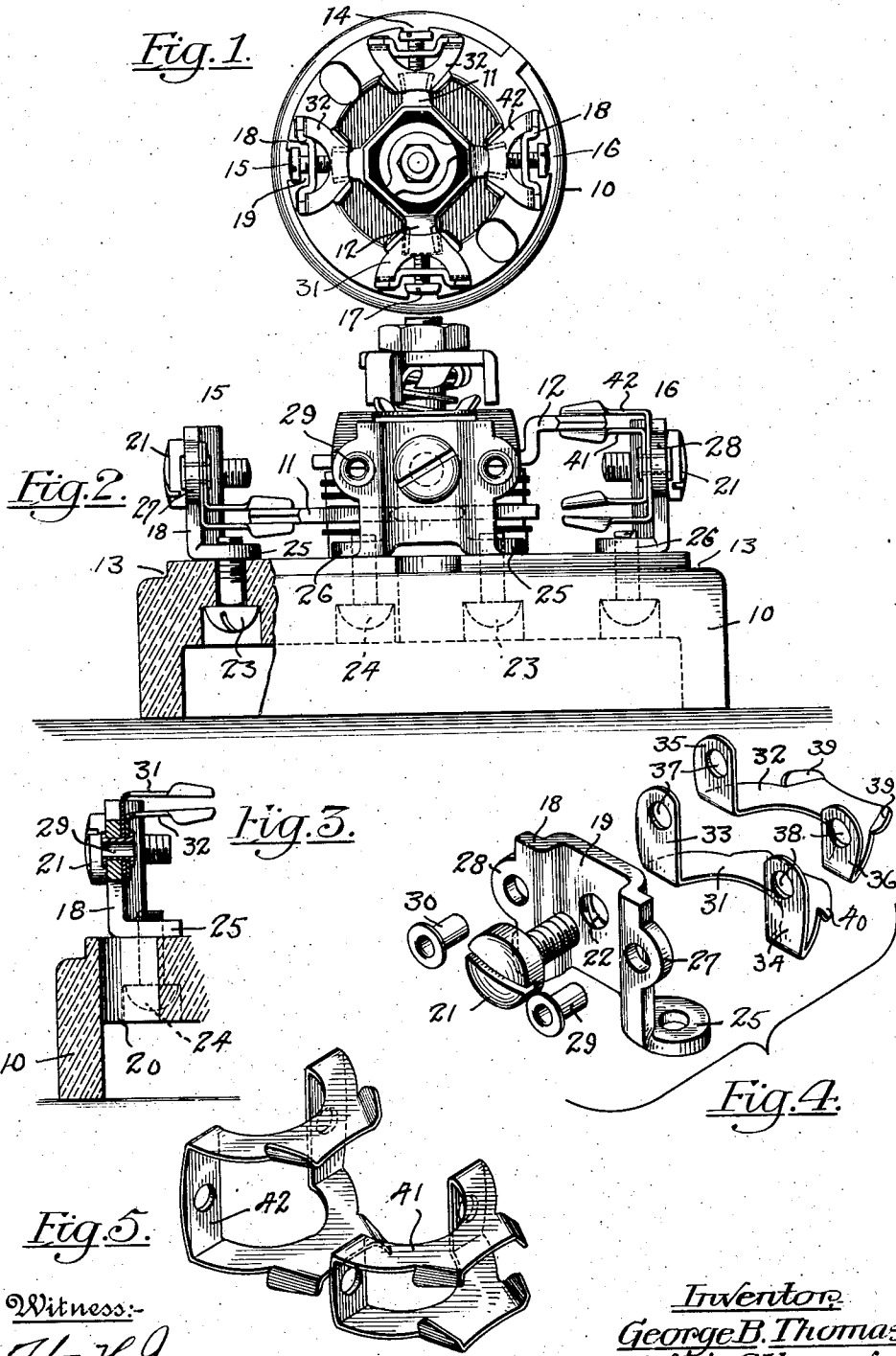


G. B. THOMAS.
 BINDING POST.
 APPLICATION FILED FEB. 2, 1916.

1,189,015.

Patented June 27, 1916.



Witness:-
John H. Arns

Inventor:
George B. Thomas.
 by his Attorneys,
Arns and Arns

UNITED STATES PATENT OFFICE.

GEORGE B. THOMAS, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE PERKINS ELECTRIC SWITCH MANUFACTURING COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

BINDING-POST.

1,189,015.

Specification of Letters Patent.

Patented June 27, 1916.

Application filed February 2, 1916. Serial No. 75,869.

To all whom it may concern:

Be it known that I, GEORGE B. THOMAS, a citizen of the United States of America, and residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented a certain new and Improved Binding-Post, of which the following is a specification.

My invention relates to a binding post and particularly to a combined binding post and switch terminal for rotary snap switches, the object of my invention being to provide a device of this character having certain features of improved construction herein-
after referred to or shown in the accompanying drawing in which—

Figure 1 is a plan of a rotary snap switch to which binding posts embodying my invention are applied; Fig. 2 is a side elevation of the latter drawn to a larger scale and partially broken away; Fig. 3 is a vertical section through portion of the switch base showing a binding post mounted thereon; Fig. 4 is a detached perspective of one of the binding posts; and Fig. 5 is a detached perspective of the contact wings employed in use on a post having switch terminals at different levels.

In the embodiment of my invention here shown I have illustrated my improved binding post in connection with a snap switch of well-known type comprising an insulating base 10 having mounted thereon a snap switch mechanism not shown in detail but serving to operate the switch blades 11 and 12 and normally incased by a cover, not shown, which is seated on the ledge 13 at the upper margin of the base 10. The switch blades 11 and 12 are of that particular type, lying at different levels, adapted to make contact with the switch terminals in various predetermined relations to afford various connections to branch circuits for lighting systems or heater systems.

Coöperating with the switch blades are four combined binding posts and switch terminals 14, 15, 16 and 17. Each of these terminals comprises a standard 18, the vertical margins of which are offset outwardly to afford a channel 19 adapted to overlie and register with a wire hole 20 piercing the base 10 and through which the bared end of the wire is introduced into the channel 19 and secured beneath the binding screw 21 tak-

ing into a tapped perforation 22 in the standard. Each standard is secured to the base by screws 23, 24, which pierce the base and take into tapped holes in the feet 25, 26, which are offset inward from the bases of the opposite margins of the standard. Each standard is also provided at its opposite vertical margins with bays 27 and 28 pierced to receive rivets 29 and 30 respectively. Mounted on the inner face of the standard are the contact wings which form the switch terminals for each binding post. Each terminal comprises a pair of wings, that shown in detail in Fig. 4 being particularly intended for a low level terminal to coöperate with the switch blade 11. These contact wings 31 and 32 are formed from spring sheet metal, preferably copper or bronze. Each wing comprises a yoke-shaped member with offset bases 33, 34, 35 and 36 which straddle the channel 19 of the upright and are perforated at 37 and 38 in register with the perforations in the bays 27 and 28 of the upright. The length of the bases 35 and 36 for the contact wing 32 are shorter than the bases 33, 34 for the contact wing 31, so that the wings are spaced slightly apart vertically to afford opportunity for the swing 11 to enter between the same. Upwardly and downwardly curved ears 39 and 40 respectively may be formed on these wings to afford guides for the switch blade.

The terminal just described is adapted to coöperate, as stated, with the lower contact blade 11. It is necessary only to reverse the position of the contact wings upon the standard to provide a terminal such as shown in Fig. 3 to coöperate with the upper blade 12 of the switch.

Where it is desired to provide a post having switch terminals to coöperate with either the upper or the lower switch blades, the construction shown on the right hand side of Fig. 2, and in Fig. 5, is employed. The standard is in all respects identical with that employed for either the high or low terminal, but the contact wings 41 and 42 are here formed in U-shape, one contact viz., 42, having its wings spaced farther apart than the other so as to form the upper member of the upper terminal and the lower member of the lower terminal, as clearly shown in Fig. 2. The bases of both contacts have their bows apertured to straddle the channel 19

of the standard and are perforated in register, not only with each other, but also with the perforations in the bays 27 and 28 of the standard to receive the securing rivets 29 and 30.

The construction shown has the particular merit that the standards are uniform for all types of terminals, while the terminals for the upper and lower switch blades may be made identical so that they are reversible from one position to the other. The spring metal contacts may be made of copper without the expense attendant upon constructing the entire post of such metal and at the same time permits the post to be made of heavy sheet brass thus insuring a rigidity and strength in the post as a whole, while securing flexibility and consequent good contact with the switch blades through the spring metal terminals. It is obvious that the construction can be used in switches in which the terminals are either at one level or in a switch having terminals at two or more levels as well as in a switch having terminals at more than one level on a single binding post. Whatever the position of the terminals, however, the supporting standard is the same in any case and only the shape of the terminals is altered to meet the requirements of the particular switch to which the terminals are applied.

Various modifications and details of construction will readily occur to those skilled in the art without departing from what I claim as my invention.

I claim as my invention:—

1. A combined binding post and switch terminal comprising a sheet metal standard centrally offset to afford a wire-receiving channel, a binding screw tapped into said channeled portion of the standard to secure a wire therein, foot portions extending at right angles to the standard to receive securing screws therefor, perforated marginal bays on the standard and a spring sheet metal switch terminal riveted to said bays, substantially as described.

2. A combined binding post and switch terminal comprising a sheet metal standard centrally offset to afford a wire-receiving channel, a binding screw tapped into said channeled portion of the standard to secure a wire therein, foot portions extending at right angles to the standard to receive securing screws therefor, perforated marginal bays on the standard, and a spring sheet metal switch terminal straddling said channel and having bases riveted to said bays, substantially as described.

3. A combined binding post and switch terminal comprising a sheet metal standard centrally offset to afford a wire-receiving channel, a binding screw tapped into said channeled portion of the standard to secure a wire therein, foot portions extending at right angles to the standard to receive securing screws therefor, perforated marginal bays on the standard and a switch terminal comprising a pair of spring sheet metal contact wings straddling said channel and having bases riveted to said bays, substantially as described.

4. A combined binding post and switch terminal comprising a sheet metal standard centrally offset to afford a wire-receiving channel, a binding screw tapped into said channeled portion of the standard to secure a wire therein, foot portions extending at right angles to the standard to receive securing screws therefor, perforated marginal bays on the standard, and a switch terminal comprising a pair of spring metal contact wings straddling said channel and having bases of unequal length riveted to said bays to space said wings slightly apart.

5. A combined binding post and switch terminal comprising a sheet metal standard centrally offset to afford a wire-receiving channel, a binding screw tapped into said channeled portion of the standard to secure a wire therein, foot portions extending at right angles to the standard to receive securing screws therefor, perforated marginal bays on the standard and a plurality of spring sheet metal switch terminals lying at different levels but secured to said standard by a common rivet.

6. A combined binding post and switch terminal comprising a sheet metal standard centrally offset to afford a wire-receiving channel, a binding screw tapped into said channeled portion of the standard to secure a wire therein, foot portions extending at right angles to the standard to receive securing screws therefor, perforated marginal bays on the standard, and a plurality of switch terminals lying at different levels and comprising a pair of nested U-shaped spring sheet metal contacts the adjacent wings of which form terminals at different levels.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

GEORGE B. THOMAS.

Witnesses:

G. W. GOODRIDGE,
H. M. WICKERT.