To give a full and complete description of all the mechanical devices which have been installed throughout the Mint would make this paper unduly long. Each of the plants enumerated above will therefore be briefly dealt with in turn, in the order given; and then the Coining Department, which contains types of machines probably less commonly known than the rest, will be described more at length.

Electrical Plant.

Electrical Equipment.—The electricity used for power and lighting is supplied in the form of a two-phase, alternating current, and enters the building at a potential of 2,140 volts. It then passes through the transformers, of which there are three for power and three for light. In each case one is a spare which can be put into circuit, on either phase, by operating the primary and secondary switches.

The transformers for power operate the motor of a motor-generator set. They are single phase, step down, oil insulated, self cooled, for a circuit of 60 cycles. The primaries are wound for a potential of 2,140 volts, and the secondaries for a potential of 500 volts. Their normal full rating is 100 kilowatts each.

The transformers for light operate the electric light system of the building. They are similar to the transformers for power, but the secondaries are wound for a potential of 107-214 volts; while their normal full rating is 15 kilowatts. The primaries and secondaries of each transformer are provided with binding posts, so that any one of them may be connected or disconnected without soldering to leads, or cutting wires.

The motor-generator set for transforming the current to operate the motors throughout the Mint consists of an alternating current motor and continuous current generator. The motor is of the two-phase, alternating current, induction type, operating from the transformers at a potential of 500 volts: its normal full rating being 225 H. P., at a speed of about 800 revolutions per minute. The generator is multi-polar, compound wound, continuous current, operating at a potential of 225 volts: its normal full rating being 150 kilowatts. The motor and generator are on one bed plate, and supplied with auto-starter for the motor, and field rheostat for the generator.

There are 32 compound-wound, continuous current motors in use, ranging in power from 1¼ H. P. to 30 H. P., all operated at a potential of 220 volts.

The wiring for the motors is of the parallel two-wire system, the wires being carried in steel conduits.

The wiring for the lighting is of the interior conduit system;