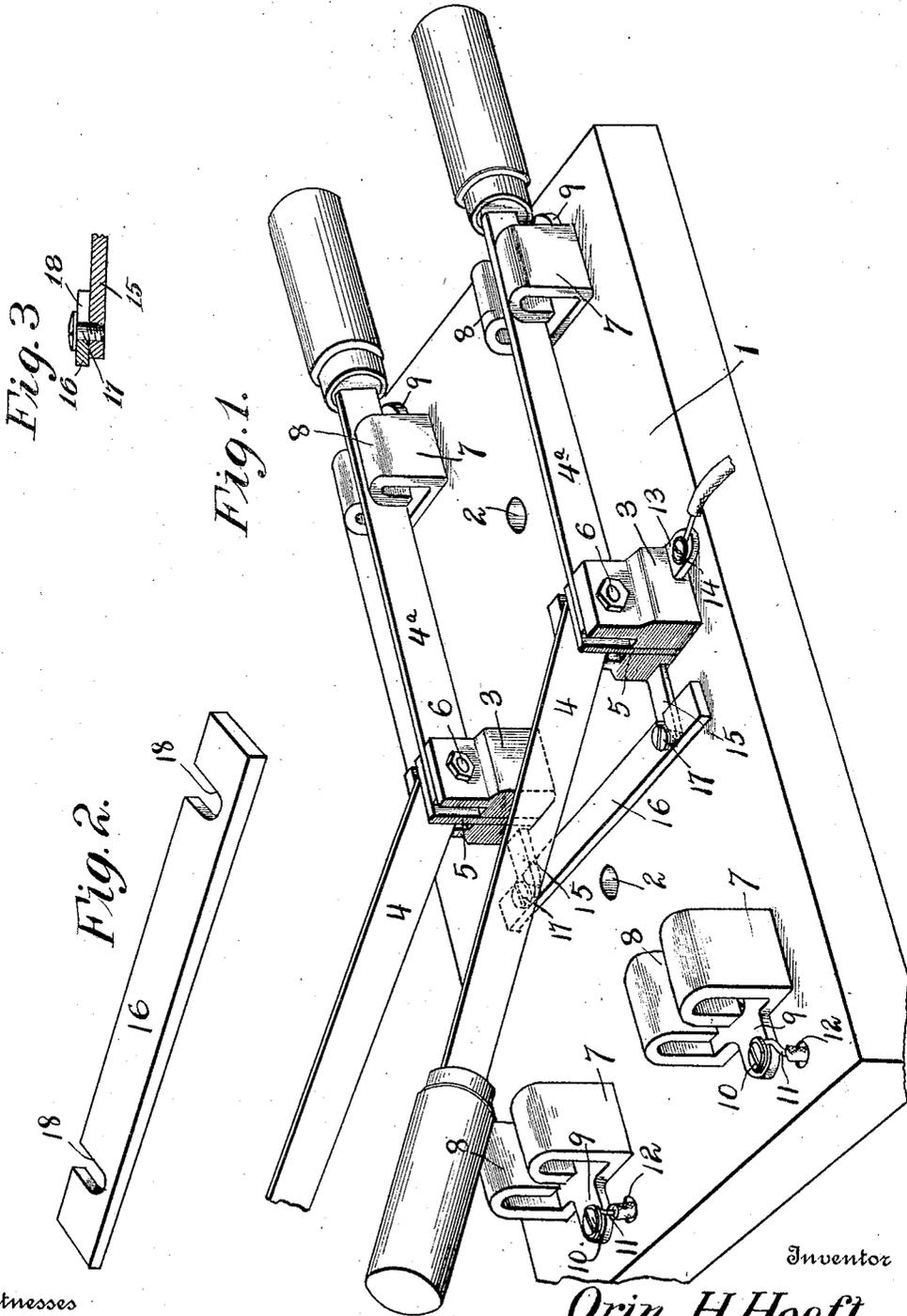


O. H. HOEFT.
KNIFE SWITCH.

APPLICATION FILED MAY 24, 1910.

989,362.

Patented Apr. 11, 1911.



Witnesses
Thos. F. Knox,
C. Bradway.

Inventor
Orin H. Hoelt,
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

ORIN H. HOEFT, OF BROWNLEE, NEBRASKA.

KNIFE-SWITCH.

989,362.

Specification of Letters Patent. Patented Apr. 11, 1911.

Application filed May 24, 1910. Serial No. 563,190.

To all whom it may concern:

Be it known that I, ORIN H. HOEFT, a citizen of the United States, residing at Brownlee, in the county of Cherry and State of Nebraska, have invented new and useful Improvements in Knife-Switches, of which the following is a specification.

This invention relates to an electric switch of the knife blade type and relates more particularly to a switch designed for use on multiple circuits.

The invention has for one of its objects to improve and simplify the construction and operation of devices of this character so as to be comparatively simple and inexpensive to manufacture, reliable and efficient in use and of such design as to adapt it for various uses.

Another object of the invention is the provision of a switch including a plurality of blades, whereby the switch can be used in the place of a number of single pole, or double pole double throw switches, the switch being especially adapted to connect any desired number of grounded lines with a source of current or adapted to be used to talk on either end of a metallic circuit or to be used in testing either end of a circuit in case of trouble.

With these objects in view, and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangements of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawing, which illustrates one embodiment of the invention:—Figure 1 is a perspective view of the switch. Fig. 2 is a detail view of the metal bridging strip adapted to connect together the pivot posts on which the blades are hinged. Fig. 3 is a detail sectional view showing the manner of connecting the bridging strip with the knife posts of the switch.

Similar reference characters are employed to designate corresponding parts throughout the several views.

Referring to the drawing, 1 designates a slate or other insulating base in the form of a plate or slab 1, which has openings 2, for the reception of screws or other fastenings serving to secure the switch to a wall or other support. Mounted on the center line of the plate 1 are posts 3, on each of which

is pivoted a pair of blades 4 and 4^a. The blades are set into the posts 3 and are separated from each other by a washer 5 so that the blades can readily move independently and passing through the post, blades, and washer is a bolt 6 which forms a pivot for the blades. At opposite sides of each post are spring clips or contacts 7 which are secured to the base 1, and between the spring members 8 thereof, each blade is adapted to engage. Each clip or contact forms the terminal of a line, and projecting from the base of each contact 7 is a lug 9 having a screw 10 for connecting the end of a line wire thereto, the line wire passing from the back of the base to the front through an opening 12 adjacent the contact 7. In the present instance, there are four spring contacts and four blades, but it is obvious that these parts can be multiplied according to the nature of the electric system in which the switch is used. Extending from each post 3 is a lug 13 that has a screw 14 for connecting a line wire thereto. Each post 3 is also provided with a lug 15 which is parallel with the panel or base 1. These lugs 15 extend all in the same direction and a metallic bridging strip 16 can be inserted over the lugs and held in place on the latter. By this means, the blade posts will be electrically connected so that all the lines can be connected with a common source of electricity when one of the posts is connected with such source and the line wires 11 are grounded. In order to effectively clamp the bridging element 16 in place, screws or bolts 17 extend through the lugs 15 and are threaded therein, and the strip 16 has recesses 18 in one edge for permitting the strip 16 to be placed over the lug 15 or readily removed therefrom without having to take the screws 17 out. Fig. 1 shows two of the blades in closed circuit position and the other two blades open, but the blades are operated independently and any one or all can be closed.

From the foregoing description taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention relates, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it under-

stood that the device shown is merely illustrative and that such changes may be made when desired as are within the scope of the claims.

5 What I claim as new and desire to secure by Letters Patent is:—

1. A switch of the class described comprising an insulating base, pivot posts mounted thereon, blades mounted on the posts, contacts on the base forming line terminals and with which the blades engage, lugs extending from the posts, a bridging strip engaging the lugs for electrically connecting the posts together, and headed fastenings extending through the lugs to clamp the said strip in place, said strip having recesses in one edge to receive the said fastenings and enter between the heads of the latter and the lugs.
2. In a switch of the class described, the

combination of a supporting base, metal posts mounted thereon, means for connecting the posts with a circuit, a plurality of blades pivotally mounted on each post, contacts secured to the base and forming line terminals and arranged to be engaged by the individual blades, lugs extending in the same direction from the posts and arranged adjacent the base, a metallic bridging element arranged in contact with the lugs, and devices arranged on the lugs for releasably holding the said strip in engagement with the latter.

In testimony whereof I affix my signature in presence of two witnesses.

ORIN H. HOEFT.

Witnesses:

BERT. MURPHY,
CHAS. J. LEE.