Jan. 20, 1931. C. H. BARNARD 1,789,293

SWITCH MOUNTING

Filed May 10, 1928

Fig. 1.

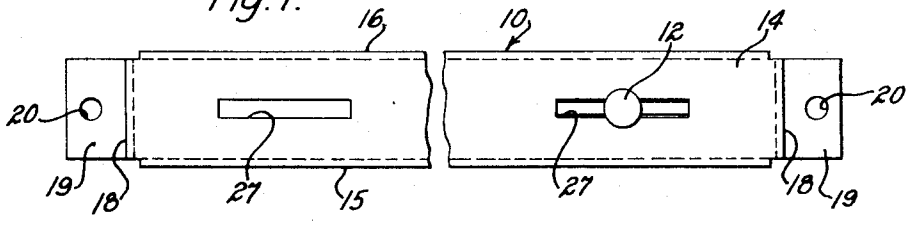


Fig. 2.

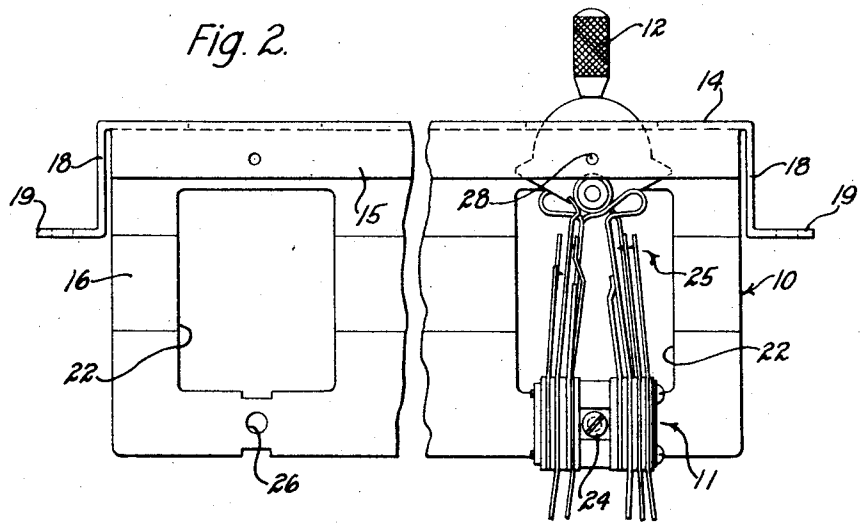
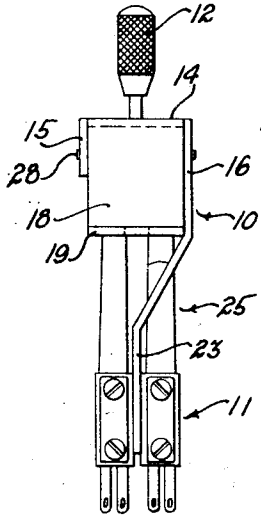


Fig. 3.



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UNITED STATES PATENT OFFICE

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SWITCH MOUNTING

Application filed May 10, 1928. Serial No. 276,540.

This invention relates to mounting and more particularly to mountings for telephone switch keys.

In the manufacture of metal articles it is well known that some articles which are formed from sheets of metal by means of a punch press are more economical to manufacture than articles of the same type which have been cast. In the past mountings for telephone keys have in some instances been cast from brass or like metal, or made up from a number of parts either welded or secured together by screws or bolts.

The object of this invention is to provide a unitary key mounting which may be cheaply manufactured and which will at the same time have great strength, rigidity and simplicity of structure.

In accordance with one embodiment of this invention there is provided a key mounting which may be completely formed on a punch press from sheet metal. The mounting is made up of a top portion slotted to receive key levers and having a reinforcing flange on the one side and a web on the other side thereof. The web has an offset portion and has rectangular openings formed at intervals therein in which the springs of the keys of the switches may be positioned. The top portion also has end portions upon which lugs are formed by means of which the key mountings may be secured in a switchboard or other apparatus.

This and other objects of the invention will be apparent from the following detailed description and accompanying drawing of one embodiment of the invention, wherein,

Fig. 1 is a plan view showing the key mounting having one key mounted therein,

Fig. 2 is a side elevational view thereof, and,

Fig. 3 is an end elevational view thereof.

Referring to the drawing in which like reference characters designate like parts throughout the various views, the numeral 10 designates generally the framework or mounting upon which a switch generally designated 11 having an operating lever 12 is mounted. The mounting 10 which preferably is formed from a single sheet of metal comprises a flat top portion 14 having a flange 15 formed on one side thereof and a web 16 formed on the other side thereof. End portions 18—18 which have integral mounting lugs 19—19 extending laterally therefrom are also provided at each end of the top portion 14. The lugs 19—19 have holes 20—20 formed therein designed to hold screws (not shown) by means of which the key mounting may be secured in the telephone apparatus (not shown) with which it is to be associated. The web 16 has rectangular openings 22—22 formed therein in which an assembly of contact springs of an ordinary type generally designated 25, of the switch 11 may be positioned. The web 16 also has a portion 23 thereof which is offset angularly and inwardly at a point intermediate its ends to substantially the center of the mounting and which continues from that point in a plane at right angles to the top portion 14 to its extremity. The assembly of contact springs 25 of the switch 11 may be mounted on each side of the offset portion of the web 16 immediately below the center of the opening 22. The lever 12 for operating the switch is movably positioned in slots 27—27 formed in the top portion 14 by means of pins 28—28 rotatably mounted in the flange 15 and the web 16.

The switch may be operated in the usual manner by moving the key lever 12 to either the right or the left (Fig. 2), but inasmuch as the switch and spring combinations thereof form no part of this invention it is deemed unnecessary to give herein a full description of the structure and operation thereof.

The key mounting described hereinbefore may be formed from one piece of metal by a punch press and thus may be economically manufactured. The flange on the side of the top portion opposite the web serves as a reinforcing member and gives the mounting great rigidity without excessive bulk.

Another advantage of a mounting of this type lies in the fact that, since the web portion upon which the assembly of contact springs is to be mounted is offset to the center of the mounting at its lower end, the assemblies of contact springs may be mounted

on both sides thereof thus permitting a great variation in spring combinations.

What is claimed is:

1. A unitary electrical key switch mounting, comprising a flat top portion, a reinforcing flange portion, a web portion, and end portions having mounting lugs formed thereon.

2. A unitary electrical key switch mounting, comprising a flat top portion, a reinforcing flange, end portions upon which are formed mounting portions, and a web extending from and at right angles to the top portion to a point substantially one-third its length and then continuing inwardly at an angle to substantially the center of the mounting and then continuing in a plane at right angles to the top portion to its extremity.

In witness whereof, I hereunto subscribe my name this 25th day of April A. D., 1928.

CHARLES HENRY BARNARD.