

(No Model.)

C. E. EGAN.  
SWITCHBOARD.

No. 586,285.

Patented July 13, 1897.

FIG. 1.

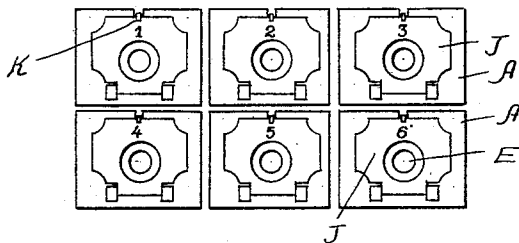


FIG. 2.

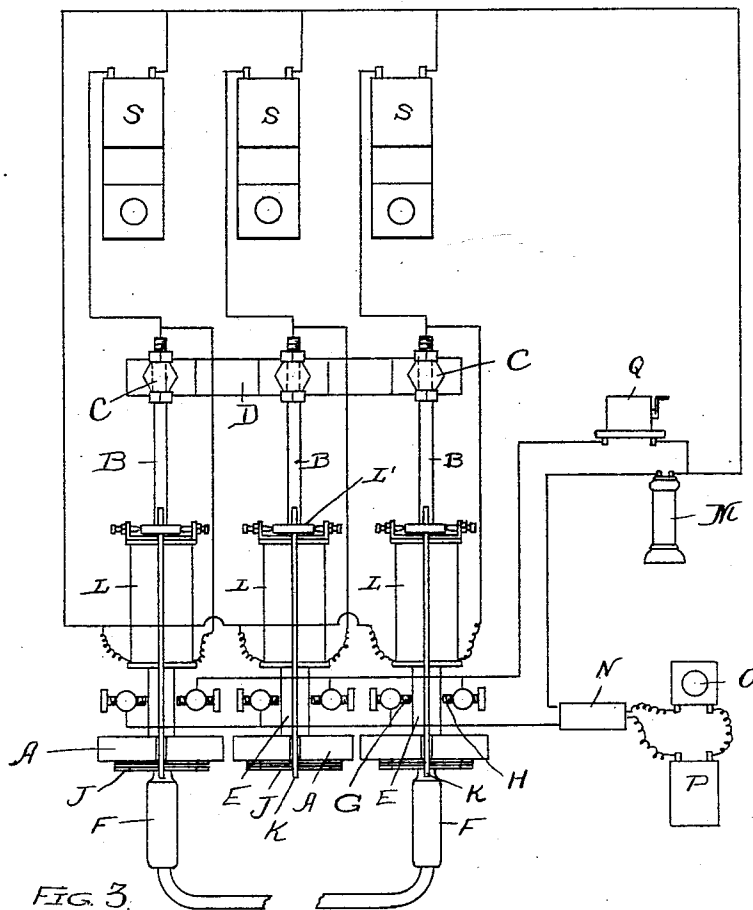
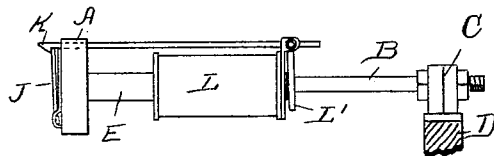


FIG. 3.



WITNESSES:

*Geo. C. Curtis*  
*A. M. Munday*

INVENTOR:  
CHARLES E. EGAN

BY *Munday, Davis & Adcock.*

HIS ATTORNEYS.

# UNITED STATES PATENT OFFICE.

CHARLES E. EGAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO STERLING L. BAILEY, OF SAME PLACE.

## SWITCHBOARD.

SPECIFICATION forming part of Letters Patent No. 586,285, dated July 13, 1897.

Application filed May 1, 1897. Serial No. 634,679. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. EGAN, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Switchboards, of which the following is a specification.

This invention is designed to effect a considerable saving in the amount of room required in switchboards and also to improve their general construction. The nature of the invention is fully set forth in the description which I give below and will be fully understood therefrom.

In the drawings accompanying this specification I show at Figure 1 an elevation of the switchboard; at Fig. 2 a horizontal section, giving also the electric circuits; and Fig. 3 is a partial vertical section.

The front of my improved switchboard is made in sections, one section for each jack. These sections are shown at A A and the jacks at B B. I also support the board-sections A upon the jacks, so that they will move with the latter. The jacks are supported at their rear or inner ends in any suitable way, as, for instance, upon stands or brackets C, attached to a support D, and it is intended that the jacks shall each possess sufficient flexibility to enable its outer end, carrying the board-section and the socket E, in which the plug F is inserted, to be moved laterally in order to effect the contact between the jack and the contacts G and H, located at each side of it. The drops J are hinged to their respective board-sections, as shown, and move with them. The magnets for releasing the catches K, by which the drops are held up, are shown at L, and they, together with their armatures L', are also mounted and wholly supported by the jacks B.

M represents the receiver used by the central-station operator; N, the induction-coil; O, the central-office transmitter; P, the battery; Q, the generator, and S S the subscribers' telephones, and the usual electrical connections are employed with them, so that when a subscriber signals the operator the latter, by moving the jack of that subscriber against its contact G, will be able to talk with such subscriber and ascertain with whom he wishes

to be placed in communication, and by moving the jack corresponding to the telephone of the subscriber who is called against its contact H she will be able to signal the subscriber, and then by connecting the two jacks by means of the plugs and their flexible connection the two subscribers will be enabled to converse.

The usual electrical connections are also made to the magnets, as shown, so that the latter may be energized and their drops caused to fall whenever a subscriber signals the central office.

The board-sections are placed on the jacks flush with the outer ends of the plug-sockets, and consequently the drops need only be provided with openings large enough to permit them to fall when the plugs are in the sockets, the sockets themselves not interfering in any way with the falling.

In a companion application I have shown sockets which project in front of the board and drops surrounding the sockets, the drops being provided with slots large enough to permit their falling notwithstanding the sockets. I do not therefore here claim, broadly, drops surrounding the sockets nor drops positioned as shown, such claims being reserved for said companion case.

By the words "flexible" and "flexibility" as used in this specification and claims I do not mean to restrict myself to a construction in which the jacks are formed of flexible or spring material, as obviously the only purpose of the flexibility is to permit the movements necessary in effecting the electrical contacts, and such movability can be obtained in other ways.

I claim—

1. The combination with a jack made flexible to permit it to be moved in effecting the electrical contacts, of the drop-magnet mounted upon and movable with the jack, substantially as specified.

2. The combination with a jack made flexible to permit it to be moved in effecting the electrical contacts, of the drop and the magnet for operating the drop, both supported upon and moving with the jack, substantially as specified.

3. The combination with a jack made flexi-

ble to permit it to be moved in effecting the electrical contacts, of the drop and a support to which the drop is hinged, said support being mounted upon and moving with the jack, substantially as specified.

4. The combination with a jack made flexible to permit it to be moved in effecting the electrical contacts, of a drop, a support to which the drop is hinged, the latch and the magnet for releasing the latch, all mounted upon and moving with the latch, substantially as specified.

5. The combination with a jack made flexible to permit it to be moved in effecting the electrical contacts, of a drop and a support

to which the drop is hinged, said support being mounted upon and moving with the jack and also forming a section of the front of the board, substantially as specified.

6. The switchboard composed of a series of movable sections A, a series of jacks each supporting one of said board-sections, and each made movable to enable the operator to effect the electrical contacts, and drops supported by the board-sections, substantially as specified.

CHARLES E. EGAN.

Witnesses:

H. M. MUNDAY,  
EDW. S. EVARTS.