which, with an alteration to the design of the fuel chute, improved the flow of fuel to the furnaces. Other boiler furnaces will be treated similarly as opportunity permits.

One generator broke down and was out of action for several weeks, but even with this handicap 65 per cent of the power required was generated by the mill. At the same time steam to the kilns and creosote plant was maintained, except on a few occasions when fuel ran short. Steam heating was also installed in the main office, boxmill office, and girls' rest-room.

No. 7 kiln came into operation in May, after which No. 2 kiln was given a complete overhaul, including the fitting of new fans. In the box-factory a Johnsered bandsaw was installed, and the other machines were maintained. The supply and installation of additional machine tools, partly ex-German reparations, has increased the efficiency of the fitter's shop. The pilot pressure preservative treatment plant came into operation in July, and two open treating-tanks, 37 ft. and 18 ft. long respectively, were added to the commercial treating installation. Part of the area required for the new seasoning-yard has also been cleared.

Apart from minor outbreaks of fire in the boiler-room, there were two fires at the Waipa Mill, but both outbreaks were quickly brought under control by the mill fire brigade.

2. Plant Workshops.—In order to cope fully with the repair and maintenance of the mechanical equipment operated by this Service, plant workshops have been erected at Waipa (Rotorua), Karioi, and Golden Downs (Nelson). Further workshops are being built at Pureora, Ashley, and Tapanui. The bulk of the equipment, such as lathes, drilling-machines, millers, grinders, &c., have been obtained from German reparations.

Mechanics, fitters and turners, welders, and other essential personnel have been obtained for the completed shops, and no difficulty is anticipated in obtaining staff for those shops now completing.

3. Transport.—The demand for transport is most acute. Many of the vehicles in operation are long past the end of their economical life, and are costly to retain in commission. Expansion of Forest Service activities has developed a demand for new vehicles, which, under the present supply conditions, cannot be procured. In addition, vehicles at present carting logs and sawn timber will in some cases require replacement during the next twelve months.

Thirty-eight new vehicles were added to the fleet; three went to Auckland, fifteen to Rotorua, four to Wellington, three to Nelson, two to Westland, five to Canterbury, and six to Southland. Two ambulances were obtained through the War Assets Realization Board, one going to Pureora and the other to Golden Downs (Nelson).

4. Logging and Earth-moving Equipment.—One 12-yard carryall scraper was obtained from the Ministry of Works for use in the Rotorua Conservancy. Two new tractors were purchased during the year, and are now operating at Conical Hill in the production of logs and the maintenance of extraction routes.

## FIRE CONTROL AND COMMUNICATIONS

1. Forest and Rural Fires Act.—The Forest and Rural Fires Act, 1947, came into force on the 18th November, 1947. All previous Acts authorizing the constitution of fire districts were repealed, but section 53 (2) of the Act provided that fire districts created under any of the repealed Acts were to continue in existence until the 18th November, 1948, or until a new fire district was constituted, whichever was the earlier.

It is likely that eventually 68 rural fire districts will be constituted under the Act; at the present time 62 fire districts containing a total of 4,244,010 acres have been constituted, and are shown in detail in Appendix XII. The remaining 6 rural fire