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1,454,879

R. ZÖLLNER

CONNECTION OR BINDING TERMINAL

Filed April 6, 1921

Fig. 1

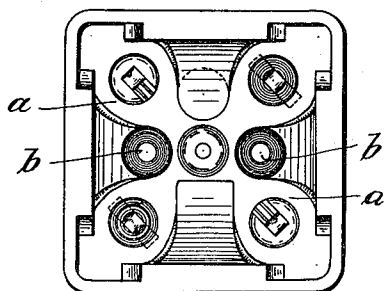


Fig. 2

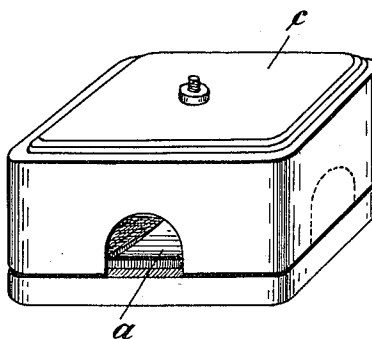


Fig. 5



Fig. 6

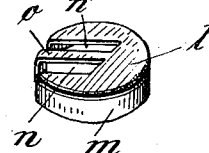


Fig. 3

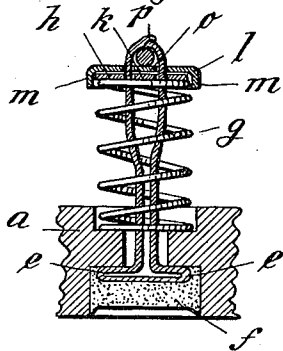


Fig. 4

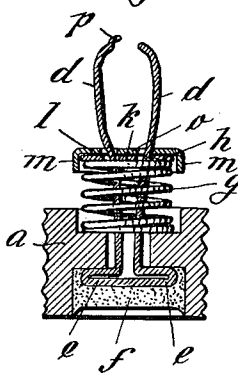
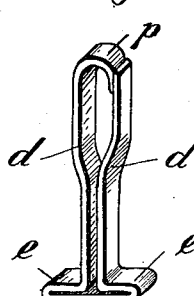


Fig. 7



Witnesses:

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UNITED STATES PATENT OFFICE.

RUDOLF ZÖLLNER, OF DRESDEN, GERMANY.

CONNECTION OR BINDING TERMINAL.

Application filed April 6, 1921. Serial No. 459,197.

To all whom it may concern:

Be it known that I, RUDOLF ZÖLLNER, a citizen of the German Republic, and residing at Dresden, Germany, have invented certain new and useful Improvements in Connection or Binding Terminals, of which the following is a specification.

This invention relates to an improved connection or binding terminal for electric conductors, which has essential advantages: 1. It ensures an absolute safe and permanent contact of the conductors to be connected; 2. The conductors can be easily and quickly attached thereto, whereby time is saved; 3. Any screws and thus damage by the same to the conductors to be connected or bound are omitted; 4. It is absolutely reliable, even when used in connection with vibrating conductors, any faults in the connection of the conductors causing a heating of the latter or a flickering of the light being thereby dispensed with.

In the accompanying drawing:

Fig. 1 is a plan view of a distribution-block (with removed cover) containing a plurality of the improved terminals;

Fig. 2 is a perspective view of such a distribution-block with cover.

Figs. 3 and 4 are partially sectional side views, showing the improved terminal in its position of use, and in its position for an insertion of the electric conduit, respectively;

Figs. 5 and 6 show two details of the improved terminal in perspective views;

Fig. 7 shows a slight modification of one detail of the improved terminal in a perspective view.

The distribution-block comprises a porcelain base *a* having holes *b* for a passage of the electric conductors therethrough and a plurality of terminals attached thereto, the same being covered as shown at *c*.

The improved terminal comprises a cotter-pin shaped support *d* having outwardly extending feet *e* connected with one another, side members of which the upper parts are spaced apart while the lower parts lie closely upon one another, and a split head *p* with overlapping ends; a coil-spring *g*; a washer *h* having two notches *i* therein forming a tongue *k* between them; and a cap *l* with downwardly extending rim *m* and having two similar notches *n* therein forming a tongue *o* between them.

Said support *d* is inserted in said porcelain base *a* from below through a hole therein, that is widened at its lower part for the reception of the feet *e*, which thus bear against the step formed by said lower widening, the hole being then filled-out with cement *f* whereby the support *d* is firmly fixed in position.

Thereupon, the coil-spring *g* is mounted over said support *d*, the lower end of said coil-spring bearing then upon the top of the porcelain base *a*, which is preferably recessed for a safe reception of the same. The washer *h* is then so placed upon the upper end of said coil-spring *g* that it engages with its notches *i* over the spaced-apart upper parts of the side members of said support *d*, its tongue *k* engaging then in the space between said side members. Finally, the cap *l* is placed over said washer in such a way that its notches engage also over the side members of the support *d* and its tongue *o* in the space between said side members, but from the opposite side thereof, so that the side members are embraced from both sides.

With empty terminal, the cap *l* is allowed to move, by action of said coil-spring, in upward direction until its tongue *o* strikes against the underside of the closed head *p* of the support *d*.

For intended use of the terminal, the cap *l* with the washer *h* are depressed against the action of the coil-spring *g* until they engage with their notches over the lower parts of the side members of the support *d*, which are thereby pressed apart, so that the split head *p* is opened (Fig. 4) for an insertion of the conductors to be connected or to be bound.

The overlapping ends of the slit head *p* may be situated either at the top end thereof (Figs. 3-4) or laterally in proximity to the latter (Fig. 7), both constructions allowing a convenient insertion of the conduits.

Upon the cap *l* being then released, it is again pressed upwards against the underside of said conductors (Fig. 3) by action of the coil-spring *g*, whereupon the binding (as shown in Fig. 3) or the connection of the conductors is completed.

What I claim, is:

A connection or binding terminal comprising a cotter pin-shaped support having side members of which the upper parts are

spaced apart while the lower parts lie closely upon one another, a split head with overlapping ends, and outwardly extending feet connected with one another; a coil-spring 5 located over said support; a washer placed upon the upper end of said coil-spring and having two notches forming a tongue between them, and a cap placed over said washer and having two similar notches 10 forming a tongue between them, said washer and cap embracing the upper parts of the side members of said support from opposite sides and adapted

when depressed against the action of said coil-spring to spread the lower parts of side 15 members and thereby to open the split head of said support, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 20 witnesses.

RUDOLF ZÖLLNER.

Witnesses:

MARTON SCHELM,
FRIEDRICH FLEMER.