As shown in that table the total electric power generated by central electric stations in 1948 was 42,389,681 kwh. For a complete presentation, the power generated by manufacturing industries for their own use and the power generated by the primary mining industry for use in its own operations must be added. There are a few other sources of electric energy such as electric railways which produced 11,179,700 kwh. during 1948. This production has been taken into the annual total shown in Table 25. There are numerous small lighting and power plants on tarms, rural homes, summer resorts, stores, etc., where electricity from central electric stations is not available and for which there are no available data. The following table gives available data separately and as a combined total. Of the total electric power generated in Canada in 1948. 89.7 p.c. is shown to have been developed in central electric stations and of this 3.1 p.c. was generated by thermal engines (see Table 5, Sect. 2), the remainder having been produced hydraulically. Of the 10.3 p.c. generated by industry for its own use, 9.7 p.c. was developed by the manufacturing industries and 0.6 p.c. by the mining industry.

25.—Total Power Generated by Central Electric Stations, Manufacturing and Mining Industries, 1938-48

| d at p. 516 of the 1948-49 edition of the Year Book. |
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| Year | Central<br>Electric Stations   |  | Manufacturing<br>Industries   |   | Mining<br>Industries  |   | Total <sup>1</sup>   |
|------|--|--|---|---|---|---|--|
|      | '000 kwh.  | pc.  | '000 kwh.   | p.c.  | '000 kwh.   | p.c.  | '000 kwh.  |
| 1938 | 26, 154, 160<br>28, 338, 030<br>30, 109, 283<br>33, 317, 663<br>37, 355, 179<br>40, 479, 593<br>40, 598, 779<br>40, 130, 054<br>41, 736, 987<br>43, 424, 799<br>42, 389, 681 | 91.4<br>91.5<br>91.1<br>91.3<br>91.1<br>92.1<br>93.2<br>93.9<br>93.4<br>92.1<br>89.7 | 2,198,732<br>2,369,338<br>2,640,919<br>2,840,843<br>3,345,445<br>3,211,609<br>2,752,125<br>2,362,260<br>2,714,262<br>3,467,535<br>4,590,677 | 7·7<br>7·6<br>8·0<br>7·8<br>8·2<br>7·3<br>6·3<br>5·5<br>6·1<br>7·4<br>9·7 | 240,078<br>262,161<br>303,077<br>309,374<br>296,734<br>248,848<br>210,554<br>217,249<br>199,950<br>269,412<br>270,522 | 0.8<br>0.9<br>0.8<br>0.7<br>0.6<br>0.5<br>0.5<br>0.6<br>0.6 | 28, 602, 697<br>30, 978, 628<br>33, 062, 458<br>36, 479, 146<br>41, 007, 482<br>43, 950, 190<br>43, 571, 276<br>42, 720, 374<br>44, 662, 974<br>47, 174, 384<br>47, 262, 060 |

<sup>&</sup>lt;sup>1</sup> Includes power generated by electric railways for their own use.

## Section 4.—Power Equipment in Canadian Manufacturing and Mining Industries

Table 26 shows the power equipment installed in the manufacturing and mining industries of Canada from 1941 to 1948. The figures for the eight years show that primary power increased from 2,185,050 h.p. to 2,808,650 h.p., or by 29 p.c., while the installation of electric motors operated by purchased power shows an increase of no less than 1,455,682 h.p. In considering the increase in the latter figures, it must be borne in mind that the shift from belts and shafting to individual motors at each machine does not necessarily mean that an amount of power is used equivalent to the increased capacity: there is always a margin by which installed equipment exceeds the simultaneous load.

Of the total primary power installed in 1948, manufacturing establishments accounted for 91 p.c., while of the total electric motors operated by purchased power, manufacturing accounted for 86 p.c. and mining for 14 p.c.