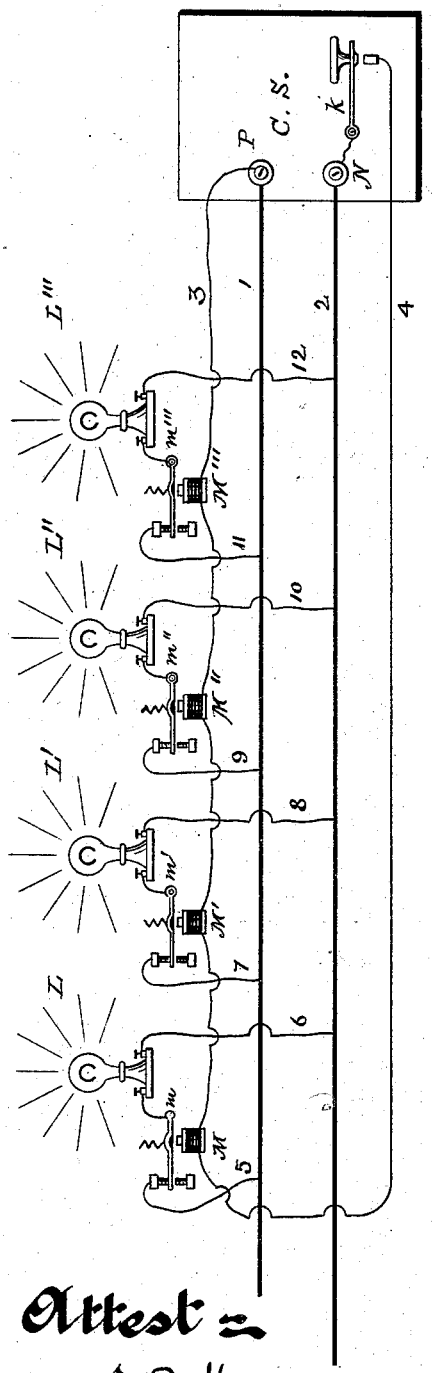
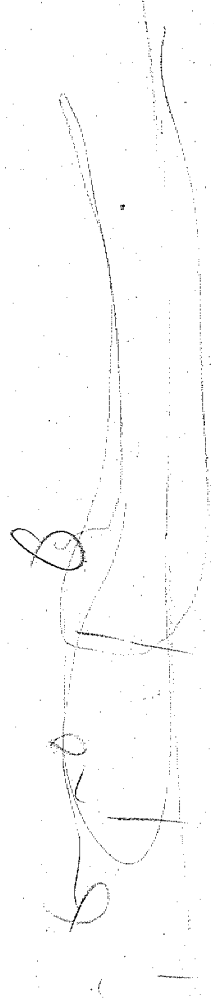
(No Model.)

T. A. EDISON.

System of Electric Lighting.

No. 239,152. **Patented March 22, 1881.**





Attest:

S. D. Mott

F. W. Howard

Inventor:

Thos. A Edison

per Dyer and Wilber

Attys.

UNITED STATES PATENT OFFICE.

THOMAS A. EDISON, OF MENLO PARK, NEW JERSEY.

SYSTEM OF ELECTRIC LIGHTING.

SPECIFICATION forming part of Letters Patent No. 239,152, dated March 22, 1881.

Application filed October 30, 1880. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. EDISON, of Menlo Park, in the county of Middlesex and State of New Jersey, have invented a new and useful Improvement in Systems of Electric Lighting and Translation; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The object of this invention is to furnish means for controlling a large number of lamps or other electric devices whose current is supplied from a circuit which supplies other devices without interference with these latter other devices. For instance, from the distributing conductors or mains supplying the current for a district, conductors may lead to a large number of street-lamps which it is desired to light and extinguish at certain hours from the central station without interference with the main circuit. This is accomplished by the means shown in the drawing, in which C S is the central station, such as described in prior applications by me made, from which lead the distributing conductors or mains 1 2. From these latter lead branch or multiple-arc circuits 5 and 6, 7 and 8, 9 and 10, 11 and 12, to lamps L L′ L″ L‴, whose number may be greater or less, as desired. In each of these branch circuits is interposed, so as to form a part of the circuit, an armature-lever, as *m m′ m″ m‴*. From the central station leads a circuit, 3 4, controlled by a key, K, in which circuit, at each lamp, is an electro-magnet, as M M′ M″ M‴.

As shown, the multiple-arc circuits to the lamps lead through the back stops of the armature-levers. Then, so long as key K be open, the springs will hold the levers against their back stops and the lamp-circuits will be completed. When it is desired to extinguish the lamps the circuit 3 4 is closed at K, the magnets attract the armatures, and the lamp-circuits are broken so long as the key is depressed.

It is evident that the lamp-circuits may be carried to the front stops and the closing of the circuit 3 4 used to light the lamps; but I prefer the arrangement shown, as being more reliable, the magnets being so constructed as to require but a small current to hold them closed.

It is also evident that the circuit 3 4 may be controlled by a clock, and that a series of clocks placed in multiple arcs may replace the lamps and be governed by the prime clock at the central station, and, further, that many other forms of electrical devices, of which the lamps L L′ L″ L‴ are only a type, may be used and controlled, as here shown.

What I claim is—

The combination, with a main circuit and branch or multiple-arc circuits, and translating devices in the latter, of a controlling-circuit and devices therein controlling or governing the circuits through the translating devices, and means in the controlling-circuit for causing, at will, the controlling or governing devices therein to operate, substantially as set forth.

This specification signed and witnessed this 14th day of October, 1880.

THOMAS A. EDISON.

Witnesses:
CHAS. BATCHELOR,
WM. CARMAN.