## WATERWORKS UNDERTAKINGS.

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## Introductory.*

The tables on pages 360 to 366 are based on returns received from Companies (including hydraulic power companies) and Local Authorities in Great Britain and Northern Ireland in respect of Waterworks Undertakings operated by them in 1924. The number of such returns received was 1,087 .

The particulars given do not cover private waterworks owned by railway companies and other concerns maintaining waterworks solely for their own uses, nor water undertakings controlled by Government Departments.

Summary of results.-The following table shows the main results of the Censuses of 1924, 1912 and 1907, comparison between the figures for the three years being subject to the qualifications mentioned in the next paragraph. It should be noted that the accounting period normally used by Local Authorities in England and Wales and in Northern Ireland is the financial year ending on the 31st March, and by Authorities in Scotland, on the 15th May; the returns made in respect of water undertakings operated by Local Authorities, therefore, usually cover periods of twelve months ended at those dates in the years 1925, 1913 and 1908.

[^0]| Particulars. | Unit. | 1924. |  |  | 1912. | 1907. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Companies. | Local Authorities. | Total. | Total. | Total. |
| Value of water supplied and work done for consumers <br> (Gross output) | $f^{\prime} 000$ | 4,082 | $\begin{array}{r} 16,762 \\ 3,251 \end{array}$ | 20,844 |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  | 11,138 1,307 | 10,634 1,559 |
| Cost of materials used.. |  | 941 3,141 | r | 16,652 | 9,831 | 9,075 |
| Net output .. . . | " |  |  | 16,652 |  |  |
| Average number of persons employed | No. | 5,924 | 26,617 | 32,541 | 20,088 | 22,104 |
| Net output per person employed | Ł | 530 | 507 | 512 | 489 | 411 |
| Mechanical power available : Prime movers | H.P. | 64,008 | 115,663 | 179,671 | 137,306 | 138,105 |
| Electric motors driven by purchased electricity. . | ,, | 7,049 | 13,254 | 20,303 | 1,139 | * |

Qualifications affecting comparisons.-In considering the above table and the other tables in this report which show figures for different censal years, it should be borne in mind that-
(1) The comparability of figures relating to value or cost is affected by the changes which have taken place in the general purchasing power of money.
(2) The Census of 1907 covered Great Britain and the whole of Ireland but that for 1924 applied only to Great Britain and Northern Ireland. The exclusion of Southern Ireland does not seriously affect the comparability of the figures since, according to the Census of Production taken by the Government of the Irish Free State in respect of the year 1926, the total value of water supplied and work done for consumers by employees of water undertakings in the Free State in that year amounted to $£^{2} 48,054$ and the number of persons employed was 954 .
(3) The Censuses of 1907 and 1924 extended to all undertakings, however small, but, in 1912, undertakings employing not more than five persons (excluding the proprietors) werc required to state only the average number of persons employed by them in the year. According to the information so furnished, the average number of persons employed in the establishments thus excluded was 1,263 , or about $6 \cdot 3$ per cent. of the number employed by the remaining undertakings as shown in the above table. Moreover, correspondence on defective returns for 1912 had not been completed when the war compelled suspension of this work, and in these circumstances detailed information for 1912 is not given in the remainder of this report. The defects in the aggregate figures given above are, however, not important. Valuation of output and cost of materials. - The figures of gross output represent the selling value of water supplied in each year, plus the total amount charged for laying and fixing pipes and fixing
meters and fittings for consumers. Most water undertakings employ a staff to carry out work of construction, alteration, maintenance and repair of waterworks, buildings, machinery, plant, etc., but the cost of such work, whether defrayed out of capital or revenue, has, like similar work carried out for waterworks undertakings by contracting firms, been treated as a charge on the water sold and the total value of such work returned to the Census is, therefore, not included in the gross output shown above. Such work is, however, not necessarily a charge on the value of the water supplied in the year in which the work is carried out. Particulars of such work of construction, maintenance and repair were obtained in order to complete the survey of building and contracting work and, in the report on the Building and Contracting Trades, they are included in the general aggregates, together with work of similar kinds carried out by builders and contractors.
The figures of cost of materials are inclusive of materials used in all work of construction, maintenance and repair carried out by the undertakings' own employees whether chargeable to revenue or to capital account, and may, therefore, be somewhat overstated in relation to those for gross output, since work done on capital account, excluded from the latter, may be included in the former. There may also be some similar overstatement in the figures shown for numbers of persons employed in relation to the gross output figures. These factors should be borne in mind in considering the net output and net output per head for water undertakings taken by themselves, and also in relation to the corresponding figures for other industries.
It should, further, be noted that the value of the output of, and the cost of materials used by, water undertakings as a whole are overstated also in respect of the water purchased by one undertaking from another and included by both in the Census returns. This matter is discussed on page 357, where it is estimated that the total amount of duplication involved amounted to not less than $£ 700,000$.

## Production.

Detailed information relating to the water supplied by water undertakings and the constructional and repair work carried out by their employees in the year 1924 will be found, for Companies, in Table II on pages 360 and 361, and, for Local Authorities, in Table II on pages 363 and 364.

Total quantity of water supplied.-Owing to the limitations imposed by the Census of Production Act, 1906, the Board of Trade were precluded from requiring water undertakings to furnish compulsory statements of the quantities of water supplied, but this information was furnished voluntarily by all important Companies and Local Authorities.
Undertakings that supplied water valued at $£ 19,365,000$, or nearly 93 per cent. of the total value ( $£ 20,545,000$ ) of water supplied by all undertakings, stated that they supplied 452,200 million
gallons of water in 1924, of which 425,400 million gallons were supplied direct to consumers for public or private purposes and 26,800 million gallons were sold to other water undertakings. Applying the same valuation, the total quantity of water supplied in 1924 may be estimated at about 490,000 million gallons; the corresponding estimate for 1907 was 390,000 million gallons. These aggregate figures contain duplication on account of water sold by one undertaking to another and included by both in their Census returns. From particulars supplied voluntarily, it is estimated that about 20,000 million gallons of water that were supplied to direct consumers in 1924 were purchased from other water undertakings, and, making allowance for these supplies, the bulk of which was probably purchased from undertakings that furnished returns, the total quantity of water supplied in 1924, free from duplication, may be estimated at about 470,000 million gallons. The corres ponding estimate for the year 1907 was about 385,000 million gallons, which includes water supplied in Southern Ireland, so that the total quantity of water recorded as supplied in 1924 was over 22 per cent. greater than in 1907.

Value of water supplied and work done for consumers.-The following statement gives particulars of the value of water supplied by undertakings in 1924 and 1907, together with the amount received in those years for work done for consumers :-

| Water supplied and work done for consumers. | Companies. |  | Local Authorities. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1924. | 1907. | 1924. | 1907. | 1924. | 1907. |
|  | $£^{\prime} 000$ | $f^{\prime} 000$ | $£^{\prime} 000$ | $£^{\prime} 000$ | $£^{\prime} 000$ | $f^{\prime} 000$ |
| Water sold to other water undertakings | 47 |  | 777 |  | 824 |  |
| Water supplied for public purposes (e.g. street watering, public baths, etc. | 72 |  | 384 |  | 456 |  |
| Water supplied to private consumers for domestic and trade purposes | 3,826 |  | 14,861 |  | 18,687 |  |
| Water supplied for public and private purposes, not separately distinguished | 68 |  | 510 |  | 578 |  |
| Total value of water supplied | 4,013 | 2,148 | 16,532 | 8,341 | 20,545 | 10,489 |
| Laying and fixing pipes, fixing meters and fittings for consumers (exclusive of cost of pipes, meters and fittings) .. | 69 | 24 | 230 | 121 | 299 | 145 |
| Total value of water supplied AND WORK DONE FOR. CONSUMERS | 4,082 | 2,172 | 16,762 | 8,462 | 20,844 | 10,634 |

* Not separately recorded.

The average revenue per million gallons supplied to consumers was $£ 42$ in 1924 and $£ 27$ in 1907.
The above statement is exclusive of particulars relating to certain smaller Authorities in respect of water supplied without special charge or of water obtained from public wells.

Work of construction, alteration, maintenance and repair carried out by employees of water undertakings.-The following statement shows the value of the principal classes of constructional and repair work carried out in 1924 and 1907 by employees of Companies and Local Authorities. Such work was valued at cost, i.e. at a sum made up of wages paid, the cost of materials used in the work and a proportion of the general establishment charges.

| Kind of work. | Companies. |  | Local Authorities. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1924. | 1907. | 1924. | 1907. | 1924. | 1907. |
|  | \&'000 | \&'000 | $¢^{\prime} 000$ | $£^{\prime} 000$ | $£^{\prime} 000$ | $\ell^{\prime} 000$ |
| Construction, alteration, main- tenance and repair of waterworks, including hydraulic power works |  |  |  |  |  |  |
| Reservoirs, wells, aqueducts, conduits, and trunk, distributing and service mains | 789 | 408 | 4,120 | 1,372 | 4,909 | 1,780 |
| Buildings in connexion with above | 73 | 21 | 124 | 22 | 196 | 43 |
| Machinery and plant in connexion with above | 129 | 61 | 394 | 66 | 524 | 127 |
| Work not separately distin guished | 44 | 69 | 419 | 344 | 463 | 413 |
| Total value of work done on WATER WORKS, BUILDINGS, | 1,035 | 559 | 5,057 | 1,804 | 6,092 | 2,363 |

These figures cover all work of the specified kinds, whether charged to revenue or capital account, carried out by employees of water undertakings in the two years and, for the reasons explained on pages 354 and 355 , these sums have not been treated as an addition to the value of the gross output of these undertakings.

Duplication in value of reater supplied. -The gross value of water supplied and work done for consumers in $1924(£ 20,844,000)$ is inclusive of the value of water, estimated at about 20,000 million gallons, supplied from certain undertakings to others for sale to direct consumers. The value of these supplies may be estimated at not less than $£ 700,000$, so that, excluding such duplication, the value of the output of water undertakings in 1924 was roughly $£ 20,000,000$. The corresponding net figure estimated for 1907 was £ $10,525,000$.

Cost of materials.-The cost of materials used in 1924 by Companies was returned as $£ 941,000$ and by Local Authorities as $£ 3,251,000$, or $£ 4,192,000$ in all, a sum which, by the exclusion of water purchased by one undertaking from another and included by both in their Census returns, is reduced to about $£ 3,390,000$. The corresponding net figure for 1907 was about $£ 1,450,000$.
Net output.-The net output in 1924 of Companies (whose gross output was valued at $£ 4,082,000$ ) was $£ 3,141,000$, and of Local Authorities (whose gross output was valued at $£ 16,762,000$ ) was $£ 13,511,000$, or $£ 16,652,000$ in all, that sum representing, without duplication, the total amount by which the value of the gross output exceeded the cost of the materials used.

The net output per head of persons employed in the censal year 1924 was $£ 530$ for Companies and $£ 507$ for Local Authorities, as compared with $£ 366$ and $£ 423$, respectively, in 1907.

## Employment.

The detailed information relating to employment in 1924 is summarised, for Companies, in Table III on page 361, and, for Local Authorities, in Table III on pages 364 and 365. The following table sets out certain particulars for that year together with those relating to the 1907 Census. For the purpose of this comparison, the average number of operatives of each sex returned for 1924 have been divided between the two age-groups in the proportions shown by the data relating to the week ended 18th October.


The increase in the proportion of administrative staff to operative staff was relatively small, viz. from slightly over 19 per cent. in 1907 to 20 per cent. in 1924, the increase in the case of the staffs of Companies contributing the more important share to this expansion.

The numbers of operatives recorded month by month in 1924 by Companies ranged from 132 below the average, in January, to 62 above the average, in July (see Table IIIB on page 361) ; and by Local Authorities from 1,156 below the average in January, to 913 above the average in July (see Table IIIB on page 365).

## Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised, for Companies, in Table IV on page 362, and, for Local Authorities, in Table IV on page 366. The following table sets out the particulars for 1924 and 1907 relating to the capacity and kinds of prime movers and the capacity of electric generators installed:-

| Power equipment. | Companies. |  | Local Authorities. |  | Companies and Local Authorities. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1924. | 1907. | 1924. | 1907. | 1924. | 1907. |
| Prime movers :- | H.P. | H.P. | H.P. | H.P. | H.P. | H.P. |
| Reciprocating steam engines | 46,478 | 42,260 | 89,668 | 85,125 | 136,146 | 127,385 |
| Steam turbines ... | 540 |  | 1,318 | - 238 | 1,858 | 245 |
| Gas engines . | 8,767 |  | 13,986 |  | 22,753 |  |
| Petrol and light oil engines | 761 | \} 4,064 | 2,925 | \} 3,853 | 3,686 | \} 7,917 |
| Heavy oil engines .. | 6,905 |  | 4,763 |  | 11,668 |  |
| Water power . . | 547 | 402 | 2,669 | 2,131 | 3,216 | 2,533 |
| Other . . | 10 | 21 | 334 | 4 | 344 | 25 |
| Total | 64,008 | 46,754 | 115,663 | 91,351 | 179,671 | 138,105 |
| Electric generators : Driven by- | Kw. | Kw. | Kw. | Kw. | Kw. | Kw. |
| Reciprocating steam engines | 282 |  | 854 |  | 1,136 |  |
| Steam turbines .. | 10 |  | 4 |  | 14 |  |
| Gas engines $\quad$. | 17 |  | 565 | * | 582 | * |
| Petrol and light oil engines | 21 |  | 43 |  | 64 |  |
| Heavy oil engines .. | 442 |  | 51 |  | 493 |  |
| Water power .. | 26 |  | 432 | ) | 458 |  |
| Total .. .. | 798 | * | 1,949 | * | 2,747 | * |

The capacity of electric motors recorded in 1924 was as shown below :-

| Electric motors. |  |  | 1924. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

Corresponding information was not required for 1907.

## TABLES.

Companies.

## I.-Summary of results.

Note.-No water supplied by Companies was recorded in Northern Ireland.

| Particulars. |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

* In order to avoid the possible disclosure of information relating to individual companies, figures are given only for Great Britain as a whole.


## II.-Production.

A. - VALUE OF WATER SUPPLIED AND WORK DONE FOR CONSUMERS.

| Water supplied and work done for consumers. | Great Britain.* |
| :---: | :---: |
|  | Net selling value. |
| Water sold to other undertakings | $\begin{array}{r} £^{\prime} 000 \\ 47 \end{array}$ |
| Water supplied for public purposes (e.g. street watering, public baths, etc.) | 72 |
| Water supplied to private consumers for trade and domestic purposes | $3,826$ |
| Water supplied for public and private purposes, not separately distinguished | 68 |
| Total value of water supplied | 4,013 |
| Laying and fixing pipes, fixing meters and fittings for consumers (exclusive of cost of pipes, meters, etc.) | $69 \dagger$ |
| Total value of water supplied and work done for consumers (Gross output) | 4,082 |

[^1]$\dagger$ Amount charged.
B.-VALUE OF CONSTRUCTION AND REPAIR WORK CARRIED OUT BY EMPLOYEES OF WATERWORKS UNDERTAKINGS ON WATERWORKS, BUILDINGS, ETC.

| Kind of work done. | $\underset{\text { Wales.* }}{\text { England }}$ |
| :---: | :---: |
|  | Value. |
|  | $\chi^{\prime} 000$ |
| Construction, alteration, maintenance and repair of waterworks, including hydraulic power works:- |  |
| Reservoirs, wells, aqueducts, conduits, and trunk, distributing and service mains | 789 |
| Buildings in connexion with above | 73 |
| Machinery and plant in connexion with above | 129 |
| Work not separately distinguished | 44 |
| Total value of work done on waterworks, buildings, etc. | 1,035 |

* No such work was recorded for Scotland.


## III.-Employment.

A.-Numbers employed in week ended 18th October, 1924.

| Kind of staff. | Males. |  | Females. |  | Males and females. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Under } \\ & 18 . \end{aligned}$ | $\begin{gathered} \text { All } \\ \text { ages. } \end{gathered}$ | $\begin{aligned} & \text { Under } \\ & 18 . \end{aligned}$ | $\underset{\text { ages. }}{\text { all }}$ | $\begin{aligned} & \text { Under } \\ & 18 . \end{aligned}$ | $\begin{aligned} & \text { All } \\ & \text { ages. } \end{aligned}$ |
| Great Britain:-* <br> Operatives <br> Administrative, technical and clerical staff | 125 | 4,544 | - | 31 | 125 | 4,575 |
|  |  |  |  |  |  |  |
|  | 67 | 1,216 | 8 | 129 | 75 | 1,345 |
| Total. . . . . | 192 | 5,760 | 8 | 160 | 200 | 5,920 |

* See footnote to Table I
B.-Operatives employed in one week in each month of 1924.


[^2]
## IV.-Mechanical Power.

Particulars of prime movers, electric generators and ELECTRIC MOTORS.


* No mechanical power was recorded for Scotland

Local Authorities.
I. Summary of results.

| Particulars. | Unit. | England and Wales. | Scotland. | Great Britain. | Northern Ireland. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Value of water supplied and work done for consumers (Gross output) $\qquad$ | $£^{\prime} 000$ | 14,976 | 1,560 | 16,536 | 226 |
| Cost of materials used ... |  | 3,010 | 223 | 3,233 | 18 |
| Net output .. | ", | 11,966 | 1,337 | 13,303 | 208 |
| Average number of persons employed | No. | 23,822 | 2,366 | 26,188 | 429 |
| Net output per person employed | も | 502 | 565 | 508 | 485 |
| Mechanical power avail-able:- |  |  |  |  |  |
| Prime movers .. .. | H.P. | 112,434 | 2,613 | 115,047 | 616 |
| Electric motors driven by purchased electricity | , | 11,953 | 1,121 | 13,074 | 180 |

## II.-Production.

A.-Value of water supplied and work done for consumers.

| Water supplied and work done for consumers. | England and | Scotland. | Great Britain. | Northern Ireland. |
| :---: | :---: | :---: | :---: | :---: |
|  | Net selling value. | Net selling value. | Net selling value. | Net selling value. |
| Water sold to other undertakings . Water supplied for public purposes (e.g. street watering, public baths, etc.) | $\begin{array}{r} £^{\prime} 000 \\ 737 \end{array}$ | $\begin{array}{r} £^{\prime} 000 \\ 39 \end{array}$ | $\begin{array}{r} £^{\prime} 000 \\ 776 \end{array}$ | $£^{\prime} 000$ |
|  | 343 | 38 | 381 | 3 |
| Water supplied to private consumers for trade and domestic purposes | 13,435 | 1,210 | 14,645 | 216 |
| Water supplied for public and private purposes, not separately distinguished | 255 | 250 | 505 | 5 |
| Total value of water supplied | 14,770 | 1,537 | 16,307 | 225 |
| Laying and fixing pipes, fixing meters and fittings for consumers (exclusive of cost of pipes, meters, etc.) | 206* | $23 *$ | 229* | 1* |
| Total value of water supplied and work done for consumers (Gross output) | 14,976 | 1,560 | 16,536 | 226 |

B.-Value of construction and repair work carried out by EMPLOYEES OF WATERWORKS UNDERTAKINGS ON WATERWORKS, BUILDINGS, ETC.

| Kind of work done. | ${ }_{\text {England and }}^{\text {Wales. }}$ | Scotland. | Great Britain. | Northern |
| :---: | :---: | :---: | :---: | :---: |
|  | Value. | Value. | Value. | Value. |
|  | ¢'000 | $¢^{\prime} 000$ | $£^{\prime} 000$ | $£^{\prime} 000$ |
|  |  |  |  |  |
| Reservoirs, wells, aqueducts, conduits, and trunk, distributing and service mains | 3,725 | ${ }^{351} 6$ | 4,076 121 | ${ }_{4}^{44}$ |
| Buildings in connexion with above | 115 | 6 |  |  |
| Machinery and plant in connexion with above | 386 | 185 | 389 | ${ }_{3}^{5}$ |
| Work not separately distinguished | 231 | 185 | 416 | 3 |
| Total value of work done on WATERWORKS, BUILDINGS, ETC... | 4,457 | 545 | 5,002 | 55 |

## III.-Employment.

A.-Numbers employed in week ended 18th October, 1924.

| Kind of staff. | Males. |  | Females. |  | Males and females. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under Under 18. | $\underset{\substack{\text { All } \\ \text { ages. }}}{ }$ | $\begin{aligned} & \text { Under } \\ & 18 . \end{aligned}$ | $\underset{\text { ages. }}{\substack{\text { All }}}$ | Under $18$ | $\begin{gathered} \text { All } \\ \text { ages. } \end{gathered}$ |
| England and Wales :Operatives Administrative, etc.* | $\begin{array}{r} 265 \\ 80 \end{array}$ | $\begin{array}{r} 19,806 \\ 3,350 \end{array}$ | 3 8 | 174 239 | $\begin{array}{r} 268 \\ 88 \end{array}$ | $\begin{array}{r} 19,980 \\ 3,589 \end{array}$ |
| Total | 345 | 23,156 | 11 | 413 | 356 | 23,569 |
| Scotland:Operatives Administrative, etc.* | 23 11 | 2,017 351 | -1 | 18 28 | $\begin{aligned} & 23 \\ & 12 \end{aligned}$ | $\begin{array}{r} 2,035 \\ \quad 379 \end{array}$ |
| Total.. | 34 | 2,368 | 1 | 46 | 35 | 2,414 |
| Great Britain :Operatives .. Administrative, etc.* | 288 91 | $\begin{array}{r} 21,823 \\ 3,701 \end{array}$ | 3 9 | $\begin{aligned} & 192 \\ & 267 \end{aligned}$ | $\begin{aligned} & 291 \\ & 100 \end{aligned}$ | $\begin{array}{r} 22,015 \\ 3,968 \end{array}$ |
| Total | 379 | 25,524 | 12 | 459 | 391 | 25,983 |
| Northern Ireland:Operatives Administrative, etc.* | 二 | 290 103 | 二 | 4 4 | - | $\begin{aligned} & 294 \\ & 107 \end{aligned}$ |
| Total.. | - | 393 | - | 8 | - | 401 |
| United Kingdom:Total.. | 379 | 25,917 | 12 | 467 | 391 | 26,384 |

[^3]
## IV.-Mechanical Power.

PARTICULARS OF PRIME MOVERS, ELECTRIC GENERATORS AND ELECTRIC MOTORS

| (a) Ordinarily in use. <br> (b) In reserve or idle. | England and Wales. | Scotland. | Great Britain. | Northern Ireland. |
| :---: | :---: | :---: | :---: | :---: |
|  | H.P. | H.P. | H.P. | H.P. |
| Prime movers :- |  |  |  | 228 |
| Reciprocating steam engines $\left\{\begin{array}{l}(a) \\ (b)\end{array}\right.$ | 70,103 17,194 | 1,560 325 | 717,663 | 258 |
| Steam turbines .. .. $\left\{\begin{array}{l}(a) \\ (b)\end{array}\right.$ | 378 | 30 | 408 910 | - |
| Steam turbines $\quad \cdots \cdots\left\{\begin{array}{l}(b) \\ (a)\end{array}\right.$ | 910 9,021 | 127 | 910 9,148 | 35 |
| Gas engines . . . . . ${ }^{\text {a }}$ (b) | 4,718 | 50 | 4,768 | 35 |
| Petrol and light oil engines $\{(a)$ | 2,223 | 50 | 2,273 | 12 |
| Petrol and light oil engines $\{$ (b) | 582 | 58 | 640 | - |
| Heavy oil engines . . .. $\{(a)$ | 4,178 | 77 | 4,255 | 46 |
| Heavy oil engines .. $\quad$ (b) | 448 | 14 | 462 | - |
| Water power $\quad . . \quad \ldots\left\{\begin{array}{l}(a) \\ (b)\end{array}\right.$ | 2,241 | 282 | 2,523 | - |
| , ${ }^{(a)}$ | 194 | 40 | 146 | 2 |
| Other.. . . . . ${ }^{\text {( }}$ ( $)$ | 138 | - | 138 | - |
| Total $\quad \cdots \quad \cdots\left\{\begin{array}{l}(a) \\ (b)\end{array}\right.$ | $\begin{aligned} & 88,338 \\ & 24,096 \end{aligned}$ | $\begin{array}{r} 2,126 \\ 487 \end{array}$ | $\begin{aligned} & 90,464 \\ & 24,583 \end{aligned}$ | $\begin{aligned} & 323 \\ & 293 \end{aligned}$ |
| Total of prime movers installed | 112,434 | 2,613 | 115,047 | 616 |
|  | Kw. | Kw. | Kw. | Kw. |
| Electric generators:Driven by- |  |  |  |  |
| Reciprocating steam $\{(a)$ | 699 | - | 699 | 6 |
| engines .. .. .. $(b)$ | 149 | - | 149 | - |
| Steam turbines .. .. (a) | 4 | - | 4 | - |
| Gas engines .. .. $\left\{\begin{array}{l}(a) \\ (b)\end{array}\right.$ | 500 | - | 500 | - |
| Gas engines $\quad \cdots \quad \cdots\{(b)$ | 65 | - | 65 | - |
| Petrol and light oil engines $\left\{\begin{array}{l}(a) \\ (b)\end{array}\right.$ | 41 | - | 41 | - |
| Petrol and | 2 | - | $\stackrel{2}{1}$ |  |
| Heavy oil engines .. (a) | 51 | - | 51 | - |
| Water power .. $\quad .\left\{\begin{array}{l}(a) \\ (b)\end{array}\right.$ | 349 | 80 | 429 3 | - |
|  |  |  |  | 6 |
| Total .. .. $\left\{\begin{array}{l}(a) \\ (b)\end{array}\right.$ | 1,644 216 | 8 | -219 | - |
| Total of electric generators |  |  |  | 6 |
| installed | 1,860 | 83 | 1,943 | 6 |
|  | H.P. | H.P. | H.P. | H.P. |
| Electric motors:- |  |  |  |  |
| Driven by- |  |  |  |  |
| Electricity generated in $(a)$ own works | 3,175 579 | 7 | - 586 |  |
| Purchased electricity $\ldots\{(a)$ | 8,159 | 892 | 9,051 | 180 |
| Purchased electricity $\cdots\{(b)$ | 3,794 | 229 | 4,023 | - |


[^0]:    * See also Notes on pages vii to xv.

[^1]:    * See footnote to Table I.

[^2]:    * See footnote to Table I.

[^3]:    * Administrative, technical and clerical staff.

