



CANADA

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS
CENSUS OF INDUSTRY

REPORT

on the

RUBBER INDUSTRY

in

CANADA

1929

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OTTAWA

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DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS CENSUS OF INDUSTRY OTTAWA - CANADA

Dominion Statistician: Chief, Census of Industry: R. H. Coats, B.A., F.S.S. (Hon.), F.R.S.C.

J. C. Macpherson.

THE RUBBER INDUSTRY IN CANADA, 1929.

Ottawa. Movember, 1930. - A report on the Rubber Industry in Canada is herewith presented for the calendar year 1929 classified under two heads: (1) Rubber tires and other rubber goods, (2) Rubber footwear. A resume of the principal statistics is given below:-

ESTABLISHMENTS

The number of establishments reporting in 1929 was 44, of which 33 were located in the province of Ontario, 9 in Quebec and 2 in British Columbia. Listed according to products the number of factories manufacturing tires only was 4, tires and footwear 2, and tires and other rubber products 6. The number making footwear only was 8, footwear and other rubber products 2, whilst those making rubber products other than tires and footwear were 22 in number.

CAPITAL

The amount of capital invested in the rubber industry in 1929 was 373,877,478 to which the rubber tires and other rubber goods section contributed \$55,697,543 and the footwear section \$17,179,935. Fixed capital in the industry as a whole amounted to \$42,774,839 and working capital to \$31,102,639.

EMPLOYEES

The number of persons employed in the industry in 1929, exclusive of outside piece workers, was 17,796 of whom 2,259 were salaried employees and 15,537 were wage-earners. Of those employed 13,155 were males and 4,630 were females. In the rubber goods section the total employees numbered 9,771 of whom 8,118 were males and 1,653 were females, whilst in the footwear section the total number employed was 8,025 of whom 5,048 were males and 2,977 were females.

SALARIES AND WAGES

The total amount of salaries and wages paid in 1929 was \$20,134,501 of which \$4,156,968 was for salaries and \$15,977,533 for wages. Total payments in the rubber goods section amounted to \$12,906,180 of which \$2,846,660 represented the cost of salaries and \$10,059,520 the cost of wages. In the rubber footwear section the total payments were \$7,228,321 of which \$1,310,308 represented the cost of salaries and \$5,918,013 the cost of wages.

FUEL CONSUMPTION

The total cost of fuel consumed by the industry in 1929 was \$719,529 of which the rubber goods section accounted for \$553,602 and the rubber footwear section for \$165,927. Bituminous coal was the principal fuel of which 91,030 tons worth \$513,476 were reported whilst its value represented 92.75 per cent of the total cost of all fuel.

MATERIALS USED

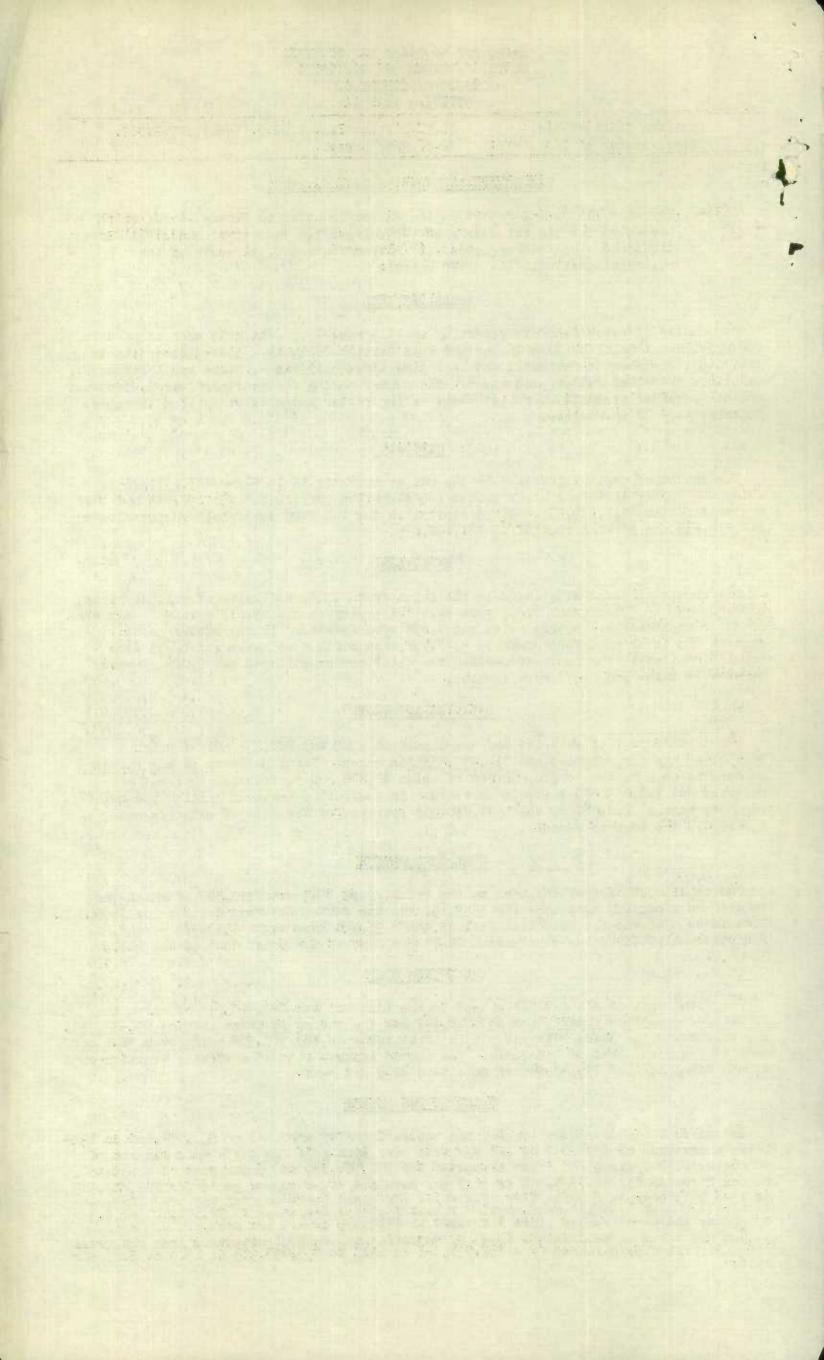
The total cost of all materials used in the industry was \$42,940,747 of which the rubber goods section contributed \$33,408,648 and the rubber footwear section \$9,532,099. Raw rubber was the chief material with a total value of \$16,361,908 being over 38.1 per cent of the total cost of materials. The second largest item of materials was tire duck with a total cost of \$9,702,844 or more than 22.6 per cent.

VALUE OF PRODUCTION

The gross value of production for the entire industry amounted to \$95,934,550 in 1929 being a decrease of \$274,053 or .28 per cent over 1928. Of the three main classes of products, rubber tires and tubes accounted for \$51,386,140 or 53 per cent of the total, rubber footwear for \$29,720,991 or 30.7 per cent and other rubber goods for \$15,827,529 or 16.3 per cent. Automobile tire production increased in value over the preceding year by \$1,677,602 or 3.38 per cent, whilst rubber footwear decreased by \$2,691,620 or 8.3 per cent, and other rubber goods increased by \$739,965 or 4.9 per cent.

The net value of production, found by deducting the cost of materials from the gross value of products, advanced from \$52,090,143 in 1928 to \$53,933,913 in 1929 or 3.65 per cent

cent.



Size of Establishments

In view of the tendency towards concentration in industrial enterprises, a series of tables has been prepared presenting in a threefold way the size of establishments in the rubber industry, measured by (a) capital investment, (b) gross value of production and (c) the number of persons employed, all within certain specified groups or limitations for the calendar years 1928 and 1929. The tables further indicate the movement of capital, production and employment within the industry.

In 1928 the number of establishments reporting was 45 with a total capital investment of \$70,459,066, a gross value of production of \$97,208,713 and a total employment of 17,095. Seventeen factories had a capital investment of \$65,843,040 or 93.4 per cent of the total capital investment with an average investment of \$3,873,120 per factory.

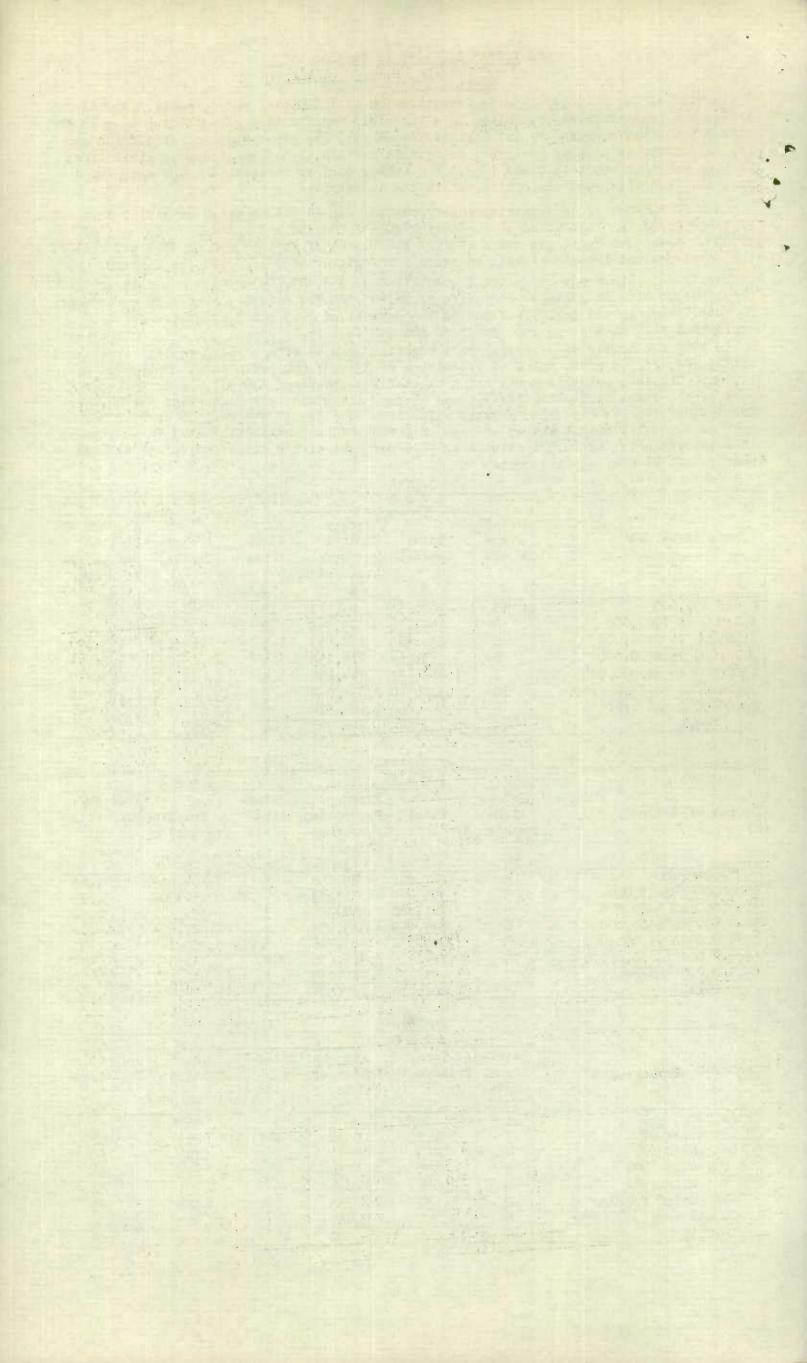
Twenty establishments had a total production of \$93,907,504 or 96.6 per cent of the total output with an average production of \$4,695,375 per establishment. In employment 20 establishments had 16,121 persons on the payroll or 94.3 per cent of the total employment with an average employment of 806 per factory.

In 1929 the number of establishments reporting was 44 with a total capital investment of \$73,877,478, a gross value of production of \$95,934,660 and a total employment of 17,796. Nineteen establishments had a capital investment of \$70,377,862 or 95.2 per cent of the total capitalization with an average investment per factory of \$3,704,098. Twenty-two establishments had a gross value of production of \$94,248,506 or 97.2 per cent of the total output and an average of \$4,284,023 per establishment. In employment 18 establishments had 16,521 persons or 92.8 per cent of the total employment with an average of 918 per establishment.

Capital								
		1 9 2 8			1929			
	Estab-		Average	Estab-		Average		
Groups of Values	lish-	Total	Capital	lish-	Total	Capital		
	ments	Capital	per estab-	ments	Capital	oer estab-		
			lishment			lishment		
	No.	\$	\$	20.	\$	\$		
Under \$50,000	13	308,561	23,743	12	234,783	19,565		
\$50,000 to \$100,000	2	159,136	79,568	3	170,072	56,691		
\$100,000 to \$200,000	5	834,965	166,993	5	769,028	153,806		
\$200,000 to \$500,000	8	3,313,264	414,158	5	2,325,733	465,147		
\$500,000 to \$1,000,000	2	1,488,431	744,216	7	2,575,437	643,859		
\$1,000,000 to \$5,000,000	10	23,310,540	2,331,054	9	19,385,169			
\$5,000,000 and over	5	41,044,069	8,203,814	6	48,417,256	8,069,543		
TOTAL	45	70,459,066	1,565,757	44	73,877,478	1,679,034		

		Production	on			
	1	1928		1929		
	Estab-		Average	Estab-		Average
Groups of Values	lish-	Total	Production:	lish-	Total	Production
	ments	Production	per estab-	ments	Production	per estab-
			lishment		Trest Till	lishment
	No.	\$	\$	No.	\$	\$
Under \$50,000	9	267,801	29,756	9	204,889	
\$50,000 to \$100,000	5	355,667	71,133	7	254,300	
\$100,000 to \$200,000	5	781,782	156,356	3	399,271	
\$200,000 to \$500,000	6	1,895.959	315,993	6	1,827,694	
\$500,000 to \$1,000,000	3	2,289,738		- 6	3,968,047	
\$1,000,000 to \$5,000,000	10	29,184,495	2,318,450	9	26,738,312	
\$5,000,000 and over	7	62,433,271	8,919,039	7	63,542,147	
TOTAL	45	97,208,713	2,160,194	7-1-1	96,934,660	2,203,060

		Employe	es			
		1928		Teller	1929	
	Estab-	Total	Average	Estab-	Total	Average
Groups of Employees	lish-	Employees	Employees	lish-	Employees	Employees
	ments			ments		
	No.	No.	No.	No.	No.	No.
Under 20	11	98	9	9	57	6
20 but under 50	7	193	. 28	8	217	27
50 but under 100	7+	293	73	5	346	69
100 but under 200	3	390	130	4	655	164
200 but under 500	7	2,088	291	5	1,791	358
500 but under 1,000	7	5,132	733	6	ц,328	721
1,000 and over	6	8,301	1,484	7	10,402	1,486
TOTAL	45	17,095	330	44	17,796	404



THE RUBBER INDUSTRY IN CANADA, 1929. COMPARATIVE STATISTICS

A comparison of the principal statistics of the rubber industry in Canada is afforded in Table 1(a) for the calendar years 1925, 1927, 1928 and 1929. The number of plants reporting in 1929 decreased by 2.22 per cent from 1928, whilst capital investment increased by 4.9 per cent, employees by 3.9 per cent, salary and wage payments by 4.1 per cent and the cost of fuel by 4.5 per cent. The cost of materials decreased by 4.8 per cent and the gross value of products by .28 per cent.

Table 1(a). - Principal Statistics, Compared, 1926 - 1929.

Principal Statistics		1925	1927	1928	1929
Establishments reporting	No.	39	717	45	1+1+
Capital investment	\$	62,561,702	66,265,064	70,459,066	73,877,478
Employees on salaries	No.	1,786	1,900	2,145	2,259
Salaries paid	\$ 1	3,096,334	3,243,988	3,602,753	4,156,968
Employees on wages	To.	11,801	13,169	14,950	15,537
Wages paid	1	11,611,689	13,377,752	15,340,977	15,977,533
Cost of fuel	3	641,551	649,892 1	588,565	719,529
Cost of materials	.5	49,902,189	44,724,502	45,113,570	42,940,747
Gross value of products	\$:	86,508,137	31,413,730	97,208,713	96,934,560
Net value of products	\$	36,605,948	45,689,228	52,090,143	53,993,913

Automobile Tire and Tube Production, Compared, 1917-1929.

A comparative summary of automobile tire production (casings and inner tubes) from 1917 to 1929 is presented in the following table. Fneumatic tires and solid tires are each shown by number and value.

Table 1(b). - Automobile Tire and Tube Production, Compared, 1917 - 1929.

		Pneumati	Solid !	Tires		
Year	Casings No.	Value \$	Inner Tubes	Value \$	Number	Value \$
1917 1918 1919 1920 1921 1922 1923	1/ 1/ 1,293,010 1,561,974 857,816 1,482,796 2,150,768 2,139,234	1/ 1/ 23,298,673 35,175,801 15,520,810 19,519,208 23,504,489 22,855,905	1/ 1/ 1,117,913 1,427,546 989,689 1,504,837 2,256,604 2,454,292	1/ 1/ 2,872,487 4,271,461 2,037,180 2,618,584 3,655,109 4,319,022	111,211 60,783 14,170 21,444 9,472 15,572 22,546 20,995	225,460 (2) 126,859 (2) 451,196 729,857 343,171 476,735 658,090 531,189
1925 1926 1927 1928 1929	2,969,632 2,966,088 3,856,315 4,338,578 4,306,185	33,586,958 38,159,495 40,707,749 41,075,594 43,618,214	3,462,380 3,511,897 4,275,753 4,638,429 4,681,550	6,922,413 7,934,096 8,302,944 7,358,560 6,671,483	20,918 18,061 21,471 17,377 10,906	721,039 798,049 859,552 592,636 387,227

1/ Separate figures for casings and inner tubes are not available for 1917 and 1918 being combined in a single total. In 1917 the number of tires was stated at 2,394,737 and the value at \$15,186,995 and in 1918 at 2,242,046 tires valued at \$14,449,957.

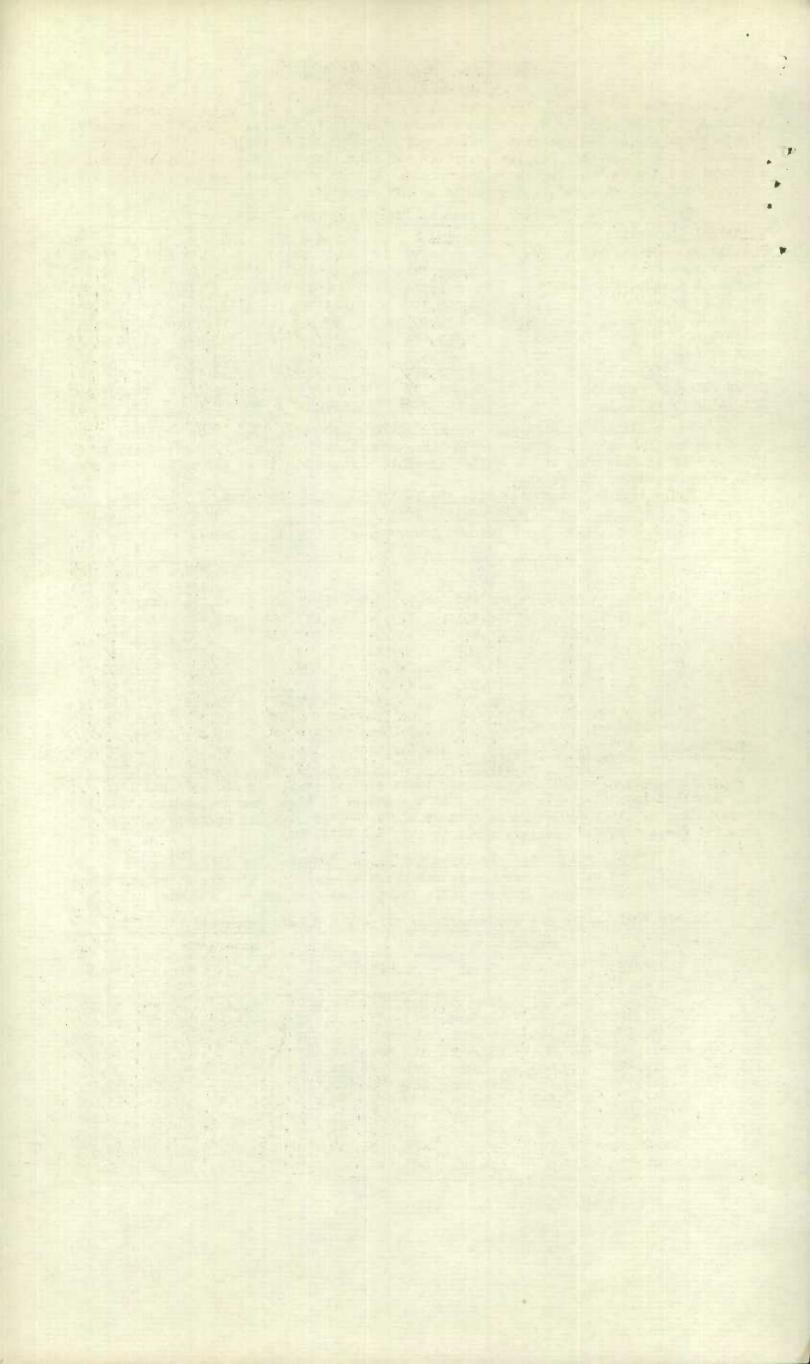
(2) Solid tires included carriage tires in 1917 and 1918.

Bicycle and Motorcycle Tires and Tubes, Compared for 1919-1929.

The quantity and value of motorcycle tires and tubes and of bicycle tires and tubes are compared in the following summary table for the calendar years 1919-1929.

Table 1(c). - Bicycle and Motorcycle Tires and Tubes, Compared, 1919-1929.

		Вісус	Motorcycle					
Year	Tires No.	Value \$	Tubes	Value \$	Tires	Value \$	Tubes No.	Value \$
1919 1920 1921 1922 1923 1924 1925 1326 1927	185,613 241,890 91,496 171,441 211,493 182,593 197,699 175,980 160,705 186,623	244,521 428,979 151,151 220,051 249,869 249,255 243,963 229,610 175,572 181,133	234,679 322,925 95,851 182,861 217,082 183,982 208,210 213,696 150,149 207,747	277,656 237,267 83,953 115,008 128,885 107,133 95,918 131,775 81,408 91,010	8,586 15,172 4,540 22,682 39,838 48,181 53,477 91,359 37,658 36,467	74,131 154,556 41,919 151,470 187,074 329,831 335,268 530,352 261,491 203,764	8,717 12,674 5,757 15,887 35,334 37,513 48,231 64,287 20,164 22,394	12,396 18,849 7,795 15,032 30,946 42,532 65,620 85,102 31,155 23,633

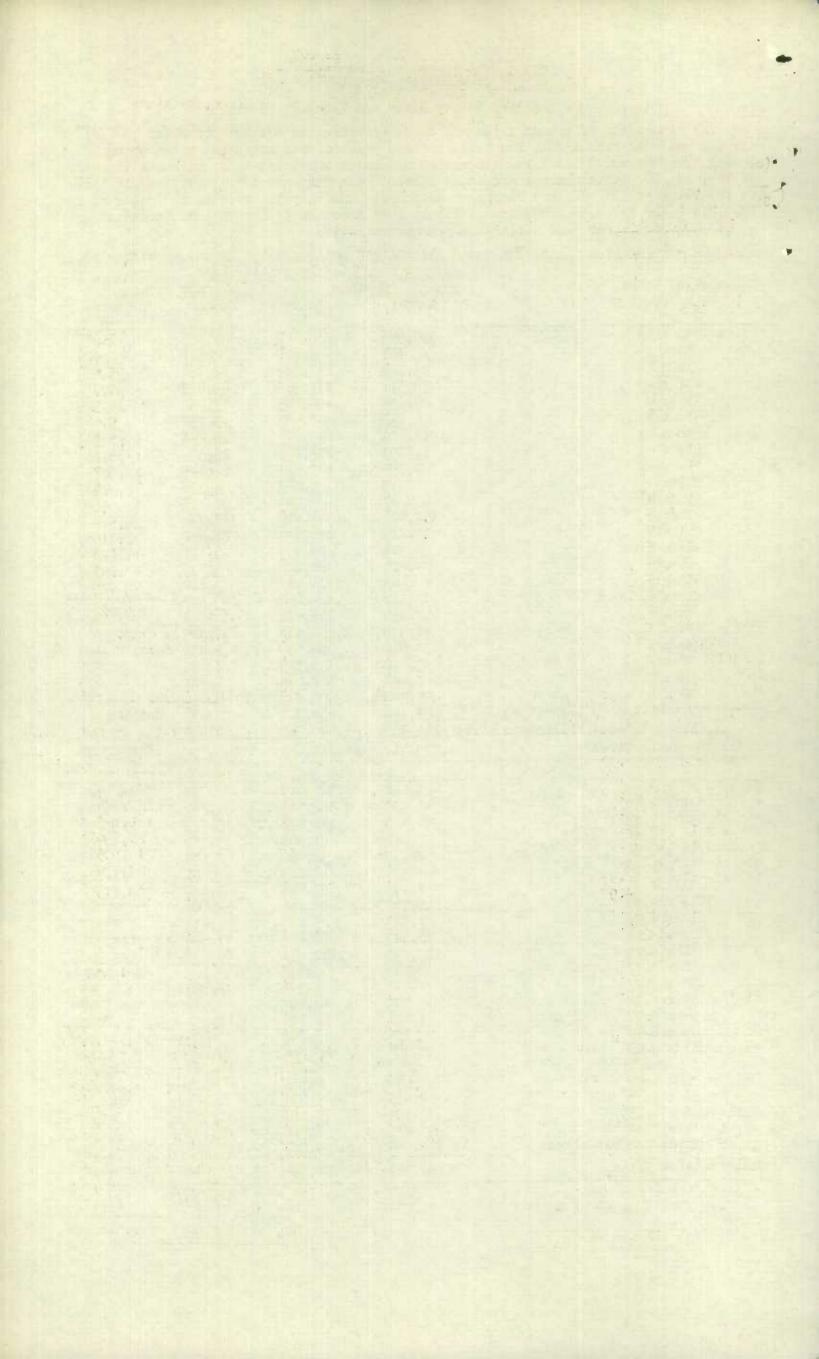


PRODUCTION STATISTICS (a) Rubber Tires and Tubes.

The production of rubber tires and tubes according to size is presented in Table 2 for the calendar year 1929. The total selling value of all tires and tubes produced during the year was \$51,386,140 comprising pneumatic tires and inner tubes to the value of \$24,110,280, balloon tires and inner tubes to the value of \$26,179,417, solid tires to the value of \$387,227 and carriage, motorcycle and bicycle tires to the value of \$709,216. The value of production which in 1928 amounted to \$49,708,538 increased by \$1,677,602 or 3.4 per cent during the year under review.

Table 2. - Production of (a) Pneumatic (b) Balloon and (c) Solid Tires, by sizes, 1929.

Table 2 Production of (a) Pneumat	ic (b) Ballo			sizes, 1929.
0.1		(a) Pneumo		
Casings and Inner		sings	Inner T	The same of the sa
Tubes by sizes	Number	Value \$	Number	Value \$
Sizes - $30 \times 3\frac{1}{2}$	580,948		840,729	741,500
			568	626
32 x 3	303			
31 x 4	29,128		73,364	93,660
32 x 4	35,371	337,965	45,612	55,891
33 x 4	20,535	495,805	23,732	35,529
34 x 4	2,142		3.792	9,667
32 x 4½ 33 x 4½ 34 x 4½	18,679	249,794	25,248	43,614
33 x 45	17,893		18,905	33,896
34 x 43	7,595	107,627	10:249	19,216
35 x 4号	113	2,048	456	837
36 x 4½	. 47	949	12	20
30 x 5	307,496	4,567,876	7-11-7-	574,088
33 x 5	15,215	276,694	21,948	46,559
34 x 5	4,509	89,935	5,111	11,310
35 x 5	ц,410	86,823	5,035	11,712
37 x 5	465	24,087	114	408
32 x 6	275,187		285,323	835,659
36 x 6	17.939	595,472	15,793	57,974
34 x 7	40,595	1,662,638	39,515	179,499
36 x 7	812	50,559		11,190
38 x 7	9,412	395.719	7,659	32,311
36 x 8	8 4774	127,664	8,481	
40 x 8	4,242	255:826		25,739
Miscellaneous inch sizes		238,021	28,836	43,921
Miscellaneous Millimetre siz			50,934	
Total Pneumatic Tires		21,111,280		
	.,,,,	(b) Balloo		
Sizes - 29 x 4.40	423,170			552,773
31 x 4.40	41,333		31,280	42,430
30 x 4.75	21,450	165,876	15,579	13,095
29 x 4.95	7,616			11,790
30 x 4.95	2,865	34,920	5,783	4,536
31 x 4.95	2,009	12,214	2,170	1,374
32 x 4.95	935	59,050	651 2,238	7,076
33 x 4.95		86,566		3,976
34 × 4.95	6,260		2,666	5,268
	1,533	23,177	1,095	2,080
30 x 5.25	76,547	756,614	71,570	127,901
31 x 5.25	113,295	1,120,431	86,602	148,900 549 8,745
30 x 5.77		8,902	169	549
32 x 5.77	74	1,598	6.720	0,745
33 x 5.77	972	18,597	0,636	4,905
34 x 5.77	1,451	26,206	1,831	4,030
35 x 5.77	172	3,729	694	94.2 84,730
33 x 6.00	55,101	685,862	38,204	
32 x 6.20	4,217	94,671	10,763	30,388
33 x 6.20	214	4,571	728	1.456
33 x 6.75	9,410	148,051	6.576	15,529
35 x 6.75	187	4,191	1,932	3.215
3 ¹ 4 x 7.30	239	6,267	1,292	3,232
Miscellaneous sizes	2,195,134	16,250,053		the same of the sa
Total Balloon Tires	2,967,074	22,506,931	2,835,798	3,672,483



THE RUBBER INDUSTRY IN CANADA, 1929. PRODUCTION STATISTICS, 1929 - (Continued).

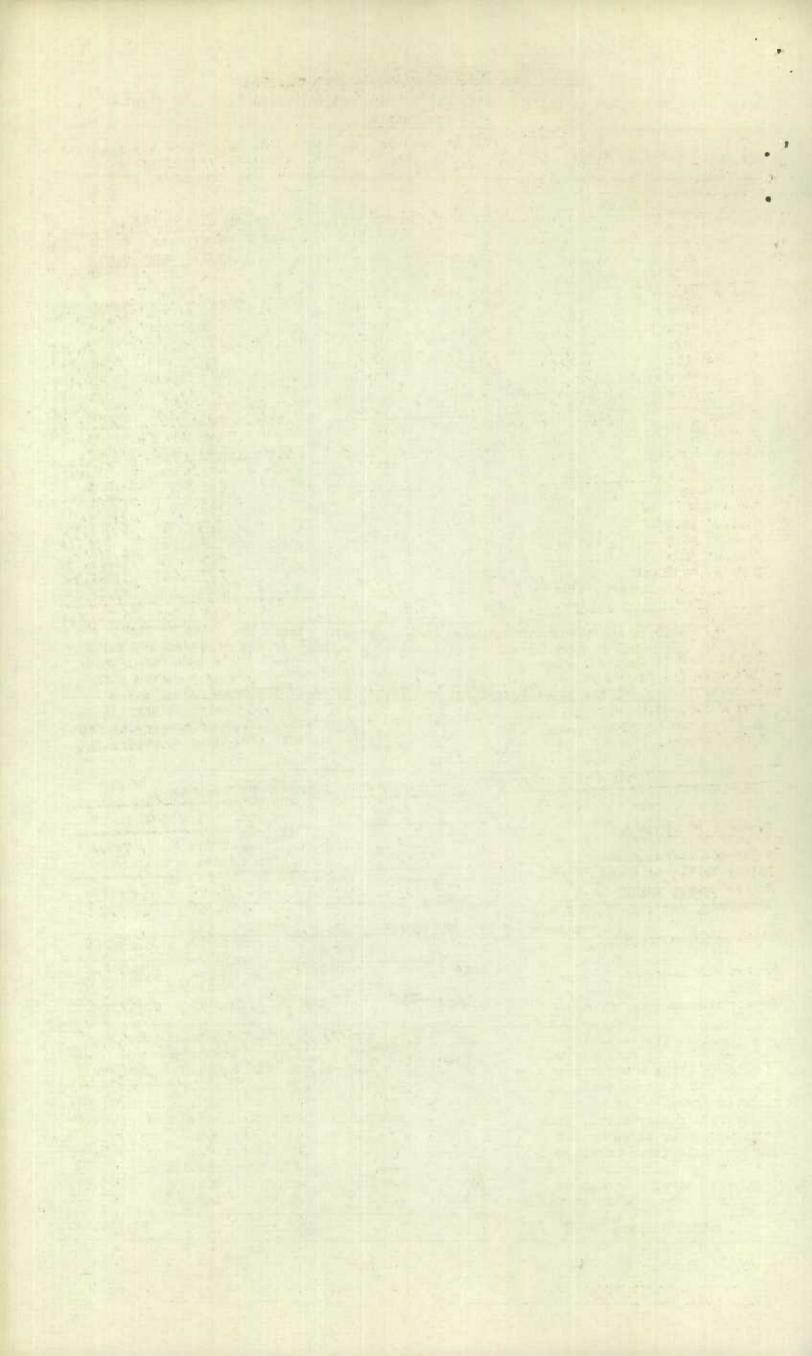
Table 2. - Production of (a) Pneumatic (b) Balloon and (c) Solid Tires, by sizes
1929 (continued)

•(c) Solid Tires by sizes	Number	Value \$
Sizes - $32 \times 3\frac{1}{2}$ $34 \times 3\frac{1}{2}$	71	958
36 x 3½ 32 x 4 34 x 4	241 300 1,324	4,355 5,635 26,330
36 x 4 38 x 4 32 x 5 34 x 5	197 269	3,835
36 x 5 40 x 5 34 x 6 36 x 6	1,155 5 175 905	6,376 30,294 173 5,242 29,040
40 x 6 34 x 7 36 x 7 34 x 8	246 391 391 480	9,149 15,725 17,977 22,527
36 x 8 36 x 10 40 x 10 36 x 12	698 165 365	42,023 11,091 25,668 22,115
40 x 12 36 x 14 40 x 14 Miscellaneous sizes	289 141 496 2,502	11,652 47,203 49,829
Total Solid Tires	10,906	387,227

Other tires and tubes not included in the foregoing table are shown by kind, quantity and value in Table 3 and is followed by a summary of all tire production in 1929.

Table 3. - Other Tires and Tubes, Solid or Pneumatic. Selling Value at the Unit of Quantity Tind Works Measure \$ 70,076 435,046 Carriage rubber tires, solid Lb. 103,426 409,245 All other rubber tires, solid 11 27,897 Motorcycle tires, casings No. 20,290 219,505 127,770 18,112 Motorcycle tires, inner tubes 11 221,035 239,048 Bicycle tires, casings
Bicycle tires, inner tubes 11 709,216 TOTAL VALUE

Swamary of	Tire Pro	duction, 19	28 and 1929.		
		1 9	2 8	19	2 9
Kind	Unit of Measure	Quantity	Selling Value at the Works	Quantity	Value at the Works
Pneumatic tires - casings " " - inner tubes Balloon tires - casings " " - inner tubes Solid tires Carriage rubber tires, solid Other rubber tires, solid Motorcycle tires - casings " " - inner tubes Bicycle tires - casings " " - inner tubes	No. II II II II II II II II II	1,717,130 2,250,712 2,521,448 2,307,717 17,377 542,210 35,102 35,467 22,394 186,523 207,747	3,725,434 21,706,002 3,633,126 592,636 170,675 11,473 203,764 23,633	409,245	
TOTAL SELLING VALUE		-	49,708,538	-	51,386,140



THE RUBBER INDUSTRY IN CANADA, 1929. PRODUCTION STATISTICS (continued).

B. Footwear.

The production of rubber footwear is shown by classes, sizes, number and value in Table 4 for the calendar year 1929. Compared with 1928 there was an increase of 1,689,406 in the number of pairs of all classes manufactured but a decrease of \$2,691,620 in value of production.

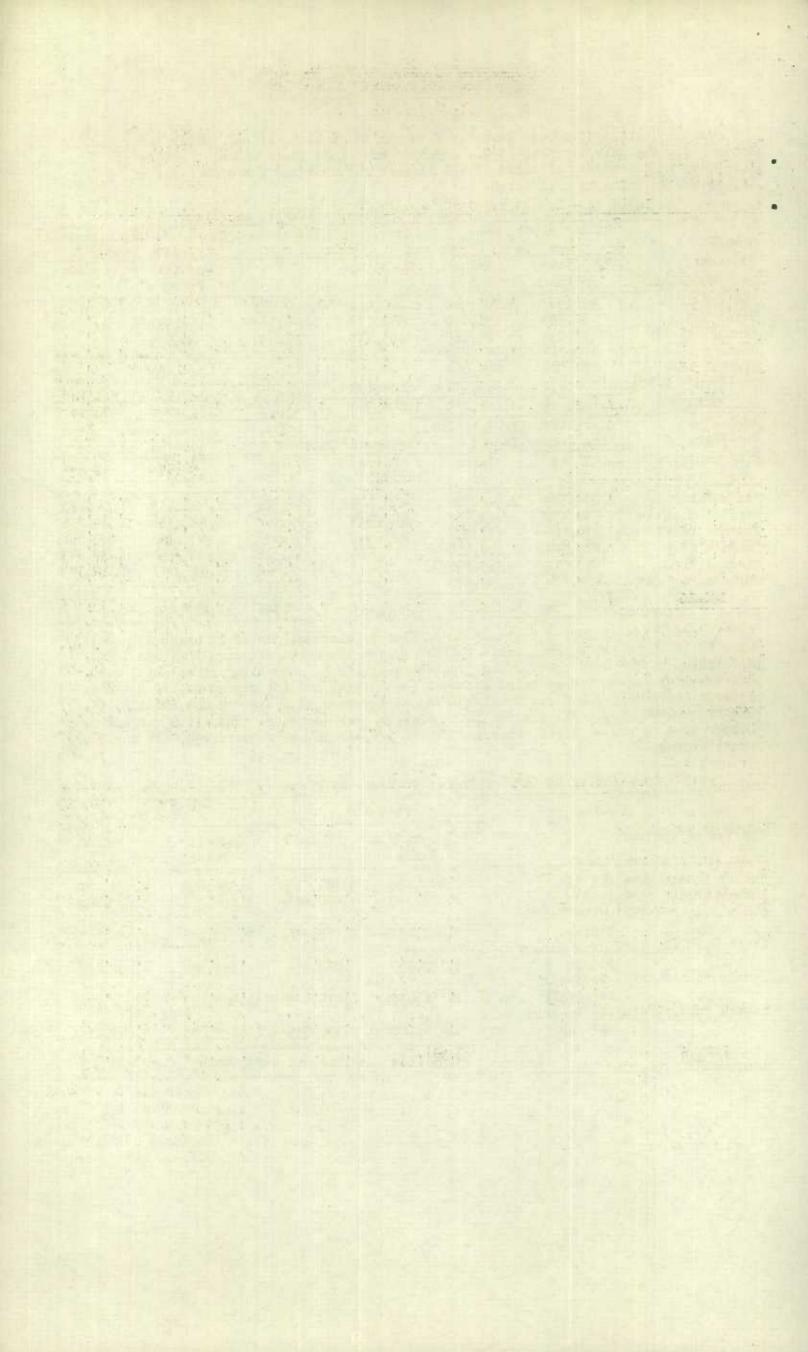
Table 4. - Rubber footwear Production by Classes and Sizes, 1929.

	Rubber Boo	ts, Knee	Lumbermen	's Rubber	Overshoes n	ot including	
Rubber	and H	ip	300	ts	Jersey Storms		
Footwear,	Quantity.	Value	Quantity	Value	Quantity	Value	
kind and size	Pairs	\$	Pairs	\$	Pairs	\$	
Men's 6-12	806,367	2,705,948	1,000,011	2,550,483	667,492		
3oys! 1-5	37,793	191,070	332,778	598,169	107,531	176,185	
Youths' 11-13	13,899	25,365	155,438	217,632	20,635	30,019	
Women's 21-8	629,217	1,353,562	41,369	70,327	1,525,454	3,449,588	
Misses' 11-2	254,902	405,664	42,664	58,053	258,420	420,142	
Children's 4-102	200,451	269,130	124,108	138,797	139,554	202,588	
TOTALS	1,992,629	4,951,739	1,696,368	3,643,961	2,719,086	5,703,018	
Rubber	Overshoes,	light, includ-	Canvas ru	bber soled	Canvas ru	bber soled	
Footwear,	ing Jerse	y Storms	footwear,	Balmorals	footwear,	oxfords	
Kind and size	Pairs	Value	Pairs :	Value	Pairs	Value	
	No.	\$	No.	\$	No.	\$	
Men's 5-12	2,204,324	1,942,526	496,722	596,525	1,626,155	1,648,406	
Boys' 1-5	580,477	414,657	672,963	700,648	1,528,316	1,321,532	
Youths' 11-13	230,166	137,506	233,667	196,649	891,265	557,606	
Women's 21-8	1,870,084	1,211,510	13,978		1 4,524,492	3,874,632	
Misses' 11-2	512,819		9,427	7,442	1,537,087	1,091,340	
Children's 4-101	495,984	236,597	79,676	52,193	1,714,885	1,052,295	
TOTALS	5,893,854	4,208,586	1,506,433	1,567,776	11,822,200	9,645,811	

A comparison of rubber footwear production by classes, number of pairs and selling value is given in the summary table following, for the calendar years 1928 and 1929. The classes of footwear showing the greatest quantity of production as compared with 1928 were (a) canvas rubber soled footwear (balmorals) and (b) canvas rubber soled footwear (oxfords), the first named showing an increase of 348,394 pairs and the next 2,808,098 pairs. All the remaining classes show decreased production varying from 56,207 pairs in rubber boots, knee and hip to 928,172 pairs in overshoes, not including Jersey storms.

Comparative Summary of Rubber Footwear by Classes, 1928 and 1929.

	1 9	2 8	1 9	2 9
Classes of footwear	Quantity Pairs	Value \$	Quantity Pairs	Value \$
Rubber boots, knee and hip Rubber boots, lumbermen's Overshoes, not including Jersey	2,048,836	5,701,563 4,496,425	1,992,629	4,951,739 3,643,961
Storms	3,647,258	8,153,385	2,719,086	5,703,018
Light rubbers, including Jersey Storms Canvas rubber-soled footwear,	6,179,130	5,080,574	5,893,854	4,208,686
balmorals	1,158,039	1,275,629	1,506,433	1,567,776
Canvas rubber-soled footwear, oxfords	9,014,102	7,705,035	11,822,200	9,645,811
TOTALS	23,941,164	32,412,611	25,630,570	29,720,991



OTHER MANUFACTURES OF RUBBER

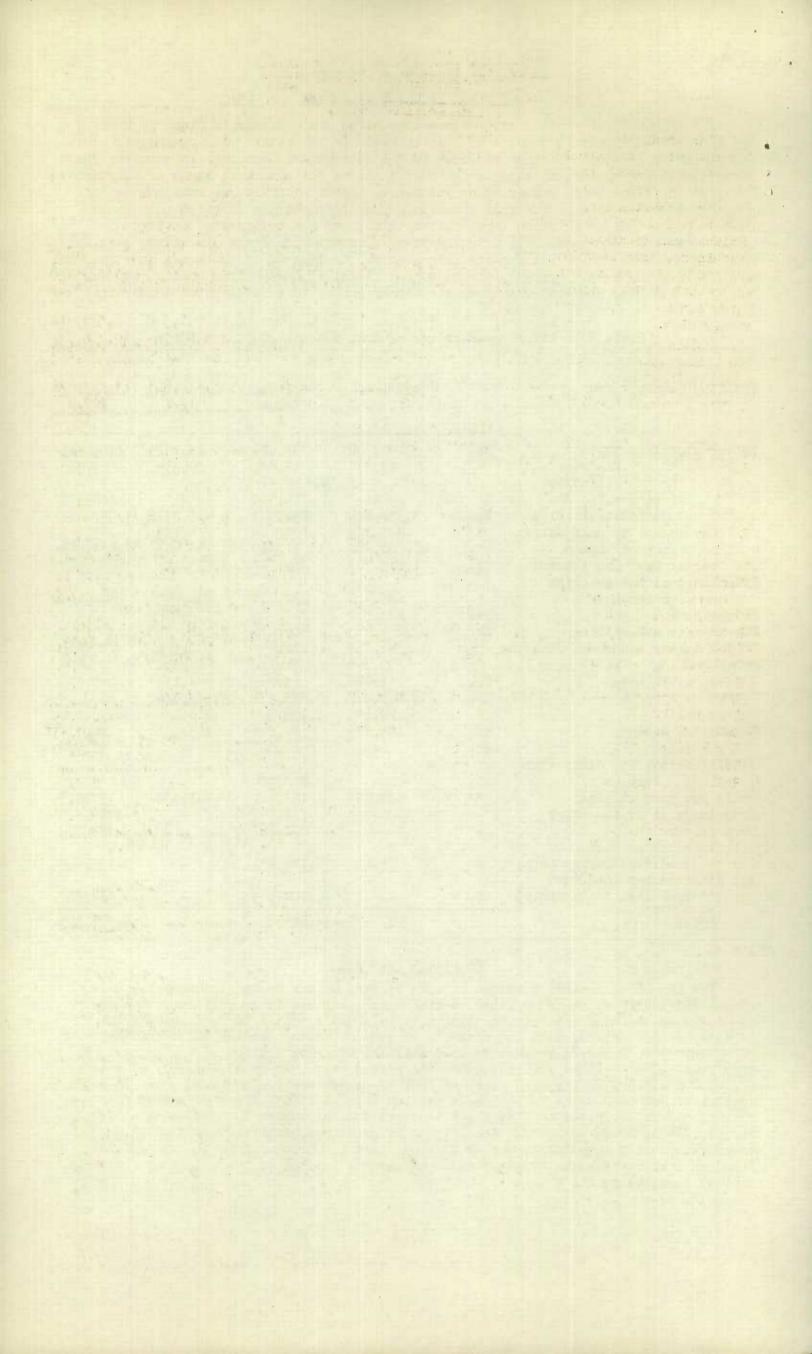
The production of rubber goods other than tires and footwear is given in Table 5, for the calendar years 1923 and 1929. An increase in the total value of production as compared with 1928 amounting to \$739,965 is the outstanding feature. In quantity of production there appears an increase in nearly all of the principal items of the table, the more important being rubber soles and heels, battery containers, rubber hose and rubber mats and matting. The list of articles manufactured was extended in 1926 to include such items as friction tape, rubber tiling and sheet flooring, battery containers, wringer rolls, roll covering other than wringer, fruit jar rings, hospital sheeting and hard rubber. A further extension of the list of products was made in 1930 which will include auto topping, dipped rubber goods, moulded rubber goods, golf balls, hot water bottles, plumbing supplies, stationery goods, toys, tire patches and tire repair kits.

Table	5.	world	Other	Manufactures	of	Rubber	Goods,	1928	and	1929.
-------	----	-------	-------	--------------	----	--------	--------	------	-----	-------

	,	1 9	28	19	2 9
Articles Manufactured		Quantity	Selling Value \$	Quantity	Selling Value \$
Rubber clothing, coats headwear all other	No.	90,300	339,576 15,881	83,159	305,725 19,083
(value only) Rubber and composition soles " " half soles " heels Tire repair gums and fabrics	Prs.	3,534,885 499,163 20,600,402 1,819,505	130,128	6,453,291 819,105 21,193,603 1,555,126	185,561
compound Rubber cement Rubber mats and matting Rubber tiling and sheet flooring Sheet packing Battery containers Rubber belting Rubber hose Hospital sheeting Wringer rolls	Gal. Lb. No. Lb. Yd. Lb.	685,460 225,562 2,265,465 746,257 399,346 1,702 6,066,377 5,109,685 185,825	232,064 227,919 426,016 170,444 91,710 3,269 3,033,531 2,096,549 84,842 27,093	852,909 172,079 2,718,938 970,546 414,361 444,177 5,585,380 5,816,089 195,951	2,654,533
Roll covering, all other than wringer Fruit jar ring rubbers Drug sundries (value only) Hard rubber All other rubber goods	Lo.	388,099	222,726 113,411 751,144 271,657	451,370	257,096 130,913 719,476 325,604
specified (value only) All other rubber goods not specified (value only)	\$		3,136,451	_	3,132,565 182,2 2 7
TOTALS		1	15,087,564	-	15,827,529

Capital Investment

The amount of capital invested in each section of the rubber industry is classified under two heads — fixed capital which includes land, buildings, machinery and tools and working capital including materials and supplies on hand, stocks in process of manufacture, finished products on hand and cash, trading and operating accounts, etc. Table 6 presents these statistics for each section of the industry by provinces. The total capital investment increased over 1928 by \$3,418,412, of which \$2,742,202 appears in the item of fixed capital, there being also an increase in working capital of \$676,210. The rubber goods section which includes tires accounted for \$56,697,543 or 76.75 per cent of the investment and the rubber footwear section for \$17,179,935 or 23.25 per cent. Apportioned by provinces, Ontario furnished 83.8 per cent of the total investment, Quebec 15.4 per cent and British Columbia .8 per cent. Fixed capital represented 57.9 per cent and working capital 42.1 per cent of the total capital invested in the industry.



THE RUBBER INDUSTRY IN CANADA, Capital Investment (Continued).

Table 6. - Capital Invested in the Rubber Industry, 1929.

Table 0 Capital Inv	ested in the Ruos	er runnspry, 17	- 7.	
	Fixed Capital	Working C	apital	
Provinces	Land, buildings, machinery and tools		and	Total Capital
	\$	process, etc.		
(a) The Rubber Goods Section -				
Ontario and Br. Columbia	31,394,359	13,803,437	10,343,026	
Quebec	419,587	358,836		1,156,721
TOTALS (b) The Rubber Footwear Section-	31,813,946	14,162,273	10,721,324	50,697,543
Ontario	4,082,915	1,958,904	881.395	6,923,214
Quebec	6,877,978	1,994,949	1,383,794	
TOTALS	10,950,893	3,953,853	2,265,189	17,179,935
Total capital invested in the Rubber Industry	42,774,839	18,116,126	12,986,513	73,877,478
Percentage of total capital	57.9	24.5	17.6	100.0

Employment Statistics

Employment in the Rubber Industry in Canada during the calendar year 1929 is shown in the following series of tables:

Table 7. Employees by classes, sex and remuneration, 1929. Table 8. Employees by months, 1929.

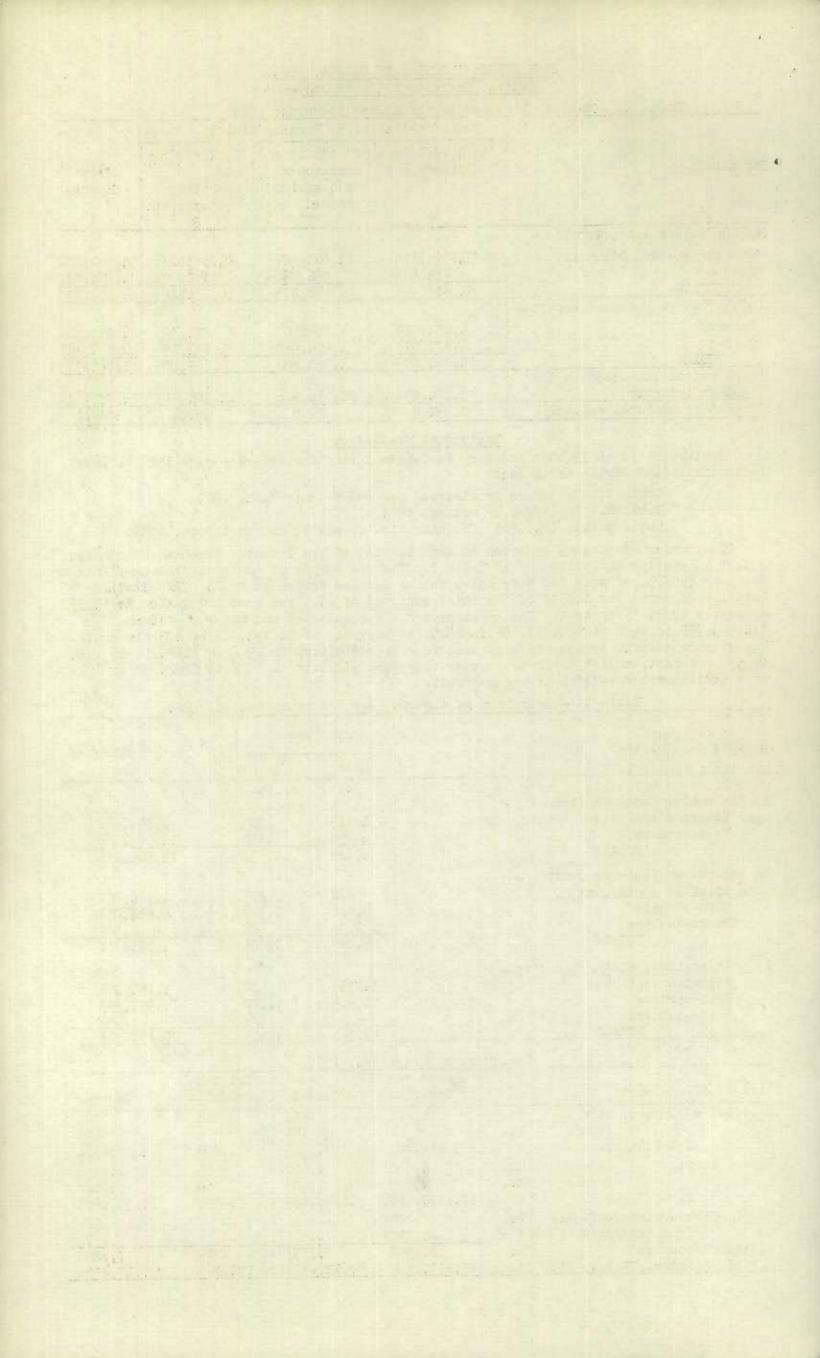
Table 9.(a), (b), (c). Working time of plants and employees, 1929.

The number of persons employed in each section of the industry is shown by classes, sex, remuneration and provinces in Table 7. The net number of employees increased during the year by 725, of whom 748 were males whilst females decreased by 23. The province of Ontario accounted for 12,398 of the total employed or 69.6 per cent and Quebec for 5,333 employees or 29.9 per cent. The total payments for salaries and wages rose from \$18,943,730 in 1928 to \$20,137,498 in 1929, an increase of \$1,193,768 or 6.3 per cent. The average salary, irrespective of sex, rose from \$1679.60 in 1928 to \$1840.18 in 1929, or 9.6 per cent, whilst the average wage rose from \$1026.15 in 1928 to \$1028.35 in 1929 or a little over one-fifth of one per cent.

Table 7. - Imployees by classes, sex and remuneration, 1929.

Classes of employees	Emplo	yees	Total Salaries	
Viasses of employees	Male	Female	and Wages	
	No.	No.	\$	
In the rubber goods section -				
Salaried employees	1,119	303	2,846,560	
Wage-earners	6,999	1,350	10,059,520	
TOTALS	8,118	1,653	12,906,180	
In the rubber footwear section -				
Salaried employees	632	205	1,310,308	
Wage-earners	4,416	2,772	5,918,013	
Piece-workers	-	24	2,997	
TOTALS	5,048	3,001	7,031,318	
In both sections of the industry -				
Salaried employees	1,751	508	4,156,968	
Wage-earners	11,415	4,122	15,977,533	
Piece-workers	ese .	24	2,397	
TOTALS	13,166	4,654	20,137,498	

Employees by Provinces, 1929. British Classes of employees Ontario Quebec Columbia Canada 1,751 458 15 170. 1,278 Salaried employees, male 11 361 3,214,733 142 508 female No. 905,685 36,490 4,156,968 Total Salaries 2,810 65 lage-earners, Mo. 11,415 8,540 male No. 2,135 1,923 4,122 female 15,977,533 \$ 12,178,170 Total Wages 3,726,767 No. 24 24 Outside Piece-workers-female 2,997 2,997 3 Total Payments 12,398 5,333 No. Total Employees 89 4,632, ,086 Total Salaries, Warres, Etc.



Employment Statistics (continued)

Tables 8(a) and 8(b) present statistics of wage-earning employees by number and sex for each month of the year and for each section of the industry. Employment in the rubber goods section was at its highest in the months of March to June and at the lowest from September to December, whilst in the footwear section it was highest in July to October and lowest in January to April. According to sex, employment in the rubber goods section was in the approximate ratio of 5 males to 1 female and in the footwear section 5 males to 3 females. The average of employment in each section was high and well maintained throughout the year.

Table 3(a). - Wage-earners by months and sex in Rubber Goods Section, 1923.

	Wage-ea	rners		Wage-	Wage-earners		
Months	Males Females		Months	Males No.	Temales		
January February March April May June	7,277 7,450 7,768 7,956 8,021 7,662	1,313 1,322 1,306 1,312 1,338 1,325	July August September October Wovember December	7,271 6,555 6,188 6,020 5,878 5,770	1,342 1,356 1,400 1,397 1,3 85 1,358		
		number at eme monthly em	ployment during the ployment	year 83,826 6,999	16,154 1,350		

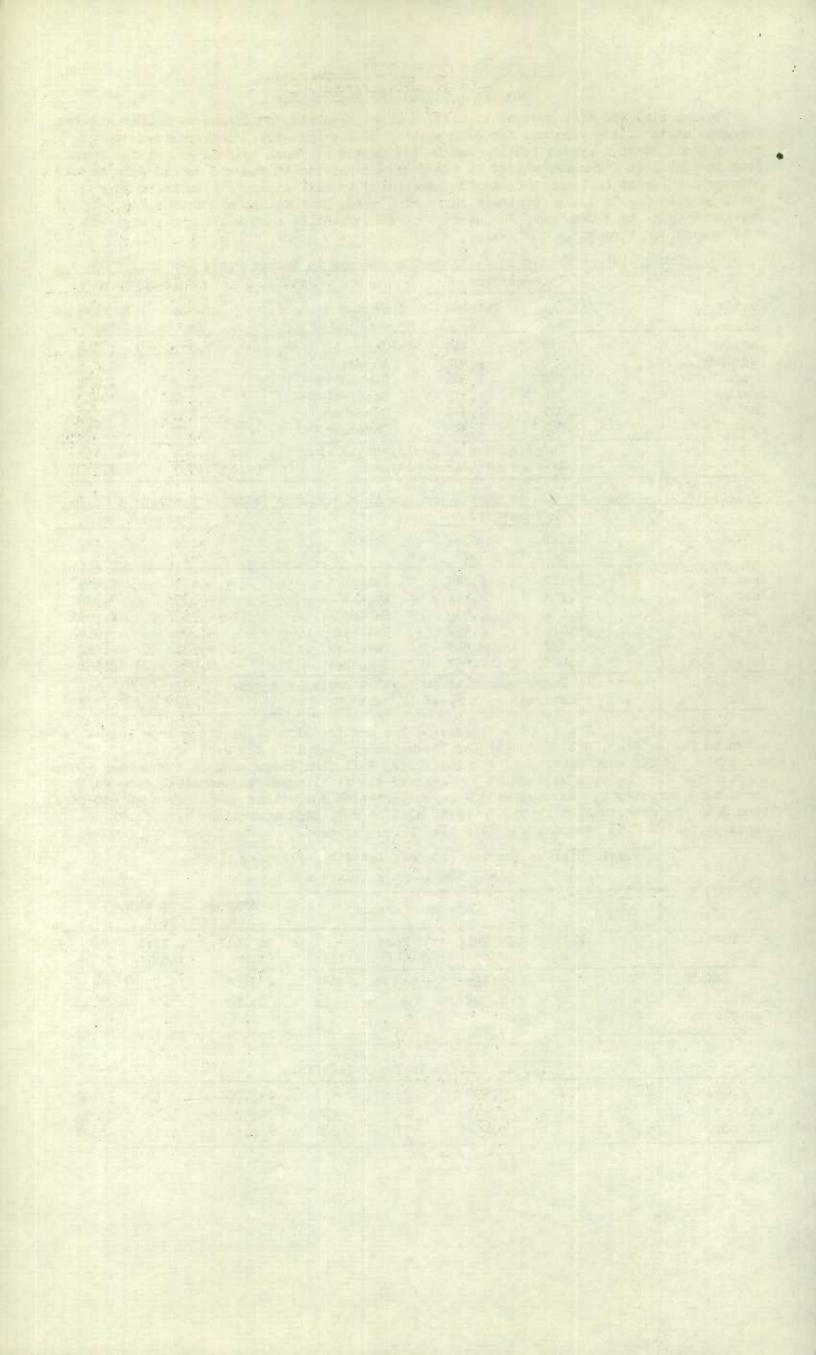
Table 8(b). - Wage-earners by months and sex in the Rubber Footwear Section, 1929.

	Wage-e	arners		Wage-e	earners
Months	Males	Females	Conths	Males No.	Females No.
January February March April May June	4,187 4,154 4,152 4,014 4,322 4,408	2,744 2,500 2,539 2,351 2,568 2,657	July August September October November December	4,657 4,639 4,482 4,606 4,621 4,555	2,954 3,039 2,968 3,014 2,980 2,651
		number at en e monthly en	ployment during the ployment	year 52,797 4,416	33,065

Working time of plants and employees. - The working time of plants and employees is shown in Tables 9(a), 9(b) and 9(c) for the calendar year 1929 for each of the provinces and for each section of the industry. Full time operations in the rubber goods section for the Dominion were 85.08 per cent of the total possible operating time which for Census purposes is reckoned at 304 days, part-time operations 5.26 per cent and idle time 9.66 per cent, whilst in the footwear section full time operations were 31.91 per cent, part-time 2.53 per cent and idle time 15.56 per cent.

Table 9(a). - Working time of plants by provinces, 1929.

	No. of	Days	in operati	lon		Average days worked per plant		
Provinces	Flants	On Full time	On Part time	Idle	On Full time	On Part	Idle	
CANADA	34	3,794	543	999	258.65	15.99	29.38	
Quebec Ontario and	5	1,508	_	12	301.60	-	2.40	
3r. Columbia	29	7,286	543	987	251.24	18.72	34.04	
	(2) The Rubb	er Footwear	Section.				
CAHADA	10	2,490	77	473	249.00	7.70	47.30	
Quebec Ontario	4	1,033	77	133	258.25 242.83	12.83	45.75	



Employment Statistics (continued).

The number and percentage of wage-earners in the month of highest employment working specified hours is shown in Table 9(b) for each section and for Canada and the provinces. Whilst no representative working day appears in the rubber goods section, that of the 9 hour day seems fairly defined in the footwear section. It will be further noted that there is a considerable variation in the working hours as between provinces in each of the sections, the 9 and 10 hour day prevailing in Quebec and the 8 and 9 hour day in Ontario and British Columbia.

Table 3(b). - Hours worked by wage-earners in month of highest employment, 1929.

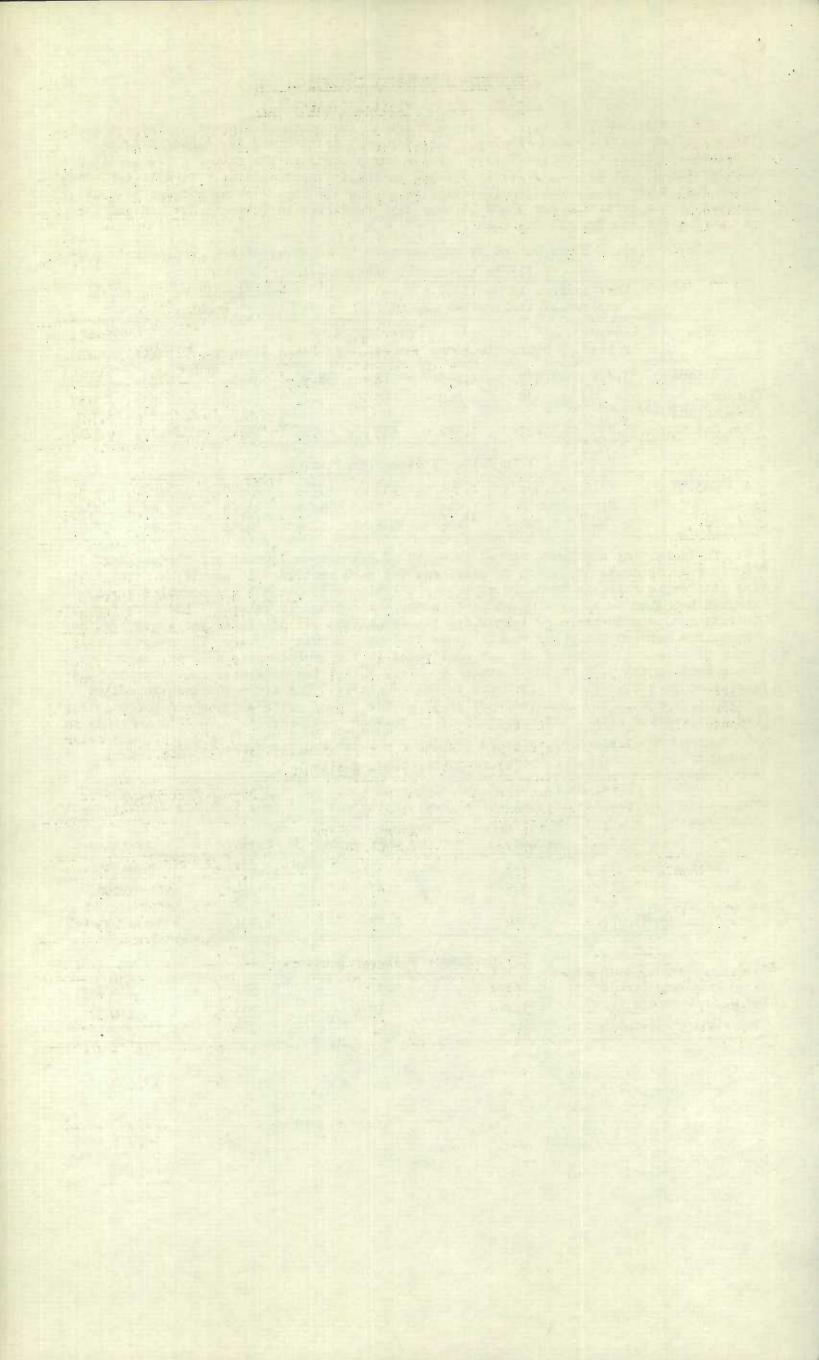
(1) In the Rubber Goods Section. Wage-earners in month of highest Percentage of wage-earners employment working per day of Over 10 8 hours 8 hours Over 10 Provinces or less; or less 9 hours 10 hours 9 hours 10 hours hours hours 3,395 1,643 910 38.96 34.84 16.86 9.34 CANADA 3.797 78 262 55 19.75 66.33 13.92 Quebec Ontario and 855 40.61 35.48 14.77 9.14 Br. Columbia 3,797 3,317 ! 1,381 (2) In Rubber Footwear Section. 655 261 1,961 65.68 23.40 CANADA 5,506 3.11 7.81 409 4.45 2,716 55.69 31.47 8.39 217 Quebec 12.15 1.26 79.58 7.01 Ontario 2,790

In Table 9(c) the hours worked in month of highest employment and the standard weekly working hours are shown by provinces for each section. It should be noted that the statistics relating to hours of labour in columns 1, 2 and 3 are compiled from figures based on month of highest employment, while those in columns 4 and 5 represent the standard weekly hours of labour for the establishments reporting and therefore, no comparison between daily and weekly hours of labour should be made. The average daily hours of labour in month of highest employment in the Dominion was 8.92 in the rubber goods section and 9.32 in the footwear section, whilst the provinces show considerable variation in the average daily hours in both sections. The average standard weekly hours of labour in the Dominion were 48.97 in the rubber goods section and 50.70 in the footwear section with similar variations as between provinces.

Table 9(c). - Hours of Labour per day and per week, 1929.

(1) In Rubber Goods Section.

		nours worked and s in month of hi		Standard working hours per week per establishment		
Provinces	Total			Total	Averages	
CANADA	85,916	9,745	8.92	1,665	48.97	
Quebec Ontario and	3,899	395	9.87	264	52.80	
Br. Columbia	83,017	9,350	8.88	1,401	48.31	
		(2) In Ru	bber Footwear Section	1.		
CAMADA	78,129	8,383	9.32	507	50.70	
Quebec Ontario	45,824 32,305	4,877 3,506	9.39 9.21	203 304	50.75 50.67	



Fuel Consumption

The quantity and cost value delivered at the factory or works of the various classes of fuel consumed by the industry in 1929 is shown separately for each section in Table 10. The total cost of fuel in the entire industry exclusive of electricity amounted to \$719,529, to which the rubber goods section contributed \$553,602 and the footwear section \$165,927. Bituminous coal was the principal fuel, forming 70 per cent of the total cost of all fuel. The cost of electricity purchased in 1929 was \$737,046 as compared with an expenditure of \$694,283 in 1928, an increase of over 6 per cent. There was a decrease as compared with 1928 in the cost of bituminous coal, amounting to \$41,112, whilst the cost of electricity purchased showed an increase of \$42,763.

Table 10. - Fuel Consumption by Classes, Quantity and Value, 1929.

	Unit of	In Rubber Section		In Rubber Footwear Section	
Classes of Fuel	Measure	Quantity	Value	Quantity	Value
			\$		\$
Bituminous coal, imported	Short ton	33,086	176,721	16,088	96,727
" Canadian	11 11	31,935	179,502	9,921	60,526
Anthracite coal, all grades	11 11	11,552	58,972		
Lignite coal, imported	rr It	1 20	180		_
Colte	11 11	357	1,876	_	-
Gasoline	Imp. Gal.	144,582	28,951	45,389	8,674
Kerosene or coal oil	11 11	619	133	_	_
Fuel oils	11 11	183,772	10,655	-	Dec .
Gas, manufactured	M cu. ft.	12,488	11,206	-	_
Gas, natural	11 11 11	1,442	1,226		pro-
All other fuel	-	-	84,180		-
Electricity		-	597,561		139,485
TOTAL COST		<u> </u>	1,151,163	-	305,412

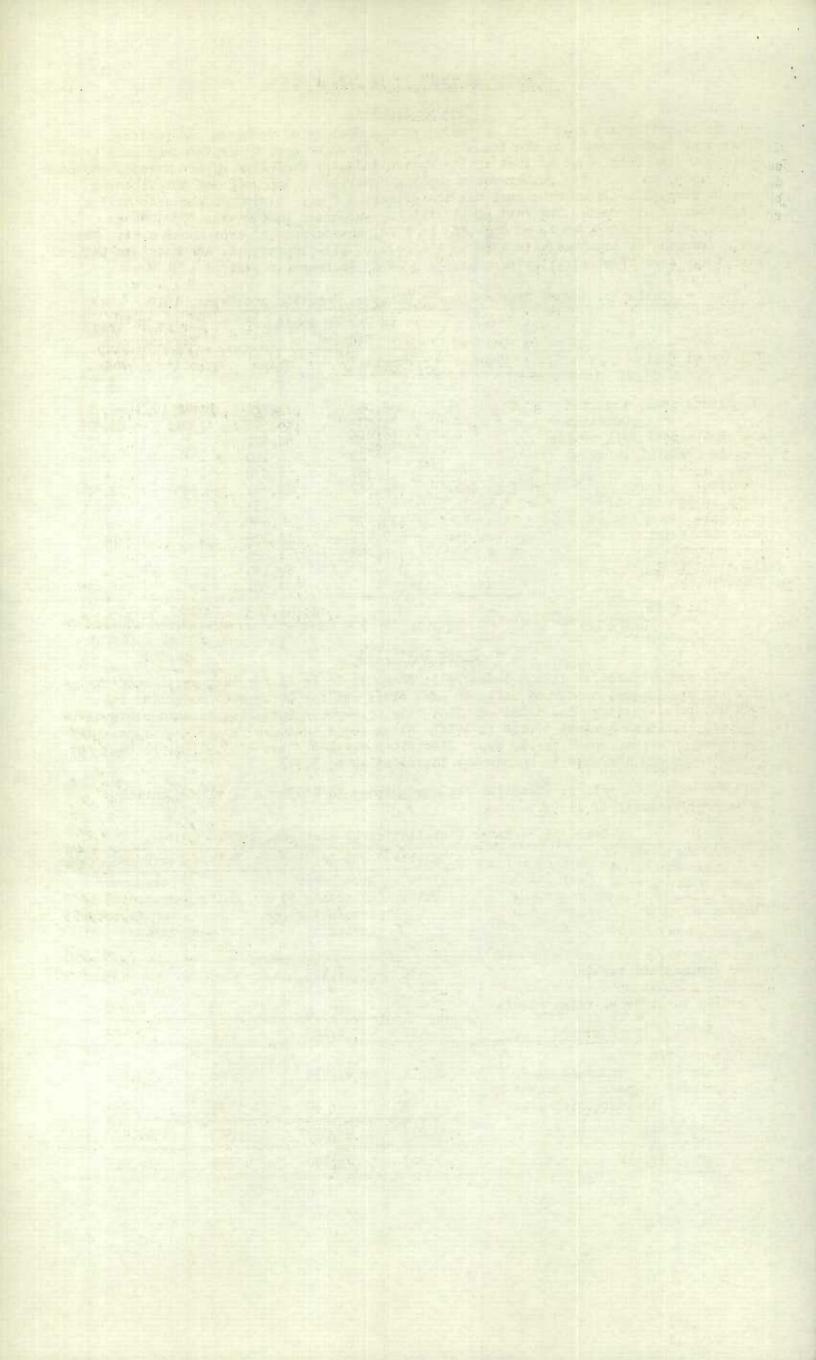
Power Installed

The power installed in the industry is shown in Table 11 for each section of the industry by classes, number of units in each class and the horsepower according to manufacturers' rating. The total manufacturing horsepower installed in both sections in 1929 was 61,115 as against 57,168 in 1928. Steam power increased by 150 h.p., and water and other power decreased by 110 h.p. Electric power increased by 3,907 h.p., thus indicating a net increase in horsepower installation of 3,947.

The number of boilers installed for any purpose in 1929 was 81 with a boiler horsepower capacity of 13,990.

Table 11. - Power Installation by Sections, 1929.

	Rubber	Goods Section .	Rubber	Footwear Section
Classes of power	Units No.	Horsepower according to manufacturers' rating	Units	Horsepower according to manufacturers' rating
Steam engines and turbines Gasoline engines Hydraulic turbines or water wheels	12	1,125	3 - 5	435 2,050
Total primary power	12	1,125	8	2,485
Electric motors - Operated by purchased power Operated by power generated by	2,211	43,975	498	13,530
the establishment	1 2	60	85	896
Total electric motors	2,213	44,035	583	14,426
Total power used in manufacturing	2,223	45,100	506	16,015



Materials Used

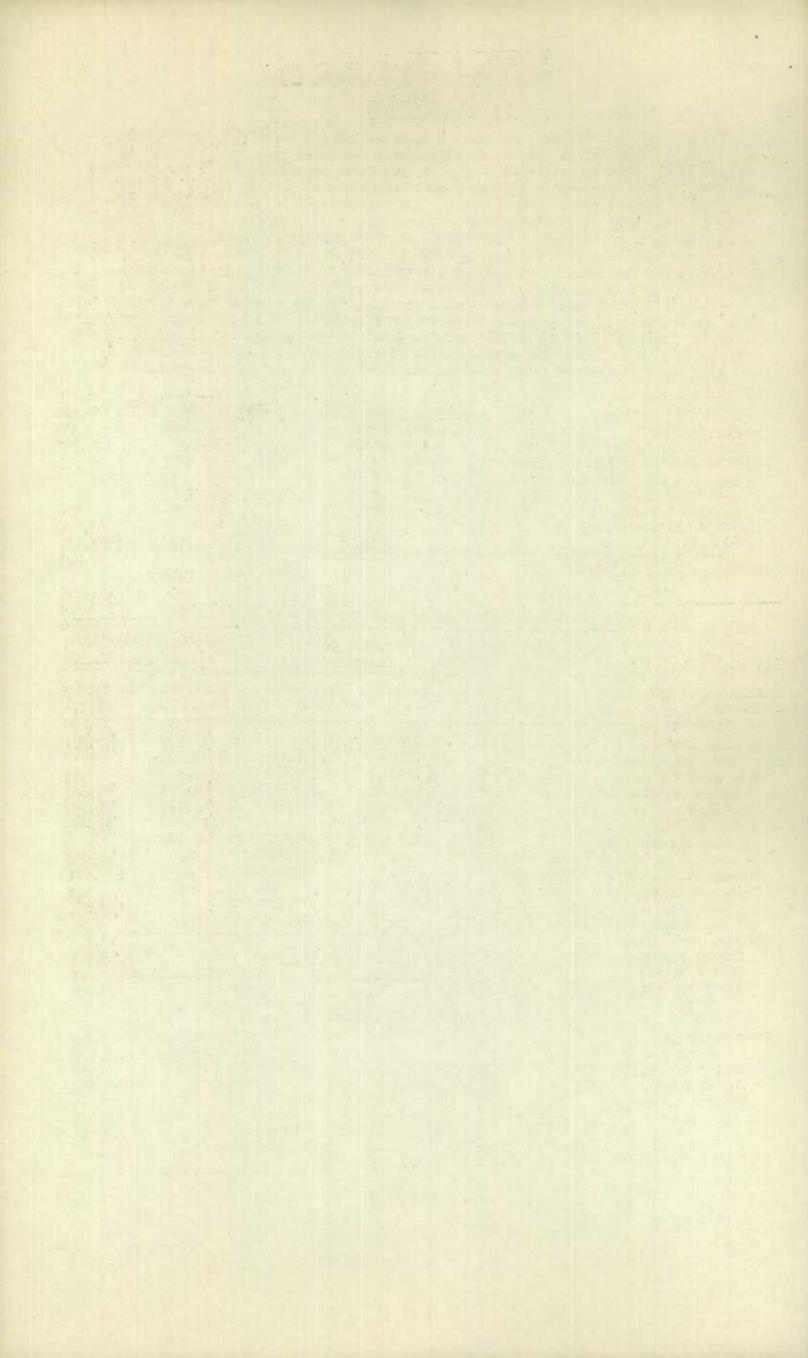
The quantity and the cost value at the factory of the materials used in each section of the industry is presented in Table 12. Compared with 1928 there was a decrease in the cost of materials used in the whole industry, the total for that year being \$45.118,570, whereas in 1929 such cost had fallen to a total of \$42,940,747, representing a decrease of 4.82 per cent. Raw rubber was the principal item being nearly 37.7 per cent of the total cost of materials in 1929 as compared with almost 44 per cent in 1928, the decreased percentage being due to a marked decline in the average price of the commodity from 41 cents per 1b. in 1927 to 29.3 cents in 1928 and to 21.2 cents in 1929. The quantity of reclaimed rubber used in the industry in 1928 was 25,451,017 pounds valued at \$1,950,560 or an average cost of 7.4 cents per 1b. as compared with a total of 25,146,289 pounds worth \$1,736,049 or an average price of 6.9 cents per 1b. in 1929. The second largest item of materials was tire duck of which 19,698,097 lbs. valued at \$9,702,844 were consumed in 1929 as against 18,042,361 pounds worth \$8,804,342 in 1928. The average price of all ducks was slightly higher in 1929 than in 1928, whilst stockinette sheeting was lower as the following table indicates.

		Average price 1928.	Average price 1929.
Rubber, raw	16.	.293 cents	.212 cents
Rubber, reclaimed	1b.	.074 cents	.069 "
Tire duck	1b.	.483 "	.492 #
Hose and belting duck	1b.	.395 "	.1102 11
Shoe duck	Yd.	.531 "	.531 "
Stockinette sheeting	lb.	.690 "	.607 "

The remaining items of materials show an increase in total cost value over 1928 amounting to \$719,632.

Table 12. - Materials used by quantity and cost value, 1929.

		er Goods tion	In Rubber Footwear Section		
Classes of Materials	Quantity:	Cost Value	Quantity	Cost Value	
Rubber, raw lb. Rubber, reclaimed	64,899,536	13,492,674	11,257,040	2,679,227	
Tire duck	19,698,097		7,7(7,1)	-	
Hose and belting duck	3,089,302		701,801		
Shoe duck Yd.	514,909	193,663	1,342,487		
Shoe duck 1b. Stockinette sheeting 1b.	312,162	203,583	227,511 843,216	105,885	
Miscellaneous cotton (value only)	,11,102	1,036,796	-	1,316,699	
Cocks, valves, etc. (value only)	-	663,683		44,906	
Chemicals and mineral compounds		0 000 700		1,054,275	
(value only) All other materials (value only)		2,929,702	Garage L	2,339,673	
The Court in the Court of the C				100010	
TOTAL COST	_	33,408,648	-	9,532,099	

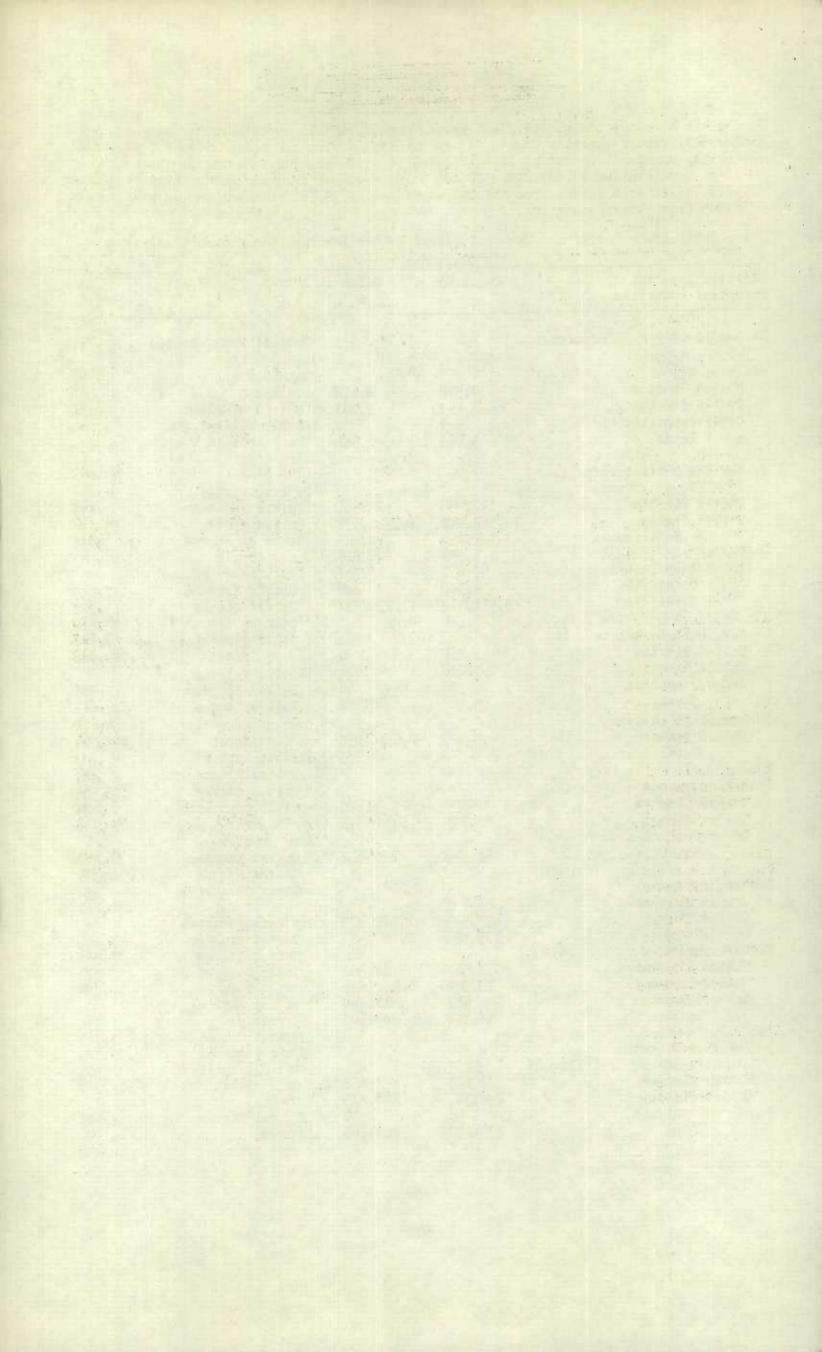


IMPORTS OF RUBBER AND RUBBER GOODS

Table 13 shows the quantity and value, when available, of all rubber and manufactures of rubber entering Canada for consumption during the calendar year 1929. Raw and partly manufactured materials aggregated in value \$19,100,153, whilst the wholly manufactured totalled \$3,829,219. Of the total value of imports, goods to the value of \$21,278,787 entered Canada from the United States, \$699,680 from the United Kingdom and \$950,905 from other countries.

Table 13. - Rubber and Manufactures of Rubber Imported for Consumption, 1929.

(Calendar Year)					
Articles Imported by Principal Countries		Quantity	Value \$	Articles Imported (Contid.)	Value only
Raw and Partly Manufactu	red			Rubber, Manufactured	
Balata, crude United Kingdom United States Other countries Total	1b.	2,512 3,147 4 5,663	1,678 1,003 4 2,585	Belting rubber United Kingdom United States Other countries Total	16,298 182,126 1,334 199,758
Rubber and Gutta Percha, Crude United Kingdom United States Straits Settlements Ceylon Dutch East Indies Other Countries Total	10.	177,440 75,618,892 3,425,290 187,952 97,857 4,388 79,511,819	33,501 16,361,978 672,149 42,818 18,767 824 17,130,037	Cement, rubber United Kindom United States Other Countries Total Clothing or rubber United Kingdom United States Germany	576 63,596 3,031 67,203 191,095 383,368 39,210
Rubber, hard, in sheets United Kingdom United States Other Countries Total Rubber, hard in tubes United States Total	16.	268 85,096 98 85,462	90 42,416 66 42,572 18,035 18,035	Other Countries Total Elastic webbing United Kingdom United States Other Countries Total Gloves, rubber United Kingdom	7,747 621,420 73,893 306,814 11,294 392,001
Rubber, powdered United Kingdom United States Other Countries Total	lb.	350 66,595 66,945	6,620 246,772 253,392	United States Other Countries Total Hose, rubber United Kingdom United States	19,602 1,454 21,445 11,042 261,131
Rubber, recovered United Kingdom United States Total Rubber, substitute	lb.	173,945 173,945	1,187,473	Cther Countries Total Hot water bottles United Kingdom United States	688 272,861 13,105 35,368
United Kingdom United States Other Countries Total	201	1,917 15,977 421 18,315	17,301 172,516 13,849 203,666	Other Countries Total Mats and matting, rubber United Kingdom	321 48,794 1,347
Rubber thread, not covered United Kingdom United States Other Countries Total	lb.	32,655 242,387 58 275,100	32,368 229,875 50 262,293	United States Other Countries Total Caskets United States Norway Total	116,775 905 119,027 5,108 14,312 19,420

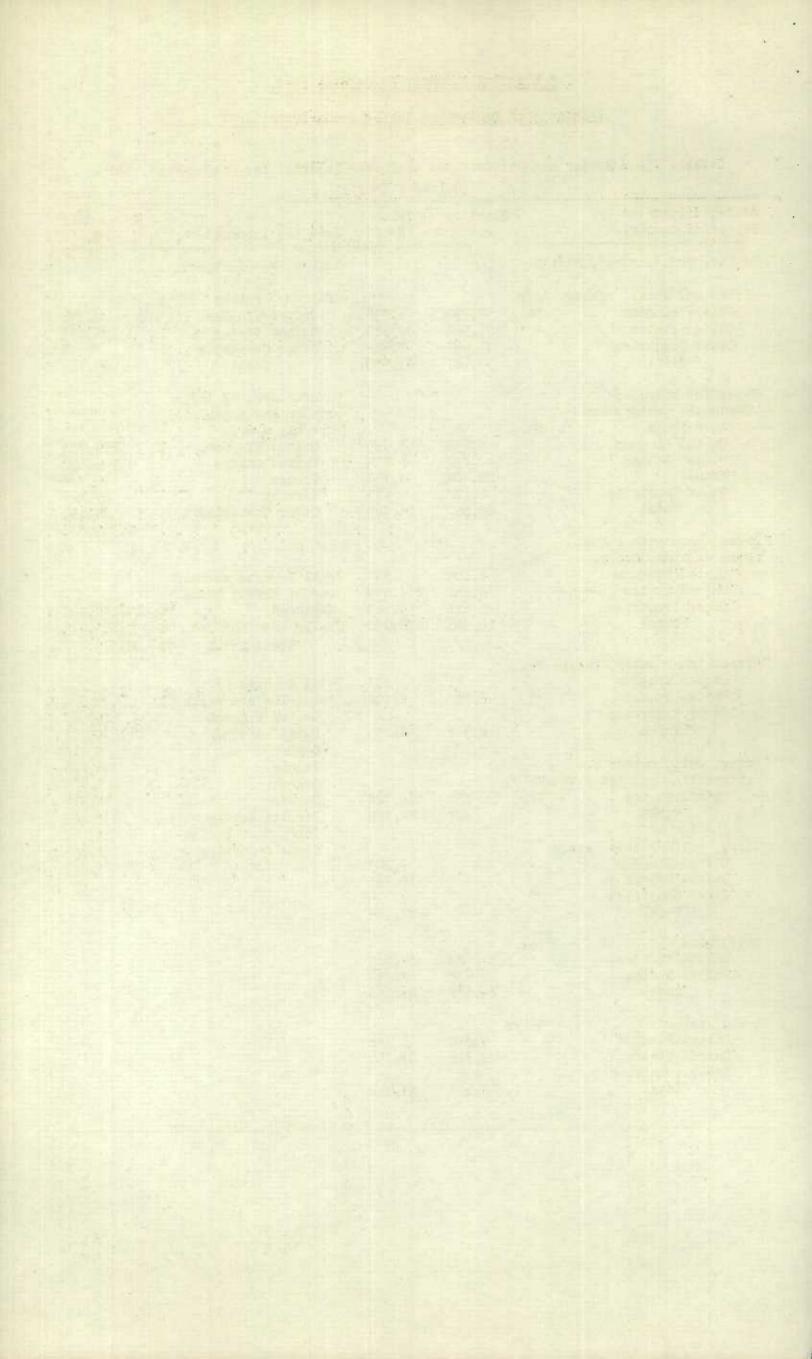


Imports of Rubber and Rubber Goods (Concluded)

Table 13. - Rubber and Manufactures of Rubber Imported for Consumption, 1929.

(Calendar Year)

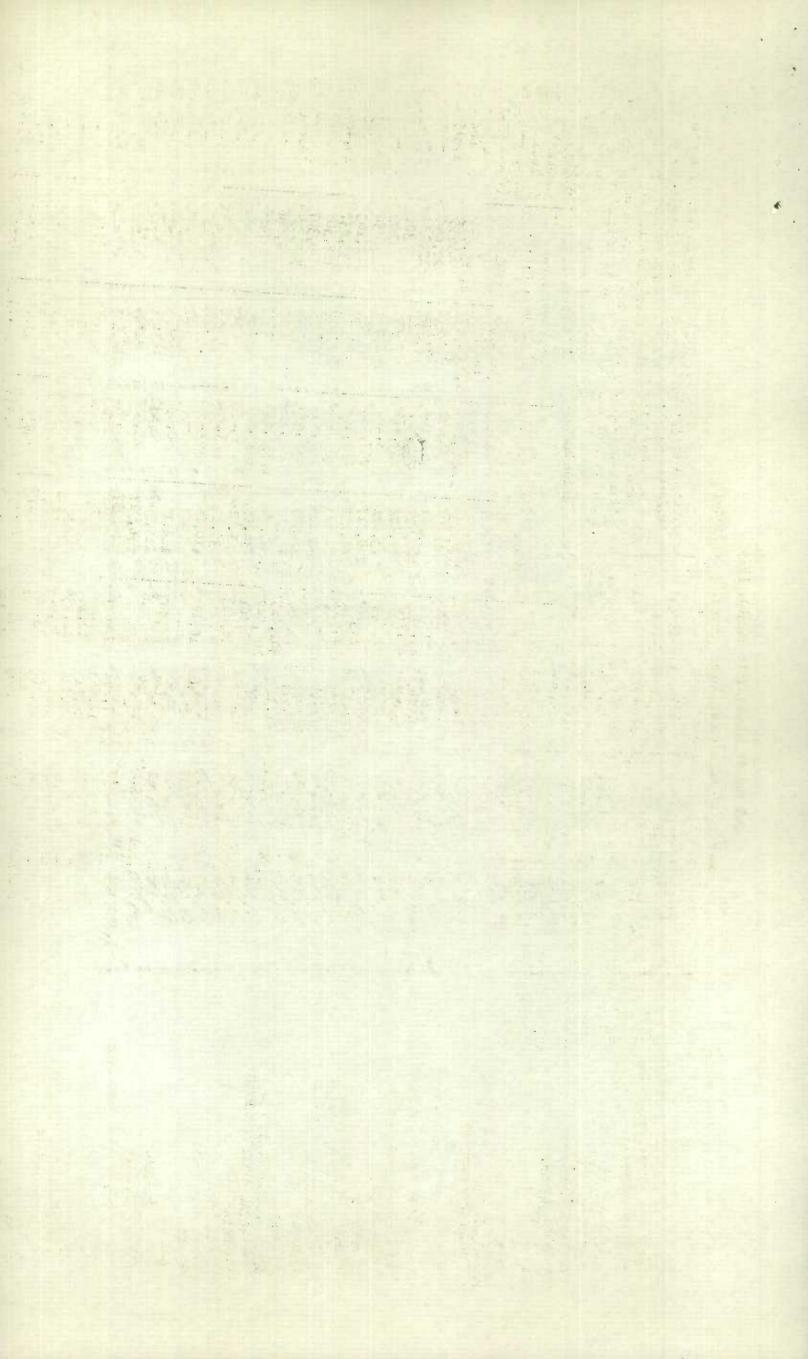
Articles Imported by Principal Countries	Quantity	Value \$	Articles Imported	Value only
Rubber, Manufactured, Contid.			Rubber, Manufactured,	
			Cont'd.	1
Boots and shoes, rubber Pair), 77),	Packing, rubber \$	2,356
United Kingdom No.		79,820	United Kingdom United States	66,793
United States Other Countries	61,760	2,402	Other Countries	: 00,755
Total	74.187	86,956	Total	69,155
10021	,,101	00,770	2000	1
Tires for bicycles -			Manufactures of India	
Pneumatic casings and			rubber and gutta-	
inner tubes No.		- (-	percha, n.o.p.	1 20/1 305
United Kingdom	4,238	3,685	United Kingdom \$	204,795
United States	770	1,709	United States	1,246,600
France	22,480	8,158	France Germany	64,729
Other Countries Total	28,590	13,965	Other Countries	24,480
Total	20,550	10,000	Total	1,569,332
Tires, pneumatic rubber				
tire casings, n.o.p No.				•
United Kingdom	1,125	5.334	Total Imports whether	
United States	18,251	267,593	raw or partly manu-	
Other Countries	617	3,163	factured \$	
Total	19,993	276,090	Wholly Manufactured \$	
			Grand Total \$	22,929,372
Tires, inner tubes, n.o.p. No.				
United Kingdom	41	137	Total Imports by	1
United States	2,307	7,898	countries and value \$	
Other Countries	0 7)10	8,035	United Kingdom United States	699,680
Total	2,348	8,033	Ceylon	42,818
Tires, solid rubber for			France	36,886
automobiles and motor trucks			Germany	103,939
United States No.	827	22,728	Norway	14,312
Total	827	22,728	Straits Settlements	572,149
			Dutch East Indies	18,767
Tires, solid rubber, n.o.p.			Other Countries	62,034
United Kingdom	-	3,223	Total	22,929,372
United States	-	19,341		
Other Countries	-	22,564		
Total		22, 504		
Golf Balls Do	Ζ.•			
United Kingdom	27,923	84,065		
United States	635	2,234		
Total	28,558	85,299		
The all a small has a	1 22 0			
	9,890	745		
United Kingdom United States	1,802,715	83,796		
Other Countries	-,000, (12)	-		
Total	1,812,605	84,542		



THE BUSDAN INDUSTRY IN CANADA, 1929. Exports of Rubber and Rubber Goods.

The quantity and value of goods, the produce of Janada, exported to Other Countries, is shown in Table 14, by classes and countries. The total value of goods exported during the calendar year 1929 amounted to \$32,169,510, an increase over 1928 of \$1,476,048 or nearly 4.8 per cent. The principal articles exported were pneumatic tires (casings) 16,305,869, canvas shoes with rubber soles 6,190,707, boots and shoes of rubber 3,546,653 and pneumatic tires, (inner tubes) 2,255,370. The destination of Canadian exports by countries shows that of this total, goods to the value of \$5,925,128 went to the United Kingdom, 4,044,307 to New Zealand, \$3,979,355 to the Argentine sepublic, \$2,117,999 to British South Africa, \$1.872,606 to British India, \$1,572,607 to Brazil and \$273,502 to Australia. Approximately 51.4 per cent of all exports went to British dominions and dependencies.

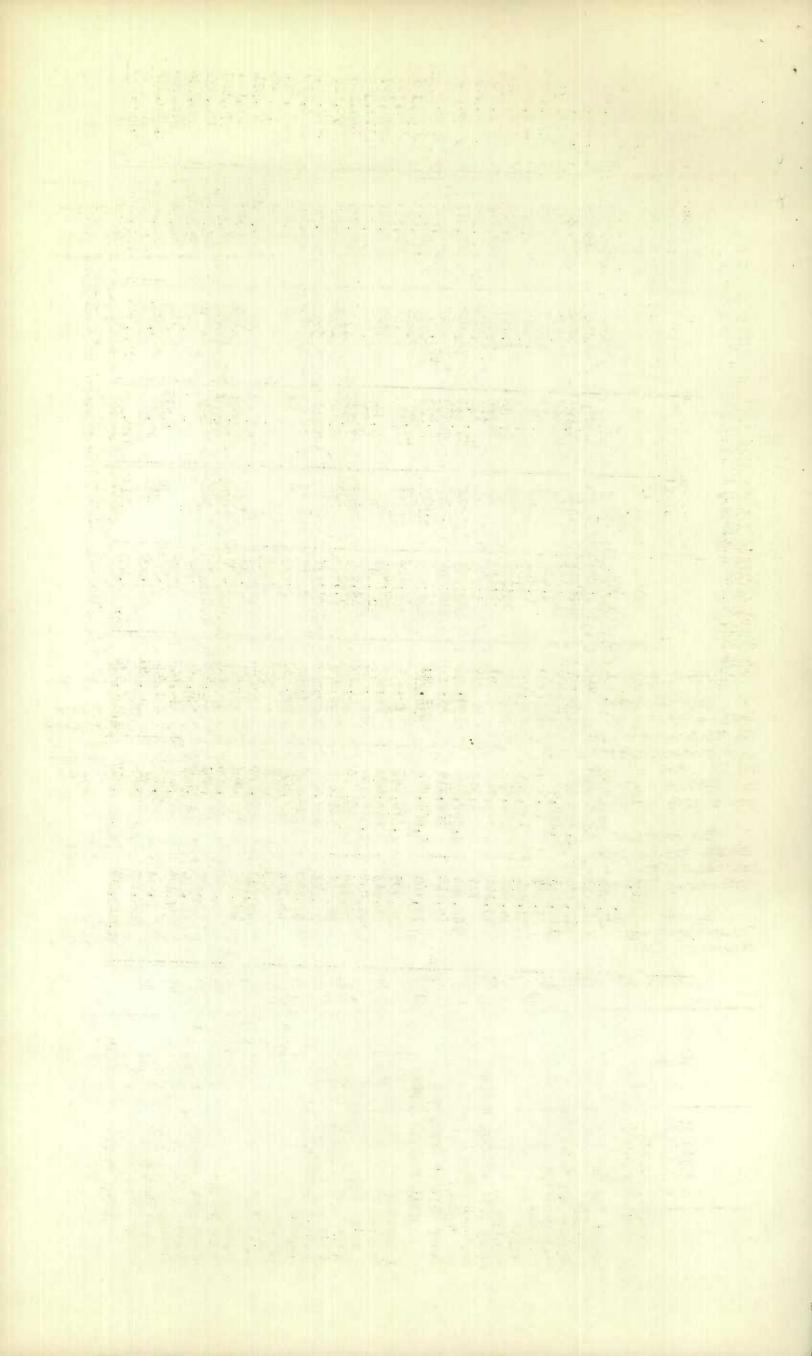
Table 14 Exports	of Janadian	Produce by	/ Classes	and Country	ies, for the	calendar yea	ar 1929.		
	laste.	Rubber	Belting	of Rubber		Shoes	1	nd Shoes	Jlothing (Rubber)
Principal Countries			Company of the last		with R	ubber Soles	of Rubbe	er, n,o.p.	including
to which Exported									Jaterproofed
	Quantity	Value	quantity	Value	quantity	Value	quantity	Value	(Value only)
	Owt.	1	1b.		Pairs		Pairs	3	
United Kingdom	1,542	3,202	344,153	115,782	1 1,586,021	1,112,457	1,330,892	2,095,453	684
Australia	4,7.4	-	30,122	10,703	57,477	56,574	35,555	56,799	1,319
British South Africa			54,509	22,310		342.518	14,721	22,656	-,3-,
British India			57,141	20,978	690,483	312,518 421,557	17,430	12,127	-
Barbados .	-		468	370		35,474	547	309	. 27
Geylon	1 1 5 TO	_	212	73	3,811	3,189	199	181	
Jamaica		1 -	3,864	1,393	258,717	217,532	146	: 58	5
Other British Jest Indies			1,940	1,639	: 267,172	235,785	1,530	1,103	226
Newfoundland		-	20,716	11,023	781	574	258,973	233,637	14,400
New Zealand			142,628	75,640	881,111	650,239	210,661	327,301	70
Other British Dominions			77,477	33,004	206,771	166,875	8,550	8,307	50
TOTAL BRITISH EMPIRE	1,542	3,202	741,310	301,415	4,670,903	3,285,774	1,887,204	2,757,929	16,861
Argentina		3,202	320,006	109,542	3,041,887	1,798,714	5,718	4,686	
Belgium	106	638	30,460	8,461	38,399	30,352	9,380	20,415	
Brazil	100	030				6 862	295	1,141	
	15	- 37	73,396	28,523	11,514	6,893			
Shina	62	37		7(7(4	36,138	23,994	971	637	
Chili		7	32,336	16,164	210,666	144,006	6,973	5,660	
Szecho-Slovakia	-	-		-		- O- /	87	111	
Denmark	BILL THE	-	135,306	46,903	124,192	80,836	271,265	477,895	-
France	1,711	9,269	380	136	115,100	88,138	24,191	56,627	-
Germany	838	4,118	-	-	76,327	49,587	36,431	69,589	-
Italy	; -	-	7,292	2,636	16,037	10,860	34,845	00,760	-
Japan	625	4,487	12,863	4,961	475	304	1 -	- 1	780
Netherlands	-	- 110	28,115	12,142	11,749	9,946	3,608	11,097	-
Dutch Last Indies	-	-	27,438	11,034	55,565	45,385	-	-	-
Spain	7.5		31,952	11,464	7,430	5,979		30 (40	-
Sweden United States	1 57 150	257 723	10,168	3,288	632	454	5,355	12,649	2,658
Other Countries	157,150	257,731	20,503	81 7,479	2,475	2,278 607,207	33,490	39,311	10,042
TOTAL FOREIGN COUNTRIES	160,492	276,280	730,341	263,194	4,618,993			788,924	13,400
TO THE TO THE TOTAL TOTAL THE	100,7/2	15/00/200	1120,047	200,174	1,000,070	2,904,933	432,734	100,147	1



THE RUBBER INDUSTRY IN DANADA, 1929.

Exports of Subber and Subber Goods. - Concluded

	Tel				-		- neg	All other	Total Value
	Pneumati	ic Tires	Pneumatio	Tires	Tires fo	r Vehicles	Hose of		
Principal Jountries	Jas:		Inner I	lubes	Solid	Rubber	lubber	of Rubber	by Countries
to which Exported	Quantity	Value	quantity	Value	quantity	Value	Value Only	Value Only	
to willen Exported	No.	3	No.		No.	9	i,p		5,
United Kingdom	45,527	511,204	15,631	30,059	-	-	24,838	2,031,449	5,925,128
Australia	8,118	106,892	816	1,483	_	_	1,282	30,450	273,502
British South Africa	167,692	1,420,230	158,458	200,813	42	1,051	40,947	26,974	2,117,999
British India	140,063	1,210,450	126,206	147,336	742	18,412	21,434	20,312	1,872,606
Barbados	1,669	18,603	1,423	2,150	8	270	1,049	2,227	63,477
Ceylon	12,210	108,266	7,138	9,280	164	2,983	218	950	125,140
Jamaica	14,866	142,493	12,557	17,105	308	5,668	3,358	15,050	402,662
Other British West Indies	13,198	143,202	9,287	15,173	62	1,584	2,487	10,700	411,947
Newfoundland	717	6,373	. 820	1,151	8	159	7,093	3,376	277,866
New Zealand	260,584	2,528,345	183,289	283,681	564	22,647	78,769	77,495	4,044,387
Other British Dominions	69,118	668,514	. 82,866	118,338	158	3,322	10,563	17,126	1,025,051
TOTAL BRITISH EMPIRE	733,762	6,864,572	598,541	826,569	2,056	56,096	192,038	2,236,109	16,540,565
Argentina	236,509	1,678,529	270,252	284,252	1,677	44,723	7,434	51,475	3,979,355
Belgium	51,443	463,804	27,668	40,004	-	-	109	2,197	565,900
Brazil	142,042	1,307,260	142,099	200,249	200	5,448	4,647	18,226	1,572,687
China	6,396	56,550	12,194	14,857	167	3,530	_ =	10,729	110,334
Chili	26,829	249,435	31,470	39,256	134	5,415	2,255	2,994	465,105
Czecho-Slovakia	15,266	247,804	15,090	47,931	-	_	-	72	295,918
Denmark	92,290	738,435	77,144	84,318	-	-	1,715	12,857	1,443,039
France	16,562	157,591	6,133	7,177	2	39	86	9,970	329,033
Germany	553	5,408	843	1,563	-	-	-	3,339	133,624
Italy	12,912	149,836	12,122	19,545	-	-	116	253	272,006
Japan	46,496	632,867	55,790	108,288	1,014	30,340	6,915	4,449	793,391
Netherlands	33,292	407,684	32,788	56,519	28	1,042	1,488	27,706	527,624
Dutch Last Indies	73,085	565,381	103,807	121,327	348	6,206	5,667	20,925	775,925
Spain	59,836	669,029	36,268	57,596	-	-	10	4,173	748,251
Sweden	37,140	301,402	34,897	51,747	-	-	1,252	12,944	383,736
United States	3,030	29,921	1,922	1,583	78	1,539	61,077	14,772	371,986
Other Countries	158,707	1,860,361	185,691	292,569	462	12,090	8,814	22,675	2,060,871
TOTAL FOREIGN COUNTRIES	1,013,188	9,521,297	1,046,178	1,428,801	4,110	110,372	101,585	219,756	15,628,945



Appendix A. -

The following table shows the world production (net exports) of both plantation and wild rubber from 1905 to 1929 by quantity and per cent.

WORLD PRODUCTION, PLANTATION AND WILD MUSSER, 1905-1929.

	Total	Total Wild,		World Productio	n
Years	Flan- tation tons	Tropical America and Africa - tons	Total tons	Plantation ner cent	Wild Per cent
1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929	174 577 1,157 1,796 3,386 7,269 14,383 30,113 51,721 73,153 114,277 158,993 221,187 180,500 348,574 304,671 276,746 378,232 379,738 386,703 478,900 585,100 567,300 621,000 835,000	59.320 62.004 66,013 64,770 70,370 73,477 68,446 73,834 63,230 48,052 54,740 51,036 56,751 36,711 50,424 36,464 23,903 27,878 26,585 28,000 38,000 38,000 38,000 27,000 25,000	59.494 62,581 67,170 66,566 73,756 80,746 82,829 103,949 115,001 121,205 169,017 210,079 277,938 217,511 398,998 341,135 300,649 406,423 414,703 515,900 605,300 648,000 860,000	0.5 0.2 1.7 4.6 9.4 9.0 45.4 67.6 17.9 67.6 14.3 93.4 93.1 93.1 93.6 93.1 93.1 93.1 93.1 93.1	99.7 99.1 99.1 97.1 97.1 97.1 97.1 97.1

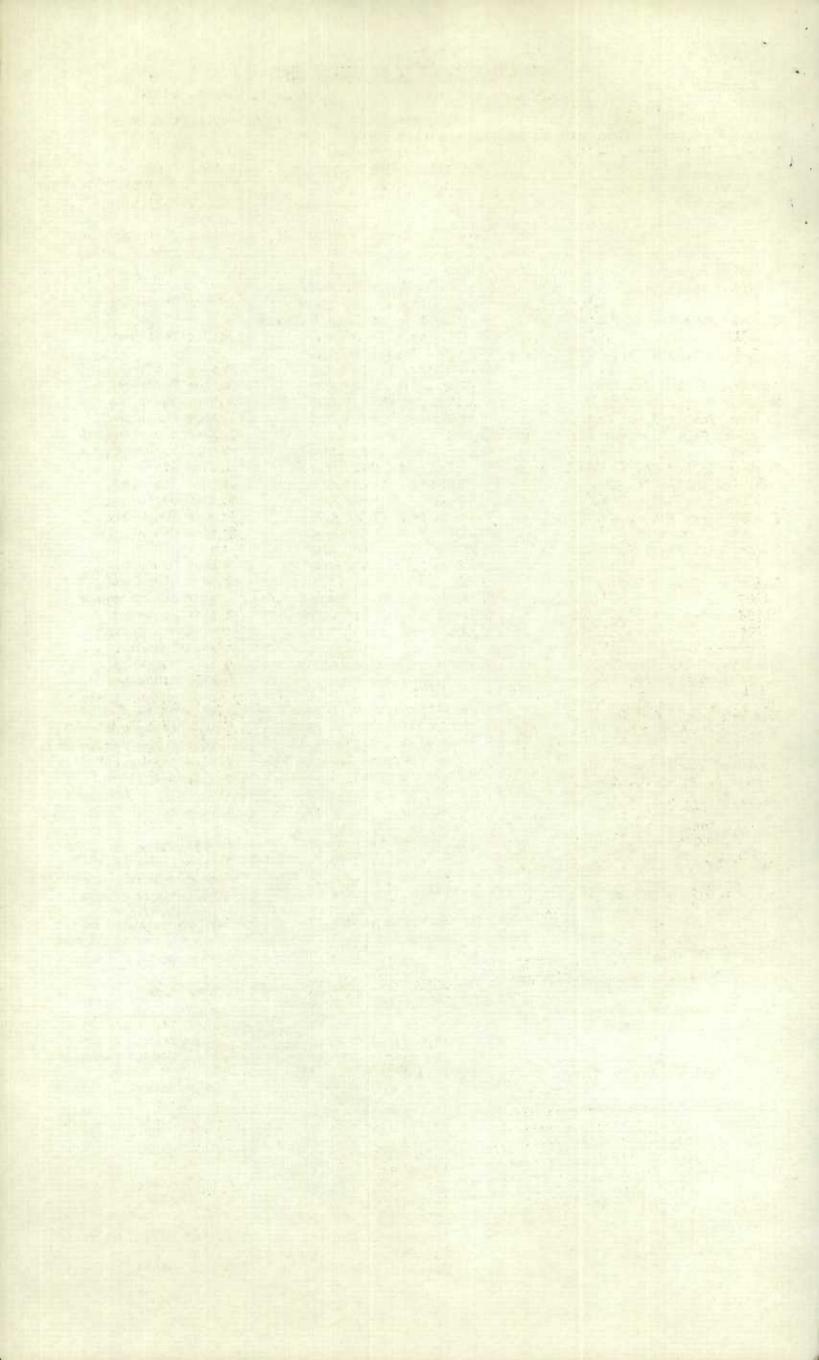
From the above table, the growing importance of plantation rubber over wild rubber will be noted. The peak of wild rubber production was reached in 1912 when approximately 74,000 tons were exported or 71 per cent of the total world production for the year. In 1914 plantation rubber for the first time exceeded that of wild constituting 60 per cent of the total net exports which in that year aggregated 121,205 tons. From between 1909 and 1910 up till 1926 the figures of percentage of wild and plantation rubber have been practically reversed.

The potential output of plantation rubber from present areas is estimated to reach 584,000 tons in 1926, 602,000 tons in 1927, 615,000 tons in 1928, 617,000 tons in 1929 and 621,000 tons in 1930 with restrictions removed and an ample supply of labour available. Wild rubber production is estimated at 20,000 tons per year.

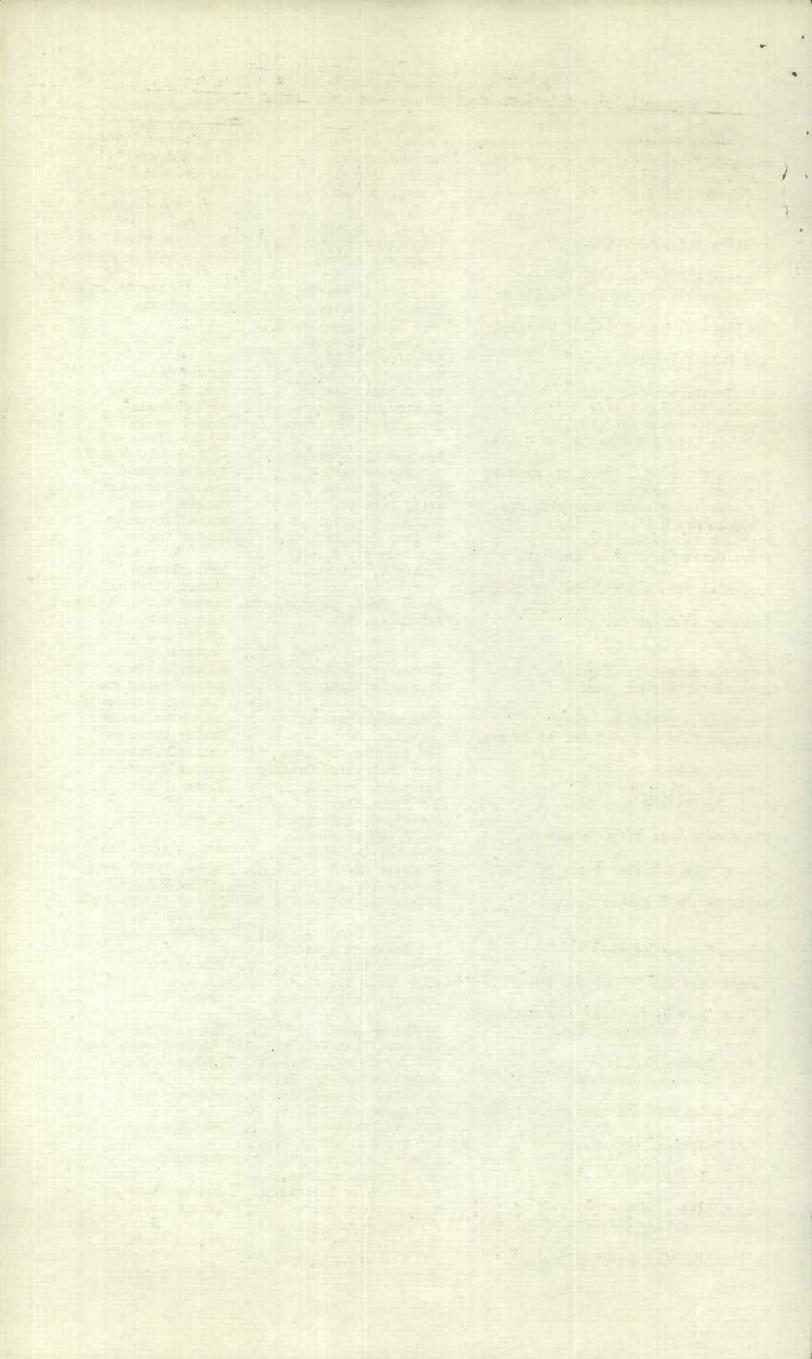
In view of the rapid increase in the world consumption of rubber, an estimate of future requirements was undertaken by the Rubber Association of America which issued the following table:-

FUTURE AND POTENTIAL WORLD PRODUCTION AND CONSUMPTION AS ESTIMATED BY THE RUBBER ASSOCIATION OF AMERICA.

	Crude Rubber. Flantation and Mild			
Years	Estimated World Production Tons	Estimated World Consumption Tons		
1926 1927	506,000 623,000	575,000 608.000		
1928	635,000	541,000		
1929 1930	537,000 541,000	572,000 703,000		



Appendix 3 Manufacturersof	Rubber Goods operating in	Canada, 1929.
Name	Location	Products Made
American Wringer Co. of Canada, Ltd.	Farnham, Quebec	Rubber Goods
The Granby Elastic Web Ltd.	Granby, Quebec	Rubber Goods
The Miner Rubber Co. Ltd.	Granby, Quebec	Rubber Footwear
		and other rubber
	2665	goods.
Dominion Rubber Co. Ltd.	1655 Notre Dame St. E., Montreal, Quebec.	Rubber Footwear and other rubber goods.
Dominion Rubber Co. Ltd. (Rubber	Montreal, quevec.	other rabber goods.
Regenerating Co. of Canada, Ltd.)	1665 Notre Dame St. E.,	
200000000000000000000000000000000000000	Montreal, Quebec.	Rubber Goods
The Columbus Rubber Co. of Montreal,	2451 Demontigny St. E.,	
Itd.	Montreal, Quebec.	Rubber Footwear
Pall Mall Specialties	36 ^C Recollet St.,	
	Montreal, Quebec.	Rubber Goods
Dominion Rubber Co. Ltd.	St. Jerome, Quebec.	Rubber Footwear
Panther Rubber Co. Ltd.	Sherbrooke, Quebec. Beamsville, Ontario.	Rubber Goods Rubber tubes
Niagara Rubber Goods Ltd., Goodyear Tire & Rubber Co. of Canada,	Beamsville, Ontario.	Rubber tires and
Lid.	Bowmanville, Ontario	other rubber goods
Western Rubber Co. (Fred. N. Stubbs)	Caledon, Ontario.	Rubber Goods
Dominion Rubber Co. Ltd.	Elmira, Ontario.	Rubber Footwear
The Canadian General Rubber Co. Ltd.	Galt, Ontario.	Rubber Goods
The Northern Rubber Co. Ltd.	Guelph, Ontario.	Rubber Footwear
Sterling Rubber Co. Ltd.	Guelph, Ontario.	Rubber Goods
Bowes Whitt "Seal Fast" Co. Ltd.	103 John St. N., Hamilton, Ontario	Rubber Goods
Firestone Tire & Rubber Co. of Canada,	Edition, Ontain	Rubber tires and
Ltd.	Beach Road, Hamilton, Ont.	
Canadian Goodrich Co. Ltd.	Kitchener, Ont.	Rubber Footwear,
		tires and other
		rubber goods
Dominion Rubber Co. Ltd.	Kitchener, Ontario.	Rubber Footwear
Dominion Rubber Co. Ltd.	Kitchener, Ontario	Rubber tires and other rubber goods
The Kaufman Rubber Co. Ltd.	Kitchener, Ontario	Rubber Footwear
Goodyear Tire & Rubber Co. of Canada,	Alterielle, ontallo	Rubber tires and
Ltd.	New Toronto, Ontario	other rubber goods
Dominion Rubber Co. Ltd.		Rubber Footwear
Verner T. Smith Co. Ltd.	Rockwood, Ontario	Rubber Goods
G. L. Griffith & Sons Ltd.	315 Front St.,	
The Constion I E C Bubban Co Itd	Stratford, Ontario.	Rubber Goods
The Canadian I. T. S. Rubber Co. Ltd.	14-32 Alpine Avenue, Toronto, Ontario.	Pubber Goods
Dunlop Tire & Rubber Goods Co. Ltd.		Rubber tires and
	Toronto, Ontario.	other rubber goods
Gutta Percha & Rubber Ltd.,	O'Hara Ave., Toronto, Ont.	Pubber tires, foot-
		wear and other
Honnon Vnight Timited	121 Prescott Avenue.	rubber goods.
Hannon-Knight Limited	Toronto, Ontario	Rubber Goods
Hannon Tire and Rubber Co. Ltd.,	1379 Bloor St. W.,	Time of Goods
	Toronto, Ontario	Rubber tires
Z. & S. Rubber Co. Ltd., and Seiberling		
Rubber Co. of Canada, Ltd.	99 Paton Road,	Rubber tires and
Walter Bukhan da	Toronto, Ontario	other rubber goods
Kelton Rubber Co. I. B. Kleinert Rubber Co.	225 Jarvis St., Toronto. 84Wellington St. W.,	Rubber Goods
1. 2. Aleiner C. Mabber Co.	Toronto, Ontario	Rubber Goods
Mational Rubber Co. Ltd.	970 Queen St. E.,	
	Toronto, Ontario	Rubber Goods
S. C. Williams	450 Pacific Ave.,	
	Toronto, Ontario	Rubber Goods
Locktite Patch Co.	36 Devonshire Road,	Dalahan Angal
Togonia Staken Duhhan da Ttd	Walkerville, Ontario. Welland, Ontario	Rubber Goods
Joseph Stokes Rubber Co. Ltd. Canadian Battery Container Corp. Ltd.	1165 Pougall Ave.,	Hannel Goods
Omegan Designation of he flores	Win sor, Ontario	Rubber Goods
De Vilbiss Manufacturing Co. Etd.	237 Wellington Avenue,	
	Windsor, Ontario.	Rubber Goods



Appendix 3. - Manufacturersof Rubber Goods operating in Canada, 1929 - Concluded.

Name	Location	Products Made
The Wingham Rubber Co. Ltd. The Woodstock Rubber Co. Ltd. Gregory Tire & Rubber 1926 Ltd. Durable Mat Co. (Canada) Ltd.	Wingham, Ontario Woodstock, Ontario Port Coquitlam, 3. C. 146 Superior Street,	Rubber Tires Rubber Tootweer Rubber Tires
Durable mat Co. (Canada) But.	Victoria, B. C.	Rubber Goods

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