NEW AND LARGER GENERATING PLANT FOR PENNSYLVANIA SOLDIERS' ORPHAN SCHOOL

By F. H. DECHANT

Wm. H. Dechant & Sons, Consulting Engineers,

Reading, Penna.

★

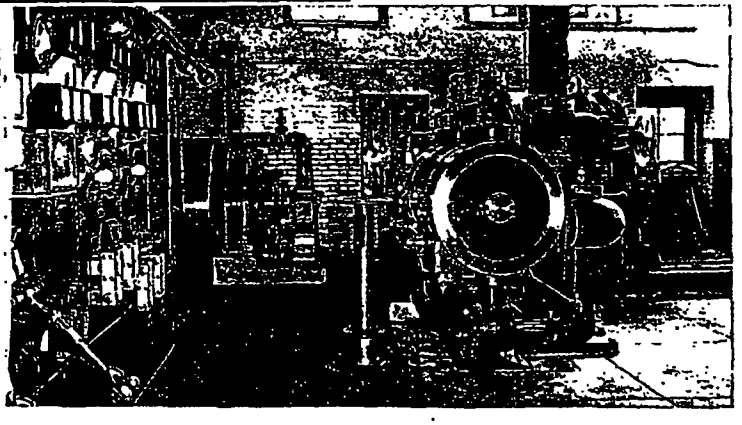
SEVERAL years ago comprehensive plans were prepared by the Department of Public Instruction of the State of Pennsylvania for modernizing the school facilities and increasing the capacity of the Soldiers' Orphan School, at Scotland, Pa., a state-owned and operated institution. These plans called for the construction of twenty cottages and a large school building to be built as appropriations were made available. To date, five of the cottages and the school building have been completed.

The services of sanitation, water supply, light, heat and power are supplied to all of the buildings of the institution from a central power plant and water and sewerage system. Along with the program of increased school capacity naturally followed a demand for increased utility services already mentioned.

Comprehensive plans have been prepared for the expansion of all of these services but to date the only expenditures that have been made in this direction have been for increasing the electric generating capacity and heating plant. Studies of the problem resulted in these controlling decisions: First, that all buildings of the institution should be heated by steam from the control plant; second, that all cooking in the new cottages should be done electrically to avoid as far as possible the fire hazards; and third, that the purchase of electric power would be more expensive



Above—*The Elliott 150-kw. engine-generator unit. The engine is of the poppet-valve unaflow type, the generator a 250-volt, 3-wire, compensated direct-current machine.*



Right—*A view in the engine room showing two of the Elliott units, and the new switchboard. The unit at the right is the 150-kw. unaflow engine-generator shown above. In the middle of the picture is the Elliott 35-kw., 250-volt, compensated generator which replaced a 110-volt generator, and which is direct-connected to a reconditioned single-valve engine.*

CRIMDEBN00000216