D.-1.xxvi

service of separate units of plant in each district, the requirements in many cases have been met by transfer.

However, in maintaining a standard of efficiency on construction works it is necessary to occasionally make replacements, while with the growth of departmental activities it is also desirable that new and up-to-date equipment and labour-aiding machines be purchased to advance with and to keep abreast of the times.

Constructional plant purchased during the year was of a varied nature, and included the following items: Eighteen motor-trucks, seven light locomotives, fourteen pumps, eight engines, three crushers, seven electric motors, two excavators, three oil-winches, three concrete-mixers, two welding-plants, two ballast-ploughs, two motor-velocipedes, thirteen machine tools, fifteen special items of plant for main highways, together with seven special testing-machines. It was also necessary to obtain forty-two railway-wagons to cope with the additional traffic on the lines run by the Department.

Mention was made last year of the need for a numerical increase in the

mechanical staff, and the necessary appointments have since been made.

SUMMARY.

To summarize shortly the operations of the Department since I assumed control, I would point out that in the past six years £6,357,301 has been expended on railway-construction, and during that period 291 miles of railway have been brought under traffic, of which 100 miles have been handed over to the Railway Department for working, while 191 miles are being operated by the Public Works Department for the carriage of goods and passengers. The cost of sections handed over to the Railway Department was £4,836,420, a large part of which was expended prior to my assuming control of the Department.

On 4,750 miles of road, including main highways, £3,724,500 have been expended, and during the period covered by such expenditure considerable improvements in road-construction have been introduced. Bitumen penetration and sealing have been experimented with and adopted in places where such protection to road-

surfaces was considered desirable and proved to be economical.

Under the heading of "Hydro-electricity" 51,000 horse-power has been developed and transmitted to centres where demands exist, at a cost of £2,195,656,

an average cost of £45 per horse-power

An area of 19,897 acres of ground has been irrigated, which involved the spending of £460,492, a considerable portion of which will provide for further areas on which water is available, but which have not yet been brought into productivity.

The expenditure out of the Public Works Fund in connection with telegraph extension for the past six years has been £3,353,106, distributed annually as follows: 1919–20, £249,379; 1920–21, £336,468; 1921–22, £590,981; 1922–23, £501,575; 1923–24, £717,409; 1924–25, £957,294.

A great deal of mechanical plant for the aiding of labour and the carrying-out of heavy construction has been brought into use, the principal items of which are: Thirty steam-shovels; five drag-line excavators; forty-seven locomotives—steam, petrol, and electric; eighty motor-lorries; sixteen tractors; twenty concrete-mixers; twenty-two power-driven winches; thirteen air-compressors; nineteen stone-crushers; thirteen road-rollers; bitumen boilers and sprayers, and a large array of machine tools, steam boilers, motors, cranes, and the other minor machines necessary for the successful operations of the larger units.

The care of the workers on the line has had the special attention of the officers of the Department, and wherever practicable, and where works were likely to last any considerable time, huts have been provided, at a total cost of £107,131, with which sum 2,287 single men's huts were built, and in addition 343 cottages for

These are the leading features of the operations of the Department, but the other activities have been carried on with equal efficiency, and at such a rate as appeared to be required by the individual necessities of the case.

The object towards which the policy of the Department is directed, is the providing of transport means adequate to the demand, whereby the primary producer,