006	1,552,266
CANADA..	4)					
CANADA..	41	2,929	4,560,581	343,085	13,718,455	23,222,129

Table 3 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1944 and 1945

Province	Average Number of Employees						TOTAL SALARIES and WAGES	
	On Salaries		On Wages		Total	Salaries	Wages	\$
	Male	Female	Male	Female				
<u>1944</u>								
Quebec ...	53	20	210	9	292	190,045	399,128	589,173
Ontario ..	176	144	1,142	1,061	2,523	715,726	2,833,080	3,548,806
Manitoba..)							
British Columbia.	11)	15	68	2	96	53,073	119,296	172,369
CANADA ..	240	179	1,420	1,072	2,911	958,844	3,351,504	4,310,348
<u>1945</u>								
Quebec ...	53	18	251	9	331	202,439	448,939	651,278
Ontario ..	210	157	1,227	890	2,484	839,941	2,870,037	3,710,638
Manitoba..)							
British Columbia.	11)	19	82	2	114	57,785	140,880	198,665
CANADA ..	274	194	1,560	901	2,929	1,100,165	3,460,416	4,560,581

Table 4 - WAGE-EARNERS, BY MONTHS, 1944 and 1945 (On the last work-day of each month)

Month	1944			1945		
	Male	Female	TOTAL	Male	Female	TOTAL
January	1,488	1,046	2,534	1,631	1,198	2,829
February	1,437	985	2,422	1,674	1,273	2,947
March	1,403	975	2,378	1,576	1,168	2,744
April	1,376	920	2,296	1,551	1,249	2,800
May	1,383	1,014	2,397	1,499	911	2,410
June	1,395	1,134	2,529	1,505	762	2,267
July	1,393	1,114	2,507	1,486	738	2,224
August	1,371	1,082	2,453	1,486	699	2,185
September	1,372	1,096	2,468	1,543	696	2,239
October	1,429	1,129	2,558	1,561	700	2,261
November	1,496	1,201	2,697	1,600	716	2,316
December	1,499	1,164	2,663	1,623	703	2,326
AVERAGE	1,420	1,072	2,492	1,560	901	2,461

Table 5 - HOURS WORKED PER WEEK, BY WAGE-EARNERS, 1944 and 1945 (In one week of highest employment; overtime included)

Hours Worked per Week	Number of Wage-earners			
	1944		1945	
	Male	Female	Male	Female
30 hours or less	124	397	64	383
31-43 hours	125	172	186	167
44 hours	72	29	76	23
45-47 hours	133	132	164	185
48 hours	463	317	826	497
49-50 hours	205	162	212	188
51-54 hours	152	52	113	43
55 hours	116	27	64	1
56-64 hours	184	7	88	...
65 hours and over	46	13	32	25
TOTAL	1,620	1,308	1,825	1,512
Total wages paid in selected week \$	48,509	20,476	63,524	31,965

Table 6 - FUEL AND ELECTRICITY USED, 1944 and 1945

Kind	Unit of measure	1944		1945	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal--Canadian	ton	463	\$ 5,896	269	\$ 3,012
Imported	ton	3,513	35,547	3,505	35,208
Anthracite coal	ton	313	3,009	596	5,680
Coke	ton	584	6,798	1,082	13,736
Gasoline	Imp.gal.	14,819	4,793	19,746	6,824
Kerosene	Imp.gal.	3,335	656	10,641	1,735
Fuel oil	Imp.gal.	1,297,105	110,130	1,364,614	112,183
Wood	cord	12	148	17	192
Gas--Manufactured	M cu.ft.	84,241	27,799	48,114	38,428
Natural	M cu.ft.	33,597	34,535	28,691	30,251
Other fuel .....	...	...	176	...	144
Electricity purchased ...	K.W.H.	9,032,564	87,443	8,423,783	95,692
TOTAL .....	...	...	316,930	...	343,085

Table 7 - POWER EQUIPMENT, 1944 and 1945

	1944		1945	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Gasoline, gas and oil engines, other than Diesel .....	...	...	1	25
Diesel engines - In use	1	7	...	...
In reserve ..	...	...	1	7
Electric motors operated on purchased power -				
In use	1,582	8,294	1,795	8,405
In reserve or idle	106	598	129	439
TOTAL	1,689	8,899	1,926	8,876
Stationary power boilers -				
In use	7	155	6	155
In reserve or idle .....	...	...	...	...
Motor-generator sets	11	281	11	177

Table 8 - MATERIALS USED, 1944 and 1945

Material	1944		1945	
	Quantity	Cost at works(*)	Quantity	Cost at works(*)
<u>Metals (Other than Scrap)-</u>				
Aluminum--Ingots	lb.	531,284	130,418	758,437
Other forms	lb.	690,626	259,819	1,261,480
Antimony metal	lb.	2,382,290	371,243	1,228,358
Arsenic	lb.	60,902	5,245	60,110
Bismuth	lb.	40,224	50,713	33,930
Brass and bronze, all forms.	lb.	1,757,131	281,109	4,167,165
Cadmium	lb.	190,183	201,348	153,369
Copper ingots and slabs	lb.	2,232,446	262,135	2,381,960
Die casting alloy	lb.	2,784,992	222,849	1,864,685
Lead, pig	lb.	52,700,766	2,631,129	66,303,479
Manganese metal	lb.	4,717	1,337	17,069
Nickel	lb.	105,324	31,234	396,380
Silver, fine	Troy oz.	256,237	104,125	266,349
Tin, pig	lb.	2,527,234	1,594,886	2,758,668
Zinc slabs, bars and ingots.	lb.	10,457,447	632,260	11,132,184
Other metals, except scrap, but including alloys	lb.	...	550,641	...
				330,927
<u>Scrap Metals -</u>				
Aluminum	lb.	6,309,852	415,789	7,377,385
Brass and bronze, all kinds.	lb.	10,039,740	880,647	9,989,999
Copper, all kinds	lb.	10,314,229	797,055	6,496,982
Lead, battery plates	lb.	17,437,865	505,027	20,352,116
Lead, all other kinds	lb.	8,615,327	364,497	8,982,164
Zinc, all kinds	lb.	1,220,688	43,539	915,695
Babbitt	lb.	2,002,674	171,871	2,237,041
Solder	lb.	969,078	107,821	890,107
Tin	lb.	82,349	37,683	45,119
Type metal	lb.	2,237,019	124,159	2,507,347
Drosses	lb.	3,280,043	141,291	4,412,694
Other scrap, including scrap unspecified by kind	lb.	...	40,018	...
Shipping containers .....	...	...	63,016	...
All other materials .....	...	...	1,907,846	...
TOTAL .....	...	...	12,930,750	...
(*) Includes freight, duty, taxes, etc.				13,718,455

(*) Includes freight, duty, taxes, etc.

Table 9 - PRODUCTS MADE, 1944 and 1945

Product	1944		1945	
	Quantity	Selling value	Quantity	Selling value
	lb.	\$	lb.	\$
Refined Metals (reclaimed or remelted) -				
Aluminum	5,835,229	841,891	6,316,378	994,716
Lead (antimonial)	27,430,854	1,618,651	24,487,714	1,507,525
Lead (common)	5,005,039	231,156	5,730,387	319,089
Tin	81,759	51,606	254,367	154,485
Zinc	2,245,480	106,612	2,731,354	136,822

Table 9 - PRODUCTS MADE, 1944 and 1945 (Concluded)

Product	1944		1945	
	Quantity	Selling	Quantity	Selling
		lb.		\$
Alloys -				
Babbitt	3,966,281	805,358	4,281,389	919,249
Brass	9,114,569	1,170,835	7,329,539	911,671
Bronze	9,074,950	1,277,652	10,670,093	1,511,521
Copper alloys, not elsewhere specified	902,208	153,454	650,721	106,737
Lead alloys, not elsewhere specified	1,671,330	123,918	10,541,955	385,697
Solders	8,437,980	2,002,730	7,133,668	1,808,764
Tin alloys, not elsewhere specified	2,771,754	66,008	1,980,296	123,697
Type and type metal	5,118,068	515,737	6,563,071	686,094
Die casting alloy			5,279,635	456,225
Zinc alloys, not elsewhere specified	5,329,849	426,294	455,408	48,943
Other non-ferrous alloys ...	...	140,331	...	88,716
Castings -				
Die castings, all kinds ...	...	2,470,509	5,254,665	1,940,758
Other castings -				
Brass and bronze	2,542,993	626,475	9,976,570	2,180,319
Lead	707,372	58,563	943,946	119,837
Other .....	...	93,889	...	109,184
Lead Products -				
Pipe	5,548,720	492,340	6,672,362	544,918
Sheets	4,693,205	389,081	4,856,208	409,884
Traps and fittings	1,063,311	198,888	1,272,093	233,783
Miscellaneous, including				
bullet wire, shot, etc. ...	29,344,875	1,004,570	5,490,915	524,250
Scrap and dross	592,903	11,241	551,488	39,212
All other products (*) .....	...	6,425,929	...	6,960,033
TOTAL .....	...	21,303,718	...	23,222,129

(*) Includes commodities which were made by only one or two firms in this industry, such as metal foil, collapsible tubes, zipper fasteners, etc.

Table 10 - PRODUCTION OF BABBITT, SOLDERS, TYPE AND TYPE METAL, 1935-1945

Year	Babbitt Metal		Solders of All Kinds		Type and Type Metal	
	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works
	lb.	\$	lb.	\$	lb.	\$
1935 ...	2,418,522	558,991	3,944,727	1,011,679	4,346,228	385,991
1936 ...	2,662,706	475,544	4,420,555	1,075,694	3,906,174	377,673
1937 ...	2,905,351	641,880	5,789,677	1,618,209	4,166,091	407,819
1938 ...	2,229,444	455,742	5,032,225	1,201,999	3,635,344	355,636
1939 ...	2,623,562	530,630	5,020,048	1,330,681	4,546,996	437,740
1940 ...	3,211,629	846,507	6,433,586	1,708,063	4,342,916	415,531
1941 ...	4,327,028	1,053,291	8,747,192	2,480,995	5,377,059	501,694
1942 ...	3,994,034	1,053,157	7,618,416	1,840,715	4,150,069	447,079
1943 ...	3,675,988	937,254	8,219,870	1,947,118	5,996,676	547,878
1944 ...	3,966,281	805,358	8,437,980	2,002,730	5,118,068	515,737
1945 ...	4,281,389	919,249	7,133,668	1,808,764	6,563,071	686,094

Table 11 - IMPORTS INTO CANADA OF LEAD, TIN AND ZINC AND THEIR PRODUCTS, 1944 and 1945

		1944	1945		
		Quantity	Value	Quantity	Value
Lead and Its Products -			\$		\$
Lead in pigs and blocks -					
United Kingdom	lb.	12,000	1,580	2,000	280
United States	lb.	8,225	1,288	15,117	3,045
Total Imports	lb.	20,225	2,868	17,117	3,325
Lead, old and scrap -					
United Kingdom	lb.	...	...	36,871	1,045
Newfoundland	lb.	2,550	97	...	...
United States	lb.	3,546	185	...	...
Total Imports	lb.	6,096	282	36,871	1,045
Lead in bars and sheets -					
United States	lb.	10,156	1,504	29,586	3,927
Total Imports	lb.	10,156	1,504	29,586	3,927
Lead pipe -					
United States	lb.	2,533	528	...	...
Total Imports	lb.	2,533	528	...	...
Lead capsules for bottles -					
Brazil .....	...	...	15,029	...	...
United States .....	...	...	990	...	126
Total Imports .....	...	...	16,019	...	126
Shot and bullets, lead -					
United States	lb.	15,721	2,479	1,393	298
Total Imports	lb.	15,721	2,479	1,393	298
Manufactures of lead, n.o.p. -					
United Kingdom .....	...	...	997	...	663
United States .....	...	...	381,458	...	325,439
Total Imports .....	...	...	382,455	...	326,102
Tin and Its Products -					
Tin in blocks, pigs or bars -					
United Kingdom	cwt.	23,409	1,570,849	67,294	4,714,710
United States	cwt.	3,414	196,930	4,656	268,524
Total Imports	cwt.	26,823	1,767,779	71,950	4,983,234
Tinfoil -					
United States	lb.	1,625,265	217,978	136,006	17,315
Total Imports	lb.	1,625,265	217,978	136,006	17,315
Collapsible tubes -					
United Kingdom .....	...	...	...	...	146
Argentina .....	...	...	43,404	...	...
United States .....	...	...	143,957	...	101,075
Mexico .....	...	...	...	...	20,377
Total Imports .....	...	...	192,361	...	121,598

White Metal

- 8 -

Table 11 - IMPORTS INTO CANADA OF LEAD, TIN AND ZINC AND THEIR PRODUCTS, 1944 and 1945 (Continued)

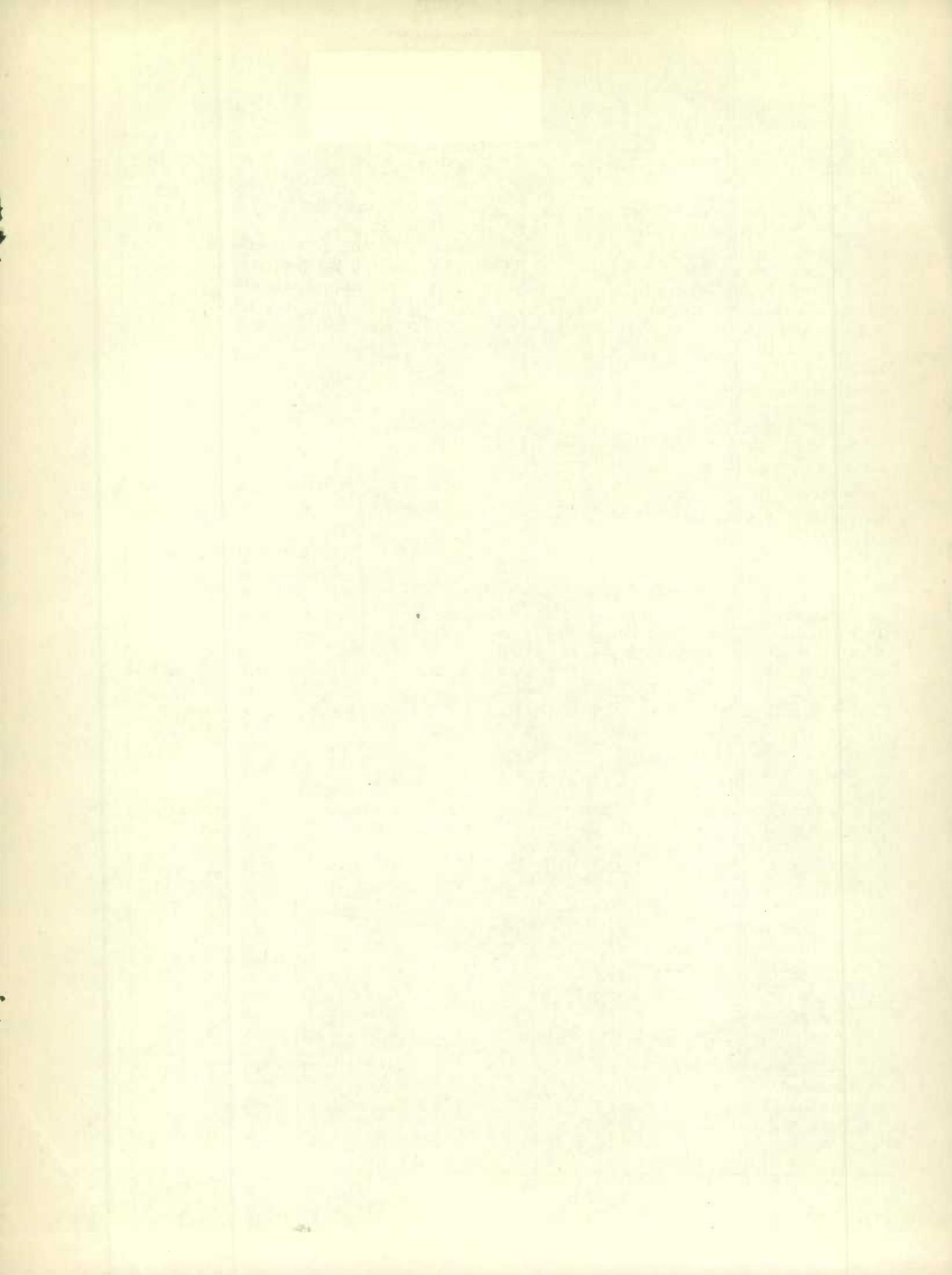
	1944		1945	
	Quantity	Value	Quantity	Value
<u>Zinc and Its Products -</u>		\$		\$
<u>Zinc spelter -</u>				
United States	cwt.	88,830	794,865	...
Total Imports	cwt.	88,830	794,865	...
<u>Zinc in blocks, pigs, bars and rods, and zinc plates, n.o.p.</u>				
United States	cwt.	1,569	26,722	1,954 30,921
Total Imports	cwt.	1,569	26,722	1,954 30,921
<u>Zinc strip and sheets; and zinc plates for marine boilers -</u>				
United States	cwt.	9,916	153,954	37,494 488,983
Total Imports	cwt.	9,916	153,954	37,494 488,983
<u>Zinc dust -</u>				
United States	cwt.	402	4,089	458 3,872
Total Imports	cwt.	402	4,089	458 3,872
<u>Zinc slugs for discs, for the manufacture of seamless cups or shells for electric dry batteries -</u>				
United States .....	...	...	86	...
Total Imports .....	...	...	86	...
<u>Zinc, manufactures of, n.o.p. -</u>				
United Kingdom .....	...	...	78	...
United States .....	...	351,140	466,651	...
Total Imports .....	...	351,218	466,842	...
<u>Alloys, n.o.p. -</u>				
<u>Babbitt metal in blocks, bars, plates and sheets -</u>				
United States	cwt.	201	4,866	302 6,492
Total Imports	cwt.	201	4,866	302 6,492
<u>Britannia metal, manufactures of, not plated -</u>				
United Kingdom .....	...	...	220	...
United States .....	...	4,710	6,431	...
Total Imports .....	...	4,930	6,651	...
<u>Chromium metal and tungsten metal, in lumps, powder, ingots, blocks or bars, and scrap of alloy metal containing chromium and tungsten, for alloying purposes -</u>				
United Kingdom	lb.	...	120,960	135,284
United States	lb.	85,741	124,842	67,562 113,162
Total Imports ...	lb.	85,741	124,842	188,522 248,446

Table 11 - IMPORTS INTO CANADA OF LEAD, TIN AND ZINC AND THEIR PRODUCTS, 1944 and 1945 (Concluded)

	1944		1945	
	Quantity	Value	Quantity	Value
Alloys, n.o.p. (Con.) -		\$		\$
Metal alloy slugs, cast, with diamonds or diamond clips embedded therein, as for the mould, and metal alloy strip -				
United States .....	...	...	49,397	...
Total Imports .....	...	...	49,397	92,345
Phosphor tin and phosphor bronze, in blocks, bars, plates, sheets and wire -				
United Kingdom	lb.	...	...	31,057
United States	lb.	735,419	361,916	688,112
Total Imports	lb.	735,419	361,916	719,169
Alloys of copper -				
United Kingdom .....	...	...	...	...
United States .....	...	...	64,618	...
Total Imports .....	...	...	64,618	118,869
Alloys of magnesium -				
United States .....	...	...	4,397	...
Total Imports .....	...	...	4,397	2,605
Type and Type Metal -				
Type metal, in blocks, bars, plates and sheets -				
United States	lb.	...	...	180
Total Imports	lb.	...	...	180
				66
Type for printing, including chases, quoins and slugs of all kinds -				
Switzerland .....	...	...	...	186
United States .....	...	...	64,092	...
Total Imports .....	...	...	64,092	89,437
				89,251

DIRECTORY OF FIRMS IN THE WHITE METAL PRODUCTS INDUSTRY, 1945

Name of Firm	Location of Plant
<u>Quebec -</u>	
The Canada Metal Company Limited	6265 Notre Dame St. E., Montreal
Dominion Foils (Canada) Limited	466 Victoria Ave., Lachine
Eagle Smelting & Refining Works Limited	1095 Wellington St., Montreal
Empire Leadburning and Welding Co.	1205 Mill St., Montreal
Kay Metal Refining Works Reg'd.	301 Nazareth St., Montreal
Magnolia Metal Co. of Canada, Limited	2028 Manufacturers St., Montreal
Mayer Sealing Devices Reg'd.	11425 Cherrier St. E., Montreal
Mount Royal Metal Co. Ltd.	1201 Mill St., Montreal
Ouellette, O. J., & Co.	270 Vitre St., Montreal
Riverside Smelting & Refining Works, Ltd.	639 Farm St., Montreal
The Steel Company of Canada, Limited	2320 Notre Dame St. W., Montreal
Standard Metal Co. Ltd.	536 Dollard Ave., Ville La Salle
United Smelters & Metals Inc.	9 Marien Ave., Montreal
Montreal Die Casting Ltd.	378 Chambly Rd., Longueuil
<u>Ontario -</u>	
Barber Die Casting Co. Limited	Cor. Hillyard & Munroe Sts., Hamilton
Binkley, Theophile	145 Beverley St., Galt
Bowes, Harold S.	R. R. 7, Mt. Pleasant Drive, London
Canada Foils Limited	7 Fraser Ave., Toronto
The Canada Metal Co. Ltd.	721 Eastern Ave., Toronto
Canadian Hanson & Van Winkle Co. Ltd.	15 Morrow Ave., Toronto
Dominion and Monarch Type Foundry	109 Ontario St., Toronto
Frankel Brothers Limited and National Metal Company	Don Roadway and Eastern Ave., Toronto
General Smelting Company of Canada, Ltd.	Wilcox St., Hamilton
Hewitt Metals Corporation, Limited	1554 McDougall Ave. E., Windsor
Kester Solder Company of Canada Limited	51 Bruce St., Brantford
Light Alloys Limited	Hall St., Renfrew
Lightning Fastener Company Limited	Niagara St., St. Catharines
London Die Casting Co. Limited	1163 King St., London
Metals & Alloys Limited	Wicksteed Ave., Leaside, Toronto
Modern Containers Limited	95 Sterling Rd., Toronto, and 346 Queen St., Ottawa
Moore Type Foundry Limited	431 King St. W., Toronto
Newburg Die Castings	29A Birch Ave., Toronto
Pressure Castings of Canada Limited	67 Main St. S., Weston
Schultz Die Casting Co. of Canada Limited	Wallaceburg
Spooner Copperine Company Limited	John St., Port Hope
Toronto Refiners & Smelters Ltd.	28 Bathurst St., Toronto
<u>Manitoba -</u>	
The Canada Metal Company Limited	301 Chambers St., Winnipeg
The Union Metal Company Limited	654 McGee St., Winnipeg
<u>British Columbia -</u>	
Atlas Smelting & Refining Co. Ltd.	321 East First Ave., Vancouver
B.C. Metals Limited	Braid St., New Westminster
The Canada Metal Company Limited	1428 Granville St., Vancouver
Great Western Smelting Co. Ltd.	310 Prior St., Vancouver



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