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REPORT

on the

RUBBER INDUSTRY

in

CANADA

1928

♦ ♦ ♦

Published by Authority of the Hon. James Malcolm, M.P.,

Minister of Trade and Commerce

OTTAWA

1929

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

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

THE RUBBER INDUSTRY IN CANADA, 1928.

Ottawa, October 15th, 1929.—A report on the Rubber Industry in Canada is herewith presented for the calendar year 1928 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 1928 was 45, of which 31 were located in the province of Ontario, 12 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 9, 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 1928 was \$70,459,066 to which the rubber tire section contributed \$54,222,878 and the footwear section \$16,236,188. Fixed capital in the industry as a whole amounted to \$40,032,637 and working capital to \$30,426,429.

EMPLOYEES

The number of persons employed in the industry in 1928 was 17,095 of whom 2,145 were salaried employees and 14,950 were wage-earners. Of those employed 12,418 males and 4,677 were females. In the rubber tire section the total employees numbered 9,076 of whom 7,509 were males and 1,567 were females, whilst in the footwear section the total number employed was 8,019 of whom 4,909 were males and 3,110 were females.

SALARIES AND WAGES

The total amount of salaries and wages paid in 1928 was \$18,943,730 of which \$3,602,753 was for salaries and \$15,340,977 for wages. Total payments in the rubber tire section amounted to \$11,598,699 of which \$2,334,891 represented the cost of salaries and \$9,263,808 the cost of wages. In the rubber footwear section the total payments were \$7,345,031 of which \$1,267,862 represented the cost of salaries and \$6,077,169 the cost of wages.

FUEL CONSUMPTION

The total cost of fuel consumed by the industry in 1928 was \$688,565 of which the rubber tire section accounted for \$512,802 and the rubber footwear section for \$175,763. Bituminous coal was the principal fuel of which 100,957 tons worth \$554,588 were reported and its value represented 80.54 per cent of the total cost of all fuel.

MATERIALS USED

The total cost of all materials used in the industry was \$45,118,570 of which the rubber tire section contributed \$35,182,923 and the rubber footwear section \$9,935,647. Raw rubber was the chief material with a total value of \$19,741,948 being over 43 per cent of the total cost of materials. The second largest item of materials was tire duck with a total cost of \$8,804,342 or more than 19.5 per cent.

VALUE OF PRODUCTION

The gross value of production for the entire industry amounted to \$97,208,713 in 1928 being an increase of \$5,794,983 or 6.34 per cent over 1927. Of the three main classes of products rubber tires accounted for \$49,708,538 of the total or 51.1 per cent, rubber footwear for \$32,412,611 or 33.4 per cent and other rubber goods for \$15,087,564 or 15.5 per cent.

Automobile tire production decreased in value from the preceding year by \$878,404 or 1.54 per cent, whilst rubber footwear increased by \$4,783,999 or 17.3 per cent, and other rubber goods by \$1,889,388 or 14.3 per cent.

The net value of production, found by deducting the cost of materials from the gross value of products, advanced from \$46,689,228 in 1927 to \$52,090,143 in 1928 or 11.56 per cent.

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, 1926, 1927 and 1928. The number of plants reporting in 1928 increased by 2.27 per cent from 1927, capital investment by 6.3 per cent, employees by 13.45 per cent, salary and wage payments by 13.97 per cent, the gross value of products by 6.34 per cent, the cost of fuel by 5.95 per cent, and the cost of materials by .88 per cent.

Table 1(a).— Principal Statistics, Compared, 1925 - 1927.

Principal Statistics		1925	1926	1927	1928
Establishments reporting	No.	40	39	44	45
Capital investment	\$	65,562,734	62,661,702	66,266,064	70,459,066
Employees on salaries	No.	1,657	1,786	1,900	2,145
Salaries paid	\$	2,724,749	3,096,334	3,243,988	3,602,753
Employees on wages	No.	11,307	11,801	13,169	14,950
Wages Paid	\$	11,418,416	11,611,689	13,377,752	15,340,977
Cost of fuel	\$	598,834	641,551	649,892	688,565
Cost of Materials	\$	38,389,352	49,902,189	44,724,502	45,118,570
Gross value of products	\$	78,229,574	86,508,137	91,413,730	97,208,713
Net value of products	\$	39,840,222	36,605,948	46,689,228	52,090,143

Automobile Tire and Tube Production, Compared, 1917 - 1928.

A comparative summary of automobile tire production (casings and inner tubes) from 1917 to 1928 is presented in the following table. Pneumatic tires and solid tires are each shown by number and value.

Table 1(b).— Automobile Tire and Tube Production, Compared, 1917 - 1928.

Year	Pneumatic Tires				Solid Tires	
	Casings	Value	Inner Tubes	Value	Number	Value
	No.	\$	No.	\$		\$
1917	1/	1/	1/	1/	111,211	225,460 (2)
1918	1/	1/	1/	1/	60,783	126,859 (2)
1919	1,293,010	23,298,673	1,117,913	2,872,487	14,170	451,196
1920	1,561,974	35,175,801	1,427,546	4,271,461	21,444	729,857
1921	857,816	15,520,810	989,689	2,037,180	9,472	343,171
1922	1,482,796	19,519,208	1,504,837	2,618,584	15,572	476,735
1923	2,150,768	23,504,489	2,256,604	3,655,109	22,546	658,090
1924	2,139,234	22,855,905	2,454,292	4,319,022	20,995	531,189
1925	2,969,632	33,586,958	3,462,380	6,922,413	20,918	721,039
1926	2,966,088	38,159,495	3,511,897	7,934,096	18,061	798,049
1927	3,856,315	40,707,749	4,275,753	8,302,944	21,471	859,552
1928	4,338,578	41,075,594	4,638,429	7,358,560	17,377	592,636

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.

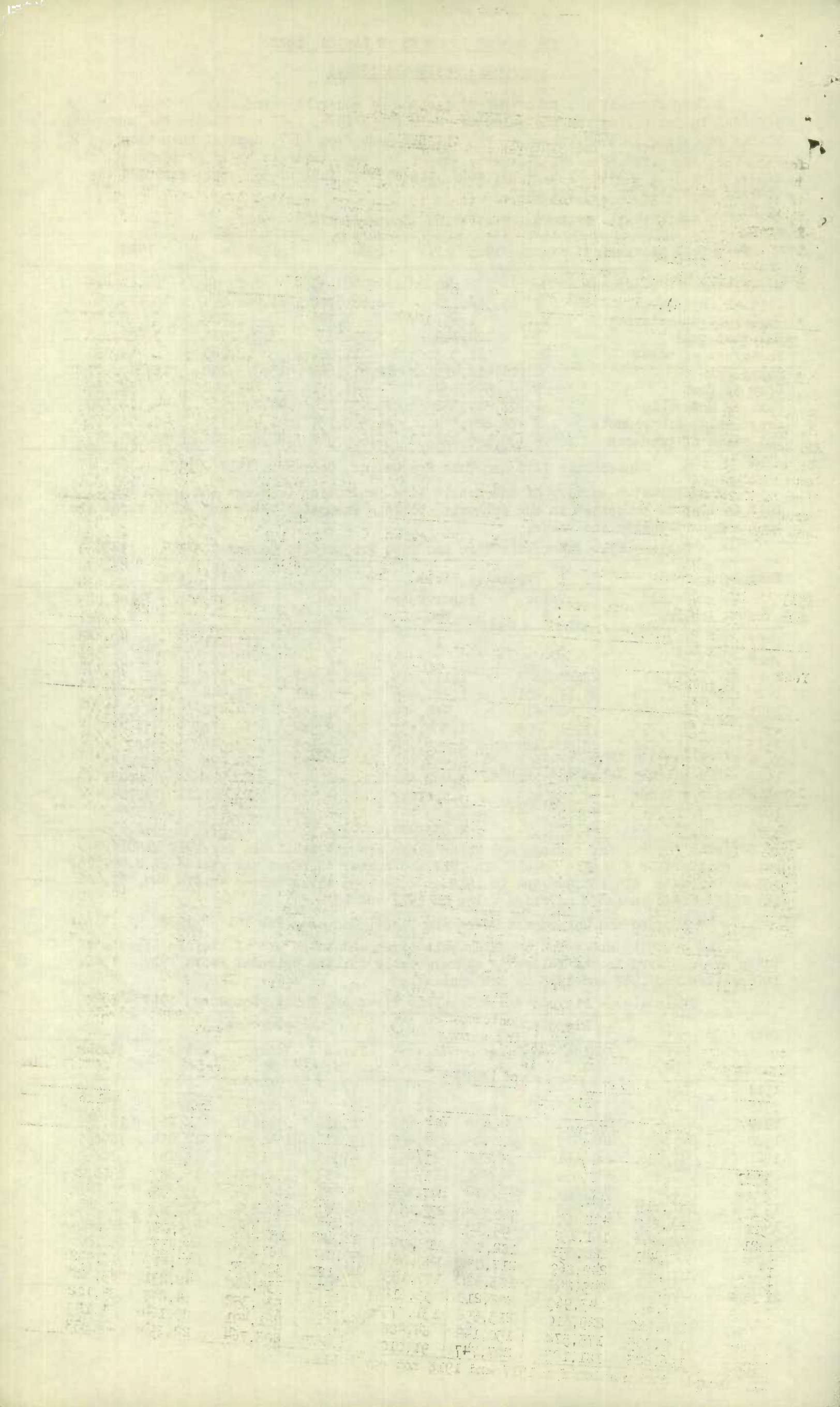
Bicycle and Motorcycle Tires and Tubes, Compared for 1917 - 1928.

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 - 1928. Information for 1917 and 1918 is not available.

Table 1(c).— Bicycle and Motorcycle Tires and Tubes, Compared, 1917 - 1928.

Year	Bicycle				Motorcycles			
	Tires	Value	Tubes	Value	Tires	Value	Tubes	Value
	No.	\$	No.	\$	No.	\$	No.	\$
1917	1/	1/	1/	1/	1/	1/	1/	1/
1918	1/	1/	1/	1/	1/	1/	1/	1/
1919	185,613	244,521	234,679	277,656	8,586	74,131	8,717	12,396
1920	241,890	428,979	322,925	237,267	15,172	154,556	12,674	18,849
1921	91,496	161,151	95,851	83,953	4,540	41,919	5,757	7,795
1922	171,441	220,051	182,861	115,008	22,682	151,470	15,887	15,032
1923	211,493	249,869	217,082	128,885	39,888	187,074	35,334	30,946
1924	182,593	249,255	183,982	107,133	48,181	329,831	37,513	42,532
1925	197,699	243,963	208,210	95,918	53,477	335,268	48,231	65,620
1926	175,980	229,610	213,696	131,775	91,359	530,352	64,287	85,102
1927	160,705	175,572	150,149	84,408	37,658	261,491	20,164	31,155
1928	186,623	181,193	207,747	91,010	36,467	203,764	22,394	23,633

1/ Separate information for 1917 and 1918 not available.



PRODUCTION STATISTICS.

3.

(a) Rubber Tires and Tubes.

The production of rubber tires and tubes according to size is presented in Table 2 for the calendar year 1928. The total selling value of all tires and tubes produced during the year was \$49,708,538 comprising pneumatic tires and inner tubes to the value of \$23,095,026, balloon tires and inner tubes to the value of \$25,339,128, solid tires to the value of \$592,636 and carriage, motorcycle and bicycle tires to the value of \$681,748. The value of production which in 1927 amounted to \$50,586,942 decreased by \$878,404 or 1.54 per cent during the year under review.

Table 2.- Production of (a) Pneumatic (b) Balloon and (c) Solid Tires, by sizes, 1928.

(a) Pneumatic Tires				
Casings and Inner Tubes by sizes	Casings		Inner Tubes	
	Number	Value	Number	Value
Sizes - 30 x $3\frac{1}{2}$	912,736	4,737,477	1,242,244	1,250,754
30 x 5	270,319	4,190,700	314,029	641,072
31 x 4	45,841	405,146	109,700	173,286
32 x $3\frac{1}{2}$	1,644	12,395	1,456	1,884
32 x 4	61,158	601,041	65,293	107,350
32 x $4\frac{1}{2}$	28,761	411,204	43,231	88,327
32 x 6	158,665	4,045,099	185,760	651,261
33 x 4	33,020	349,831	33,927	58,909
33 x $4\frac{1}{2}$	25,099	343,556	40,071	83,236
33 x 5	24,222	505,524	35,172	91,885
34 x 4	6,219	69,952	7,852	14,449
34 x $4\frac{1}{2}$	15,873	240,316	18,743	41,470
34 x 5	6,317	148,962	8,252	22,964
34 x 7	28,810	1,254,226	33,879	182,025
35 x $4\frac{1}{2}$	452	7,139	725	1,701
35 x 5	6,087	140,622	9,028	25,222
36 x $4\frac{1}{2}$	163	3,324	193	581
36 x 6	17,620	601,760	16,165	70,171
36 x 7	94	5,474	363	2,677
37 x 5	293	7,513	342	1,398
38 x 7	6,916	320,316	9,493	55,209
40 x 8	3,154	196,358	3,628	26,631
Miscellaneous inch sizes	35,954	448,975	43,079	79,477
Miscellaneous Millimetre sizes	27,713	322,682	28,087	53,495
Total Pneumatic Tires	1,717,130	19,369,592	2,250,712	3,725,434
(b) Balloon Tires				
Sizes - 29 x 4.40	510,686	3,256,372	370,690	532,063
31 x 4.40	85,175	678,247	9,732	19,348
30 x 4.75	23,260	184,994	20,330	32,688
29 x 4.95	11,634	87,913	12,868	18,508
30 x 4.95	10,690	88,489	3,857	5,937
31 x 4.95	2,464	26,863	2,665	5,281
32 x 4.95	10,731	117,929	1,717	3,378
33 x 4.95	14,505	161,529	4,746	7,666
34 x 4.95	2,780	44,848	1,759	2,949
30 x 5.25	67,164	739,163	54,535	106,646
31 x 5.25	128,358	1,397,673	105,513	196,983
30 x 5.77	5,401	72,477	9,692	21,228
32 x 5.77	505	12,033	1,210	3,814
33 x 5.77	3,116	52,424	527	1,721
34 x 5.77	3,095	54,273	352	1,317
35 x 5.77	368	8,074	38	117
33 x 6.00	63,925	884,059	47,628	114,317
32 x 6.20	13,978	223,419	15,322	37,397
33 x 6.20	3,406	58,270	4,431	13,394
33 x 6.75	9,362	167,201	7,969	24,301
35 x 6.75	211	5,304	130	724
34 x 7.30	2,220	40,755	2,259	6,912
Miscellaneous sizes	1,648,414	13,343,693	1,709,747	2,476,387
Total Balloon Tires	2,621,448	21,706,002	2,387,717	3,633,126

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY
CHICAGO, ILLINOIS 60637
U.S.A.
FEBRUARY 1968
TO THE DIRECTOR, NATIONAL BUREAU OF STANDARDS
WASHINGTON, D.C. 20535
FROM: DR. J. H. DUNN, JR.
SUBJECT: REPLY TO YOUR LETTER OF JANUARY 22, 1968
RE: YOUR REQUEST FOR A REPLY TO YOUR LETTER OF JANUARY 22, 1968
RE: YOUR REQUEST FOR A REPLY TO YOUR LETTER OF JANUARY 22, 1968

Enclosed for you are two copies of a report of the results of the work done by the Division of the Physical Sciences, Department of Chemistry, University of Chicago, in response to your request for a reply to your letter of January 22, 1968. The report is entitled "The Effect of Temperature on the Rate of Reaction of Hydrogen Peroxide with Potassium Dichromate" and is written by Dr. J. H. Dunn, Jr. and Dr. R. W. Smith. The report is a preliminary report and is subject to change without notice. It is being submitted to you for your information and for your use in your work. It is not to be distributed outside your organization without the approval of the Division of the Physical Sciences, Department of Chemistry, University of Chicago.

Very truly yours,
J. H. DUNN, JR.
Director, Division of the Physical Sciences
Department of Chemistry
University of Chicago
Chicago, Illinois 60637
U.S.A.

THE RUBBER INDUSTRY IN CANADA, 1928.
PRODUCTION STATISTICS, 1928 - (continued).

4.

Table 2.-Production of (a) Pneumatic (b) Balloon and (c) Solid Tires, by sizes
1928 (continued)

Casings and Inner Tubes by sizes		(c) Solid Tires	
		Number	Value \$
Sizes -	32 x 3½	1,760	25,814
	34 x 3½	-	-
	36 x 3½	7	116
	32 x 4	2,520	45,650
	34 x 4	420	8,390
	36 x 4	1,538	32,440
	38 x 4	90	2,193
	32 x 5	355	7,088
	34 x 5	455	11,699
	36 x 5	1,583	45,312
	40 x 5	47	1,566
	34 x 6	637	19,811
	36 x 6	1,239	43,262
	40 x 6	59	2,415
	34 x 7	304	11,769
	36 x 7	488	21,297
	34 x 8	397	18,133
	36 x 8	699	34,420
	36 x 10	844	52,499
	40 x 10	148	10,729
	36 x 12	431	32,214
	40 x 12	531	42,918
	36 x 14	123	11,383
	40 x 14	619	58,840
	Miscellaneous sizes	2,083	52,678
Total Solid Tires		17,377	592,636

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 1928.

Table 3.- Other Tires and Tubes, Solid or Pneumatic.

Kind	Unit of Measure	Quantity	Selling Value at the works \$
Carriage, rubber tires, solid	Lb.	542,210	170,675
All other rubber tires, solid	"	36,102	11,473
Motorcycle tires, casings	No.	36,467	203,764
Motorcycle tires, inner tubes	"	22,394	23,633
Bicycle tires, casings	"	186,623	181,193
Bicycle tires, inner tubes	"	207,747	91,010
Total Value		-	681,748

Summary of Tire Production, 1928.

Kind	Unit of Measure	Quantity	Selling Value at the works \$
Pneumatic tires - casings	No.	1,717,130	19,369,592
" " inner tubes	"	2,250,712	3,725,434
Balloon tires - casings	"	2,621,448	21,706,002
" " inner tubes	"	2,387,717	3,633,126
Solid Tires	"	17,377	592,636
Carriage rubber tires, solid	Lb.	542,210	170,675
Other rubber tires, solid	"	36,102	11,473
Motorcycle tires- casings	No.	36,467	203,764
" " inner tubes	"	22,394	23,633
Bicycle tires - casings	"	186,623	181,193
" " inner tubes	"	207,747	91,010
Total Selling Value		-	49,708,538

PRODUCTION STATISTICS (continued)

5.

B. Footwear.

The production of rubber footwear is shown by classes, sizes, number and value in table 4 for the calendar year 1928. Compared with 1927 there was an increase of 4,146,272 in the number of pairs of all classes manufactured and of \$4,783,999 in value of production.

Table 4.- Rubber footwear Production by Classes and Sizes, 1928.

Rubber Footwear, kind and size	Rubber Boots, Knee and Hip		Lumbermen's Rubber Boots		Overshoes not including Jersey Storms	
	Quantity Pairs	Value \$	Quantity Pairs	Value \$	Quantity Pairs	Value \$
Men's 6-12	813,616	3,070,291	1,119,972	3,157,387	1,092,997	2,361,157
Boys' 1-5	78,965	200,835	369,418	728,592	134,455	242,647
Youths' 11-13	13,265	27,601	175,198	275,681	35,407	61,293
Women's 2½-8	736,128	1,727,658	41,912	77,770	1,854,379	4,550,377
Misses' 11-2	215,075	387,267	65,378	106,383	330,163	617,754
Children's 4-10½	191,787	287,911	121,921	150,612	199,857	320,157
Totals	2,048,836	5,701,563	1,893,799	4,496,425	3,647,258	8,153,385
Rubber Footwear, kind and size	Rubbers, light including Jersey storms		Canvas rubber soled footwear, Balmorals		Canvas rubber soled footwear, oxfords	
	Pairs No.	Value \$	Pairs No.	Value \$	Pairs No.	Value \$
Men's 6-12	2,463,821	2,524,193	398,367	506,245	1,418,069	1,473,015
Boys' 1-5	686,903	568,686	495,461	545,826	1,472,234	1,300,735
Youths' 11-13	248,235	176,016	160,402	141,594	656,180	492,541
Women's 2½-8	1,776,494	1,245,884	16,294	16,842	3,341,361	3,010,925
Misses' 11-2	516,235	308,377	27,745	21,879	1,023,587	748,543
Children's 4-10½	487,442	257,418	59,770	43,243	1,102,671	679,276
Totals	6,179,130	5,080,574	1,158,039	1,275,629	9,014,102	7,705,035

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 1927 and 1928. The classes of footwear showing the greatest quantity of production as compared with 1927 were (a) overshoes, not including Jersey storms and (b) canvas rubber soled footwear (oxfords), and (c) rubber boots, knee and hip, the first named showing an increase of 872,902 pairs, the next with 1,806,192 pairs, and the last named with 682,945 pairs. All the remaining classes with the exception of Canvas rubber soled footwear (balmorals), which shows a decrease of 9,838 pairs, show increased production varying from 101,753 pairs in lumbermen's rubber boots to 692,318 pairs in light rubbers including Jersey storms.

Comparative Summary of Rubber Footwear by Classes, 1927 and 1928.

Classes of footwear	1927		1928	
	Quantity Pairs	Value \$	Quantity Pairs	Value \$
Rubber boots, knee and hip	1,365,891	3,873,355	2,048,836	5,701,563
Lumbermen's rubber boots	1,792,046	4,229,231	1,893,799	4,496,425
Overshoes, not including Jersey storms	2,774,356	6,605,868	3,647,258	8,153,385
Light rubbers including Jersey storms	5,486,812	4,562,580	6,179,130	5,080,574
Canvas rubber-soled footwear Balmorals	1,167,877	1,425,498	1,158,039	1,275,629
Canvas rubber-soled footwear, oxfords	7,207,910	6,932,080	9,014,102	7,705,035
Totals	19,794,892	27,628,612	23,941,164	32,412,611

OTHER MANUFACTURES OF RUBBER

The production of rubber goods other than tires and footwear is given in Table 5 for the calendar years 1927 and 1928. An increase in the total value of production as compared with 1927 amounting to \$1,889,388 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, rubber belting, rubber hose, drug sundries and tire repair gums and fabrics. The list of articles manufactured was extended in 1926 to include such items as friction tape, rubber tiling and sheet flooring, battery jars, wringer rolls, roll covering, other than wringer, fruit jar rings, hospital sheeting and hard rubber.

Table 5.- Other Manufactures of Rubber Goods, 1927 and 1928.

Articles Manufactured			1928		1927	
			Quantity	Selling Value \$	Quantity	Selling Value \$
Rubber clothing, coats	No.		90,300	339,676	64,952	CE 297,236
" " headwear	"		18,575	15,881	16,333	14,376
" " all other (value only)	\$		-	218,920	-	114,722
Rubber and composition soles	Prs.		3,534,885	896,363	1,738,066	486,030
" " half soles	"		499,163	130,128	773,247	218,147
" " heels	"		20,600,402	1,611,319	18,521,110	1,497,428
Tire repair gums and fabrics	Lb.		1,819,505	864,347	1,712,870	AA 841,990
Friction tape and splicing compound	"		685,460	232,064	637,630	C 219,685
Rubber cement	Gal.		225,562	227,919	182,754	MI 220,830
Rubber mats and matting	Lb.		2,265,465	426,016	2,032,350	HF 371,946
Rubber tiling and sheet flooring	"		746,257	170,444	584,068	C 170,862
Sheet packing	"		399,346	91,710	322,162	A 87,753
Battery jars	No.		1,702	3,269	16,706	AA 16,494
Rubber belting	Lb.		6,066,377	3,033,531	4,885,422	M 2,322,421
Rubber hose	"		5,109,685	2,096,549	4,214,920	M 1,801,616
Hospital sheeting	Yd.		185,825	84,842	186,777	M 93,464
Wringer rolls	Lb.		-	27,093	18,391	HF 6,689
Roll covering, all other than wringer	Lb.		-	222,726	260,048	HF 220,882
Fruit jar ring rubbers	"		388,099	113,411	415,040	A 124,903
Drug sundries (value only)	-		-	751,144	-	MI 596,538
Hard rubber	-		-	271,657	-	257,800
All other rubber goods specified (value only)	\$		-	3,136,451	-	3,131,837
All other rubber goods not specified (value only)	\$		-	122,104	-	84,527
Totals			-	15,087,564	-	13,198,176

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 1927 by \$4,193,002, of which \$1,674,127 appears in the items of working capital, there being also an increase in fixed capital of \$2,518,875. The rubber goods section which includes tires accounted for \$54,222,878 or 76.95 per cent of the investment and the rubber footwear section for \$16,236,188 or 23.05 per cent. Apportioned by provinces, Ontario furnished 83.04 per cent of the total investment, Quebec 16.25 per cent and British Columbia .71 per cent. Fixed capital represented 56.8 per cent and working capital 43.2 per cent of the total capital invested in the industry.

THE HISTORY OF THE
CITY OF BOSTON

From its first settlement in 1630 to the present time, the city of Boston has been a center of commerce, industry, and culture. Its location on a small island in the harbor of Massachusetts gave it a strategic advantage, and its proximity to the sea made it a natural port for trade with the West Indies and Europe. The city's growth was rapid, and by the middle of the eighteenth century it had become one of the largest and most important cities in the colonies. Its role in the American Revolution was pivotal, and it has since been a leader in the development of the United States. The city's history is a testament to the resilience and ingenuity of its people, and its legacy continues to shape the nation today.

Capital Investment (continued)

Table 6.- Capital Invested in the Rubber Industry, 1928.

Provinces	Fixed Capital	Working Capital		Total Capital
	Land, buildings, machinery and tools	Materials and supplies on hand, stocks in process, etc.	Cash, trading and operating accounts, etc.	
	\$	\$	\$	\$
(a) The Rubber Goods Section -				
Ontario and Br. Columbia	29,208,423	11,679,063	11,852,380	52,739,866
Quebec	782,023	391,180	309,809	1,483,012
Totals	29,990,446	12,070,243	12,162,189	54,222,878
(b) The Rubber Footwear Section -				
Ontario	3,569,984	1,680,793	1,016,573	6,267,350
Quebec	6,472,207	1,567,445	1,929,186	9,968,838
Totals	10,042,191	3,248,238	2,945,759	16,236,188
Total capital invested in the Rubber industry by classes	40,032,637	15,318,481	15,107,948	70,459,066
Percentage of total capital	56.8	21.7	21.5	100.0

Employment Statistics

Employment in the Rubber Industry in Canada during the calendar year 1928 is shown in the following series of tables:

Table 7. Employees by classes, sex and remuneration, 1928.

Table 8. Employees by months, 1928.

Table 9. (a), (b), (c). Working time of plants and employees, 1928.

The number of persons employed in each section of the industry is shown by classes, sex, remuneration and provinces in Table 7. The number of employees increased during the year by 2,026, of whom 1,110 were males and 916 were females. The province of Ontario accounted for 11,643 of the total employed or 68.11 per cent and Quebec for 5,362 employees or 31.37 per cent. The total payments for salaries and wages rose from \$16,621,740 in 1927 to \$18,943,730 in 1928, an increase of \$2,321,990 or 14 per cent. The average salary, irrespective of sex, fell from \$1707.36 in 1927 to \$1679.60 in 1928 or 1.6 per cent, whilst the average wage rose from \$1015.85 in 1927 to \$1026.15 in 1928 or a little over 1 per cent.

Table 7.-Employees by classes, sex and remuneration, 1928.

Classes of employees	Employees		Total Salaries and Wages
	Male	Female	
	No.	No.	\$
In the rubber goods section -			
Salaried employees	986	278	2,334,891
Wage-earners	6,523	1,289	9,263,808
Totals	7,509	1,567	11,598,699
In the rubber footwear section -			
Salaried employees	663	218	1,267,862
Wage-earners	4,246	2,892	6,077,169
Totals	4,909	3,110	7,345,031
In both sections of the industry -			
Salaried employees	1,649	496	3,602,753
Wage-earners	10,769	4,181	15,340,977
Totals	12,418	4,677	18,943,730

Employees by Provinces, 1928.

Classes of employees		Ontario	Quebec	British Columbia	Canada
Salaried employees, male	No.	1,129	506	14	1,649
" " female	No.	351	139	6	496
Wage-earners, male	No.	8,131	2,571	67	10,769
" " female	No.	2,032	2,146	3	4,181
Total Employees	No.	11,643	5,362	90	17,095

General Accounting Commission

1900

State of Texas, County of _____

Comptroller's Office

For the year ending _____

Received of _____ the sum of _____ Dollars

for _____

_____ Dollars

_____ Dollars

_____ Dollars

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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 September to December and at the lowest from January to April, whilst in the footwear section it was highest in October to December and lowest in January to July. 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 3 males to 2 females. The average of employment in each section was high and well maintained throughout the year.

Table 8(a).—Wage-earners by months and sex in Rubber Goods Section, 1928.

Months	Wage-earners		Months	Wage-earners	
	Males No.	Females No.		Males No.	Females No.
January	5,853	1,025	July	6,672	1,297
February	5,894	1,063	August	6,884	1,376
March	5,947	1,092	September	7,014	1,436
April	6,014	1,168	October	7,051	1,501
May	6,229	1,272	November	7,055	1,464
June	6,439	1,292	December	7,178	1,449
Total number at employment during the year				78,230	15,435
Average monthly employment				6,523	1,289

Table 8(b).—Wage-earners by months and sex in the Rubber Footwear section, 1928.

Months	Wage-earners		Months	Wage-earners	
	Males No.	Females No.		Males No.	Females No.
January	3,700	2,370	July	3,302	2,440
February	3,790	2,320	August	4,306	3,146
March	3,802	2,362	September	4,458	3,227
April	3,931	2,421	October	4,626	3,411
May	4,052	2,477	November	4,709	3,499
June	4,016	2,544	December	4,489	3,234
Total number at employment during the year				49,181	33,451
Average monthly employment				4,246	2,892

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 1928 for each of the provinces and for each section of the industry. Full time operations in the rubber goods section for the Dominion were 87.5 per cent of the total possible operating time which Census purposes is reckoned at 304 days, part-time operations 6.68 per cent and idle time 5.82 per cent, whilst in the footwear section full time operations were 85.31 per cent, part time 1.50 per cent and idle time 13.19 per cent.

Table 9(a).— Working time of plants by provinces 1928 in Rubber Goods Section.

Provinces	No. of plants	Days in operation			Average days worked per plant		
		On Full time	On Part time	Idle	On Full time	On Part time	Idle
Canada	34	9,044	691	601	266.00	20.32	17.68
Quebec	7	2,039	43	46	291.29	6.14	6.57
Ontario and Br. Columbia	27	7,005	648	555	259.45	24.00	20.55
In Rubber Footwear Section.							
Canada	11	2,853	50	441	259.36	4.55	40.09
Quebec	5	1,302	30	188	260.40	6.00	37.60
Ontario	6	1,551	20	253	258.50	3.34	42.16

THE UNIVERSITY OF CHICAGO
LIBRARY
The University of Chicago Library is a part of the University of Chicago. It is a collection of books, journals, and other materials that are used by the faculty and students of the University. The library is located in the University of Chicago Library Building, which is a large, modern building that was built in the early 20th century. The library is open to the public, and it is a place where people can come to study and learn.

Table 1: Summary of the University of Chicago Library's holdings in the field of American literature, 1900-1950.

Author	Title	Year	Format	Notes
Walt Whitman	Leaves of Grass	1855	Book	First edition
Emily Dickinson	Complete Poems	1955	Book	First edition
Henry David Thoreau	Walden	1854	Book	First edition
Mark Twain	Huckleberry Finn	1884	Book	First edition
Ernest Hemingway	The Sun Also Rises	1926	Book	First edition
J. Edgar Hoover	The American Criminal	1931	Book	First edition
Franklin D. Roosevelt	The State of the Union	1941	Speech	First edition
John F. Kennedy	Profiles in Courage	1956	Book	First edition

Table 2: Summary of the University of Chicago Library's holdings in the field of American literature, 1950-1990.

Author	Title	Year	Format	Notes
Robert Frost	The Waste Land	1922	Book	First edition
William Faulkner	The Sound and the Fury	1929	Book	First edition
John Steinbeck	The Grapes of Wrath	1939	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition

Table 3: Summary of the University of Chicago Library's holdings in the field of American literature, 1990-2000.

Author	Title	Year	Format	Notes
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition

Table 4: Summary of the University of Chicago Library's holdings in the field of American literature, 2000-2010.

Author	Title	Year	Format	Notes
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition
William S. Burroughs	The Waste Land	1922	Book	First edition

THE RUBBER INDUSTRY IN CANADA, 1928.

Employment Statistics (Continued).

9.

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.

Table 9(b).—Hours worked by wage-earners in month of highest employment, 1928.

(1) In the Rubber Goods Section.

Provinces	Wage-earners in month of highest employment working per day of -				Percentage of wage-earners working -			
	8 hours or less	9 hours	10 hours	Over 10 hours	8 hours or less	9 hours	10 hours	Over 10 hours
Canada	3,259	2,738	2,752	208	36.39	30.57	30.72	2.32
Quebec	31	54	275	31	7.93	13.81	70.33	7.93
Ontario and Br. Columbia	3,228	2,684	2,477	177	37.68	31.33	28.92	2.07

(2) In Rubber Footwear Section.

Canada	151	6,078	1,378	672	1.82	73.42	16.64	8.12
Quebec	113	4,060	416	380	2.27	81.71	8.37	7.65
Ontario	38	2,018	962	292	1.15	60.97	29.06	8.82

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 8.93 in the rubber goods section and 9.27 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 53.55 in the footwear section with similar variations as between provinces.

Table 9(c).—Hours of Labour per day and per week, 1928.

(1) In Rubber Goods Section.

Provinces	Total hours worked and number of wage earners in month of highest employment			Standard working hours per week	
	Total hours	Total wage-earners	Average hours per wage-earner	Total	Averages
Canada	80,418	8,957	8.93	1,665	48.97
Quebec	3,810	391	9.74	374	53.43
Ontario and Br. Columbia	76,608	8,566	8.94	1,291	47.82

(2) In Rubber Footwear Section.

Canada	76,746	8,279	9.27	589	53.55
Quebec	45,594	4,969	9.18	262	52.40
Ontario	31,152	3,310	9.41	327	54.50

Fuel Consumption

The quantity and cost value delivered at the factory or works of the various classes of fuel consumed by the industry in 1928 is shown separately for each section in Table 10. The total cost of fuel in the entire industry exclusive of electricity amounted to \$688,565, to which the rubber goods section contributed \$512,802 and the footwear section \$175,763. Bituminous coal was the principal fuel, forming 80 per cent of the total cost of all fuel. The cost of electricity purchased in 1928 was \$694,283 as compared with an expenditure of \$579,419 in 1927, an increase of nearly 20 per cent. There was a small decrease as compared with 1927 in the cost of bituminous coal, amounting to \$9,275, whilst the cost of electricity purchased showed an increase of \$114,864.

Table 10.- Fuel Consumption by Classes, Quantity and Value, 1928.

Classes of Fuel	Unit of measure	In Rubber Goods Section		In Rubber Footwear Section	
		Quantity	Value	Quantity	Value
			\$		\$
Bituminous coal (Imported	ton	64,243	346,127	8,401	51,675
(Canadian	ton	9,499	50,082	18,814	106,704
Anthracite coal, all grades	"	118	549	984	4,512
Coke	"	202	1,144	-	-
Gasoline	Gal.	96,704	19,995	68,835	12,788
Kerosene or coal oil	"	353	78	-	-
Fuel oils	"	165,988	9,128	-	-
Gas, manufactured	m.c.ft.	1,956	1,798	-	-
All other fuel	-	-	83,901	-	84
Electricity	-	-	534,050	-	160,233
Total cost	-	-	1,046,852	-	335,996

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 1928 was 57,168 as against 53,637 in 1927. Steam power decreased by 1,415 h.p., and water and other power decreased by 6 h.p. Electric power increased by 4,952 h.p. thus indicating a net increase in horsepower installation of 3,531.

The number of boilers installed for any purpose in 1928 was 80 with a boiler horsepower capacity of 14,012.

Table 11.- Power Installation by Sections, 1928.

Classes of power	Rubber Goods Section		Rubber Footwear Section	
	Units No.	Horsepower according to manufacturers' rating	Units No.	Horsepower according to manufacturers' rating
Steam engines and turbines	12	975	3	435
Gasoline engines	-	-	-	-
Hydraulic turbines or water wheels	-	-	6	2,160
Total primary power	12	975	9	2,595
Electric motors -				
Operated by purchased power	1,969	40,174	486	13,424
Operated by power generated by the establishment	3	860	101	1,095
Total electric motors	1,972	41,034	587	14,519
Total power used in manufacturing	1,984	41,149	495	16,019

THE RUBBER INDUSTRY IN CANADA, 1928.

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 1927 there was a small increase in the cost of materials used in the whole industry, the total for that year being \$44,724,502, whereas in 1928 such cost had risen to a total of \$45,118,570, representing an increase of less than 1 per cent. Raw rubber was the principal item, being nearly 44 per cent of the total cost of materials in 1928 as compared with almost 53 per cent in 1927, the decreased percentage being due to a marked decline in the average price of the commodity from 41 cents per lb. in 1927 to 29.3 cents in 1928. The quantity of reclaimed rubber used in the industry in 1927 was 26,451,017 pounds valued at \$1,950,660 or an average cost of 7.37 cents per lb. as compared with a total of 20,646,795 pounds worth \$1,716,571 or an average price of 8.3 cents per lb. in 1927. The second largest item of materials was tire duck of which 18,042,361 lbs. valued at \$8,804,342 were consumed in 1928 as against 14,811,834 pounds worth \$7,004,605 in 1927. The average price of all ducks was higher in 1928 than in 1927, whilst stockinette sheeting was lower as the following table indicates.

		<u>Average price 1928.</u>	<u>Average price 1927.</u>
Tire duck	Lb.	.488 cents	.473 cents
Hose and belting duck	"	.395 "	.350 "
Shoe duck	Yd.	.531 "	.475 "
Stockinette sheeting	Lb.	.690 "	.727 "

The remaining items of materials show an increase in total cost value over 1927, amounting to \$1,197,209.

Table 12.- Materials used by quantity and cost value, 1928.

Classes of Materials		In Rubber Goods Section		In Rubber Footwear Section	
		Quantity	Cost Value \$	Quantity	Cost Value \$
Rubber, raw	Lb.	57,502,501	16,601,462	9,807,868	3,140,486
Rubber, reclaimed	"	20,982,465	1,541,834	5,468,552	408,826
Tire duck	"	18,042,361	8,804,342	-	-
Hose and belting duck	"	3,325,788	1,275,563	745,645	333,444
Shoe duck	Yd.	244,111	87,581	895,852	518,283
Shoe duck	Lb.	221,880	92,037	462,159	280,457
Stockinette sheeting	Lb.	484,515	361,906	861,711	567,346
Miscellaneous cotton (value only)		-	933,672	-	1,654,266
Cocks, valves, etc. (value only)		-	670,033	-	50,785
Chemicals and mineral compounds (value only)		-	2,446,831	-	928,212
All other materials (value only)		-	2,367,662	-	2,053,542
Total Cost		-	35,182,923	-	9,935,647

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 1928. Raw and partly manufactured materials aggregated in value \$20,041,053, whilst the wholly manufactured totalled \$3,570,490. Of the total value of imports, goods to the value of \$21,643,690 entered Canada from the United States, \$653,813 from the United Kingdom and \$1,314,040 from other countries.

Table 13.-Rubber and Manufactures of Rubber Imported for Consumption, 1928.
(Calendar Year)

Articles Imported by Principal Countries	Quantity	Value \$	Articles Imported (cont'd)	Value Only \$
Raw and Partly Manufactured			Rubber, manufactured	
Balata, crude Lb.			Belting rubber	
United Kingdom	13,639	6,913	United Kingdom	4,404
United States	7,496	2,623	United States	179,606
Total	21,135	9,536	Other Countries	-
			Total	184,010
Rubber and Gutta Percha, Lb.				
Crude			Cement, rubber	
United Kingdom	253,852	49,765	United Kingdom	631
United States	64,047,190	16,863,179	United States	76,073
Straits Settlements	2,995,872	696,638	Other Countries	1,310
Dutch East Indies	1,552,956	371,985	Total	78,014
Other Countries	370,448	77,720	Clothing of rubber	
Total	69,220,318	18,059,287	United Kingdom	164,515
			United States	371,781
Rubber, hard, in sheets Lb.			Germany	36,516
United Kingdom	5,104	2,952	Other Countries	3,754
United States	50,917	33,712	Total	576,566
Other Countries	562	260	Elastic, round or flat	
Total	56,583	36,924	United Kingdom	10,436
Rubber, hard in tubes			United States	21,689
United States	-	15,778	Other Countries	82
Total	-	15,778	Total	32,207
Rubber, powdered Lb.			Gloves, rubber	
United Kingdom	413	3,155	United Kingdom	413
United States	83,277	349,358	United States	18,260
Other Countries	-	-	Other Countries	908
Total	83,690	352,513	Total	19,581
Rubber, recovered Lb.			Hose, rubber	
United Kingdom	5	6	United Kingdom	12,452
United States	3,574,158	1,160,424	United States	216,149
Total	3,574,163	1,160,430	Other Countries	23
Rubber substitute Lb.			Total	228,624
United Kingdom	439	4,653	Hot water bottles	
United States	8,574	148,610	United Kingdom	3,441
Other Countries	38	1,374	United States	27,470
Total	9,051	154,637	Other Countries	324
Rubber thread, not covered Lb.			Total	31,235
United Kingdom	16,760	17,344	Mats and matting, rubber	
United States	210,720	234,593	United Kingdom	3,859
Other Countries	9	11	United States	117,080
Total	227,489	251,948	Other Countries	1,851
			Total	122,790

Imports of Rubber and Rubber Goods (Concluded)

Table 13.- Rubber and Manufactures of Rubber Imported for Consumption, 1928.
(Calendar Year)

Articles Imported by Principal Countries	Quantity	Value \$	Articles Imported	Value Only \$
Rubber, Manufactured, Cont'd			Rubber, Manufactured, Cont'd.	
Boots and shoes, rubber Pair			Packing, rubber \$	
United Kingdom No.	43,491	24,293	United Kingdom	4,343
United States	136,593	204,778	United States	58,103
Other Countries	927	482	Other Countries	305
Total	181,011	229,553	Total	62,751
Tires for bicycles - Pneumatic casings and inner tubes No.			Manufactures of India rubber and gutta- percha, n.o.p. \$	
United Kingdom	840	1,032	United Kingdom	222,654
United States	1,384	2,660	United States	1,126,507
France	18,079	6,979	France	17,944
Other Countries	2	2	Germany	70,465
Total	20,305	10,673	Other Countries	24,418
Tires, pneumatic rubber tire casings, n.o.p.- No.			Total	1,461,988
United Kingdom	176	2,493	Total Imports whether raw or partly manu- factured \$	20,041,053
United States	21,173	228,005	Wholly Manufactured	3,570,490
Other Countries	3	37	Grand Total	23,611,543
Total	21,352	230,535		
Tires inner tubes, n.o.p. No.			Total Imports by countries and value\$	
United Kingdom	35	305	United Kingdom	653,813
United States	32,928	48,971	United States	21,643,690
Other Countries	-	-	France	24,923
Total	32,963	49,276	Germany	106,981
Tires, solid rubber for automobiles and motor trucks No.			Straits Settlements	696,638
United States	721	17,932	Dutch East Indies	371,985
Total	721	17,932	Other Countries	113,513
Tires, solid rubber, n.o.p.			Total	23,611,543
United Kingdom	-	2,435		
United States	-	18,352		
Other Countries	-	595		
Total	-	21,382		
Golf Balls Doz.				
United Kingdom	29,205	110,712		
United States	1,458	6,941		
Total	30,663	117,653		
Heels, rubber Pairs				
United Kingdom	4,978	607		
United States	1,531,643	95,056		
Other Countries	435	57		
Total	1,537,056	95,720		

THE RUBBER INDUSTRY IN CANADA, 1928.
Exports of Rubber and Rubber Goods.

The quantity and value of goods, the produce of Canada, exported to Other Countries, is shown in Table 14, by classes and countries. The total value of goods exported during the calendar year 1928 amounted to \$30,693,462, an increase over 1927 of \$2,692,530 or nearly 9.6 per cent. The principal articles exported were (a) pneumatic tires, (casings) \$16,735,971, canvas shoes with rubber soles \$5,092,198, boots and shoes of rubber \$3,509,660 and pneumatic tires, (inner tubes) \$2,605,729. The destination of Canadian exports by countries shows that of this total, goods to the value of \$6,151,427 went to the United Kingdom, \$3,533,854 to New Zealand, \$3,064,544 to the Argentine Republic, \$1,911,290 to British South Africa, \$2,140,432 to British India, \$1,426,860 to Brazil and \$437,955 to Australia. Approximately 53.8 per cent of all exports went to British dominions and dependencies.

Table 14.- Exports of Canadian Produce by Classes and Countries, for the calendar year 1928.

Countries to which Exported	Waste Rubber		Retting of Rubber		Canvas shoes with rubber soles		Boots and shoes of rubber, n.o.p.		Clothing, rubber incl. waterproofed
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Value only
	Cwt.	\$	Lb.	\$	Pairs	\$	Pairs	\$	\$
United Kingdom	107	802	227,874	74,132	1,405,635	1,031,823	1,362,497	2,438,401	1,173
United States	146,292	246,157	-	-	612	801	196	687	2,251
Argentine Republic	-	-	261,682	86,700	2,200,143	1,272,632	-	-	-
Australia	-	-	65,564	22,821	66,593	68,500	61,402	87,906	-
Belgium	-	-	-	-	-	-	-	-	-
Brazil	-	-	112,480	44,748	-	-	-	-	-
British South Africa	-	-	59,296	22,366	343,316	211,347	6,632	12,287	-
British East Africa	-	-	-	-	-	-	-	-	-
France	-	-	-	-	72,791	59,887	14,131	41,590	-
British India	-	-	22,763	7,785	656,390	443,599	-	-	-
Japan	-	-	41,964	17,173	-	-	-	-	976
Jamaica	-	-	-	-	196,404	166,896	-	-	-
Ceylon	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	174,591	151,318	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Dutch East Indies	-	-	-	-	53,066	47,607	-	-	-
Norway	-	-	-	-	-	-	-	-	-
New Zealand	-	-	120,303	57,961	618,000	469,485	174,880	310,388	-
Uruguay	-	-	-	-	143,659	96,822	-	-	-
Straits Settlements	-	-	41,478	16,479	-	-	-	-	-
Other Countries	2,466	17,008	271,890	120,737	1,445,260	1,071,481	426,343	618,401	24,359
Total by classes	148,865	263,967	1,225,294	470,902	7,376,460	5,092,198	2,046,081	3,509,660	28,759

Date		Description		Amount		Balance	
1911	Jan 1	Balance					
1911	Jan 15	Received from John Doe					
1911	Feb 1	Received from John Doe					
1911	Feb 15	Received from John Doe					
1911	Mar 1	Received from John Doe					
1911	Mar 15	Received from John Doe					
1911	Apr 1	Received from John Doe					
1911	Apr 15	Received from John Doe					
1911	May 1	Received from John Doe					
1911	May 15	Received from John Doe					
1911	Jun 1	Received from John Doe					
1911	Jun 15	Received from John Doe					
1911	Jul 1	Received from John Doe					
1911	Jul 15	Received from John Doe					
1911	Aug 1	Received from John Doe					
1911	Aug 15	Received from John Doe					
1911	Sep 1	Received from John Doe					
1911	Sep 15	Received from John Doe					
1911	Oct 1	Received from John Doe					
1911	Oct 15	Received from John Doe					
1911	Nov 1	Received from John Doe					
1911	Nov 15	Received from John Doe					
1911	Dec 1	Received from John Doe					
1911	Dec 15	Received from John Doe					
1911	Dec 31	Received from John Doe					

This is a statement of account for the year 1911, showing the balance and the amounts received from John Doe. The balance at the beginning of the year was \$100.00. The amounts received from John Doe during the year were as follows:

Date	Amount
Jan 15	\$10.00
Feb 1	\$20.00
Feb 15	\$15.00
Mar 1	\$25.00
Mar 15	\$10.00
Apr 1	\$30.00
Apr 15	\$15.00
May 1	\$20.00
May 15	\$10.00
Jun 1	\$25.00
Jun 15	\$15.00
Jul 1	\$30.00
Jul 15	\$10.00
Aug 1	\$20.00
Aug 15	\$15.00
Sep 1	\$25.00
Sep 15	\$10.00
Oct 1	\$30.00
Oct 15	\$15.00
Nov 1	\$20.00
Nov 15	\$10.00
Dec 1	\$25.00
Dec 15	\$15.00
Dec 31	\$30.00

The total amount received from John Doe during the year was \$500.00. The balance at the end of the year was \$600.00.

THE RUBBER INDUSTRY IN CANADA, 1928.

Exports of Rubber and Rubber Goods - Concluded

Countries to Which Exported	Pneumatic Tires, Casings		Pneumatic Tires, inner tubes		Tires for Vehicles, solid rubber		Hose of Rubber	All other Mfrs. of rubber	Total Value of Exports by Countries.
	Quantity	Value	Quantity	Value	Quantity	Value	Value Only	Value Only	
	No.	\$	No.	\$	No.	\$	\$	\$	\$
United Kingdom	136,767	1,508,322	61,344	115,774	597	9,940	47,490	923,570	6,151,427
United States	2,833	40,413	4,207	5,513	34	223	48,010	6,134	350,189
Argentine Republic	172,610	1,325,917	100,924	244,141	2,042	72,096	-	62,258	3,064,544
Australia	20,439	236,604	8,215	20,124	-	-	-	-	437,955
Belgium	33,713	341,151	26,188	45,057	-	-	-	-	387,008
Brazil	139,927	1,172,379	121,199	183,372	-	-	-	26,361	1,426,860
British South Africa	153,204	1,392,450	159,581	237,819	-	-	35,021	-	1,911,290
British East Africa	10,412	139,519	14,502	29,359	-	-	-	-	168,878
France	13,534	165,303	-	-	-	-	-	-	266,780
British India	147,479	1,344,699	192,647	298,731	1,215	31,493	-	14,125	2,140,432
Japan	50,076	603,726	48,571	100,480	3,666	79,547	-	-	801,902
Jamaica	16,977	182,289	14,357	23,976	-	-	-	-	373,161
Ceylon	15,102	138,595	-	-	-	-	-	-	138,595
Trinidad and Tobago	5,413	73,931	-	-	-	-	-	-	225,249
Netherlands	45,131	548,417	44,436	90,811	-	-	-	36,512	675,740
Dutch East Indies	119,929	961,408	110,414	156,692	-	-	-	-	1,165,707
Norway	10,143	83,434	13,967	24,332	-	-	-	-	107,766
New Zealand	209,551	2,304,394	128,708	233,729	1,038	49,544	60,145	48,208	3,533,854
Uruguay	32,702	208,977	31,654	46,424	-	-	-	-	432,223
Straits Settlements	27,429	206,549	26,644	44,079	690	13,756	-	-	280,863
Other Countries	311,182	3,675,494	367,527	704,516	3,314	104,148	66,450	250,445	6,653,039
Total by classes	1,674,553	16,735,971	1,555,085	2,605,729	12,596	361,547	257,116	1,367,613	30,693,462

Appendix A.-

The following table shows the world production (net exports) of both plantation and wild rubber from 1905 to 1928 by quantity and per cent.

WORLD PRODUCTION, PLANTATION AND WILD RUBBER, 1905-1928

Years	Total Plan- tation tons	Total Wild, Tropical America and Africa - tons	World Production		
			Total tons	Plantation per cent	Wild Per cent
1905	174	59,320	59,494	0.3	99.7
1906	577	62,004	62,581	0.9	99.1
1907	1,157	66,013	67,170	1.7	98.3
1908	1,796	64,770	66,566	2.7	97.3
1909	3,386	70,370	73,756	4.6	95.4
1910	7,269	73,477	80,746	9.0	91.0
1911	14,383	68,446	82,829	17.4	82.6
1912	30,113	73,834	103,949	29.0	71.0
1913	51,721	63,280	115,001	45.0	55.0
1914	73,153	48,052	121,205	60.4	39.6
1915	114,277	54,740	169,017	67.6	32.4
1916	158,993	51,086	210,079	75.7	24.3
1917	221,187	56,751	277,938	79.6	20.4
1918	180,800	36,711	217,511	83.1	16.9
1919	348,574	50,424	398,998	87.4	12.6
1920	304,671	36,464	341,135	89.3	10.7
1921	276,746	23,903	300,649	92.0	8.0
1922	378,232	27,878	406,110	93.1	6.9
1923	379,738	26,685	406,423	93.4	6.6
1924	386,703	28,000	414,703	93.2	6.8
1925	478,900	38,000	516,900	92.6	7.4
1926	585,100	33,000	618,100	94.6	5.4
1927	567,300	38,000	605,300	93.7	6.2
1928	621,000	27,000	648,000	95.8	4.2

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, 613,000 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

Years	Crude Rubber, Plantation and Wild	
	Estimated World Production	Estimated World Consumption
	Tons	Tons
1926.....	606,000	575,000
1927.....	623,000	608,000
1928.....	633,000	641,000
1929.....	637,000	672,000
1930.....	641,000	703,000

Appendix B. - Manufactures of Rubber Goods operating in Canada, 1928.

Name	Location	Products Made
Eastern Rubber Co. Ltd.	Actonvale (Que)	Footwear
American Wringer Co. of Canada Ltd.	Farnham,	Rubber Goods
Paramount International Rubber Co. Ltd.	Farnham	Rubber Goods
Granby Elastic Web Ltd.	Granby	Rubber Goods
Miner Rubber Co. Ltd.	Granby	Rubber Footwear and other rubber goods.
Dominion Rubber Co. Ltd.	Montreal	Rubber Footwear and other rubber goods.
Dominion Rubber Co. Ltd. (Rubber Regenerating Co. of Canada, Ltd.)	Montreal	Rubber Goods
Columbus Rubber Co. of Montreal	Montreal	Rubber Footwear
Pall Mall Specialties	Montreal	Rubber Goods
Dominion Rubber Co. Ltd.	St. Jerome	Rubber Footwear
Anderson Industries, Ltd.	Sherbrooke	Rubber Goods
Panther Rubber Co. Ltd.	Sherbrooke	Rubber Goods
Niagara Rubber Goods Ltd.	Beamsville Ont.	Rubber tires
Goodyear Tire & Rubber Co. of Canada, Ltd.	Bowmanville	Rubber tires and other rubber goods
Western Rubber Works	Caledon	Rubber goods
Dominion Rubber Co. Ltd.	Elmira	Rubber Footwear
Canadian General Rubber Co.	Galt	Rubber goods
Northern Rubber Co. Ltd.	Guelph	Rubber footwear
Sterling Rubber Co. Ltd.	Guelph	Rubber Goods
Firestone Tire & Rubber Co. of Canada, Ltd.	Hamilton	Rubber tires and other rubber goods
Canadian Goodrich Co. Ltd.	Kitchener	Rubber footwear, tires and other rubber goods
Dominion Rubber Co. Ltd.	Kitchener	Rubber footwear
Dominion Rubber Co. Ltd.	Kitchener	Rubber tires and other rubber goods
Kaufman Rubber Co. Ltd.	Kitchener	Rubber footwear
Goodyear Tire & Rubber Co.	New Toronto	Rubber tires and other rubber goods
Dominion Rubber Co. Ltd.	Port Dalhousie	Rubber footwear
Verner Smith Co. Ltd.	Rockwood	Rubber Goods
G.L. Griffith & Sons Ltd.	Stratford	Rubber Goods
Canadian I.T.S. Rubber Co. Ltd.	(West) Toronto	Rubber Goods
Dunlop Tire & Rubber Goods Co. Ltd.	Toronto	Rubber Tires and other rubber goods
Gutta Percha & Rubber Ltd.	Toronto	Rubber tires, foot- wear and other rubber goods
Hannon Tire and Rubber Co. Ltd.	Toronto	Rubber tires.
K. & S. Tire & Rubber Goods Ltd.	Toronto	Rubber tires and other rubber goods
Kelton Rubber Co.	Toronto	Rubber goods
I.B. Kleinert Rubber Co.	Toronto	Rubber goods
S.C. Williams	Toronto	Rubber goods
Locktite Patch Co.	Walkerville	Rubber Goods
Joseph Stokes Rubber Co. Ltd.	Welland	Rubber Goods
Canadian Battery Container Corp. Ltd.	Windsor	Rubber Goods
De Vilbiss Manufacturing Co. Ltd.	Windsor	Rubber Goods
Wingham Rubber Co. Ltd.	Wingham	Rubber Tires and inner tubes
Woodstock Rubber Co. Ltd.	Woodstock	Rubber footwear
Gregory Tire & Rubber Co. Ltd.	Fort Coquitlam, B.C.	Rubber Tires
Durable Mat Co. (Canada), Ltd.	Victoria	Rubber goods
National Rubber Co. Ltd.	Toronto	Rubber goods

