per capita for all purposes to 1,845 kilowatt hours, which is more than twice the average in the United States and almost 10 times the average in Great Britain, the large consumption by the pulp and paper industry is the main factor.

Other factors entering into the relative per capita consumption of electric energy in Canada and the United States are the costs of fuel and the water power developments. Cheap fuel in the United States tends to increase the proportion of industries producing their own power instead of purchasing it from central electric stations, and large hydro electric plants in Canada located in the industrial sections tend to increase the proportion of industries purchasing power. In Canada 98 p.c. of the output of central electric stations in 1929 was from water power, whereas in the United States the proportion was only 36 p.c. In the United States the capacity of motors operated on purchased power in all industries was only 44 p.c. of the total power employed in 1925 (the latest year for which data are available), whereas in Canada the proportion for 1925 was 51 p.c. and for 1927 it has increased to 59 p.c.

4.—Summary Statistics of Central Electric Stations, calendar years 1917-1928.

Years.	Number of stations.[1]	Capital invested.	Revenue from sale of power.[2]	Total horse power.[3]	Kilowatt hours generated.	Customers.	Persons employed.	Salaries and wages.
		$	$	h.p.	(000)	No.	No.	$
1917.....	666	356,004,168	–	1,844,571	–	–	8,847	7,777,715
1918.....	795	401,942,402	43,908,085	1,841,114	–	–	9,696	10,354,242
1919.....	805	416,512,010	47,933,490	1,907,135	5,497,204	–	9,656	11,487,132
1920.....	506	448,273,642	53,436,082	1,897,024	5,894,867	894,158	10,693	14,626,709
1921.....	510	484,669,451	58,271,622	1,977,857	5,614,132	973,212	10,714	15,234,678
1922.....	522	568,068,752	62,173,179	2,258,398	6,740,750	1,053,545	10,684	14,495,250
1923.....	532	581,780,611	67,496,893	2,423,845	8,099,192	1,112,547	11,094	14,784,038
1924.....	532	628,565,093	74,616,863	2,849,450	9,315,277	1,200,950	12,956	17,946,584
1925.....	563	726,721,087	79,341,584	3,569,527	10,110,459	1,279,731	13,263	18,755,907
1926.....	595	756,220,066	88,933,733	3,769,323	12,093,445	1,337,562	13,406	19,943,000
1927.....	629	866,825,285	104,033,297	4,173,349	14,549,099	1,381,966	14,708	22,946,315
1928.....	601	956,919,603	112,326,819	4,627,667	16,336,518	1,464,005	15,855	24,253,820

[1] Excluding non-generating stations in 1920 and subsequent years. [2] Revised to exclude duplications.
[3] Not including auxiliary plant equipment which is included in installation shown in central electric stations under Manufactures on p. 407.

Equipment of Central Electric Stations.—The primary power equipment of all central electric stations aggregated 4,627,667 h.p. in 1928. This included water wheels and turbines, steam reciprocating engines and turbines and internal combustion engines. The hydraulic power machines greatly predominated over the other prime movers, providing 96·1 p.c. of the total capacity, with steam turbines, steam reciprocating engines and internal combustion engines making up the remaining 3·9 p.c. Not included in the above were steam engines and internal combustion engines with a capacity of 159,233 h.p., or 3·3 p.c. of the total power capacity, installed as auxiliary or standby equipment.

Central electric stations that have no water power, but are operated by steam and internal combustion engines, are on the whole small stations. Of the 115 steam reciprocating engines installed in central electric stations in 1928, only 13 in number, or about 11 p.c., were over 500 h.p. The steam turbines averaged over 2,000 h.p. with 7 units averaging 7,877 h.p., but there were only 56 steam turbines in the industry and these were confined to 27 stations, whereas the 749 water wheels and turbines averaged 5,935 h.p.

The majority of the fuel-using stations are primarily for lighting purposes, using the cheapest fuel procurable, generally local coal. In the Prairie Provinces