

L. M. NEHER.
 SPRING BINDING POST.
 APPLICATION FILED FEB. 11, 1908.

1,005,283.

Patented Oct. 10, 1911.

Fig. 1.

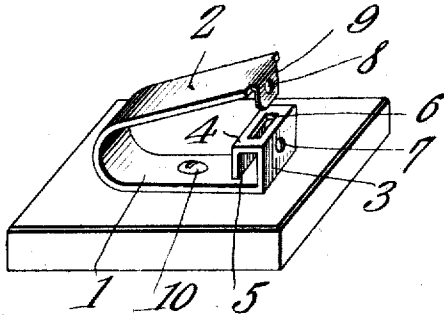


Fig. 2.

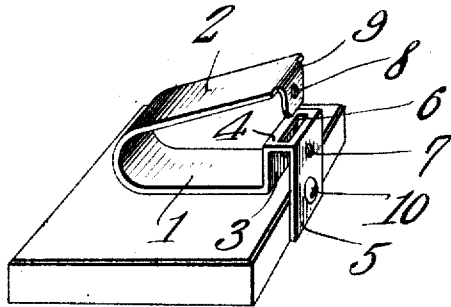
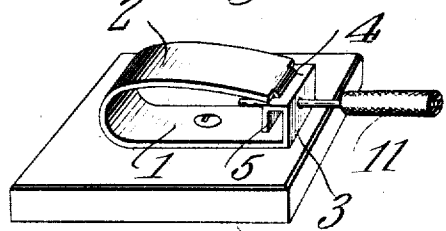
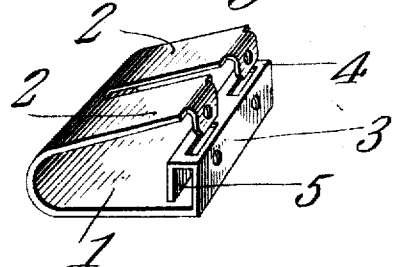


Fig. 3.

Fig. 4.



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UNITED STATES PATENT OFFICE.

LEVI M. NEHER, OF MILFORD, INDIANA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO FAHNESTOCK ELECTRIC COMPANY, A CORPORATION OF WEST VIRGINIA.

SPRING BINDING-POST.

1,005,283.

Specification of Letters Patent.

Patented Oct. 10, 1911.

Application filed February 11, 1908. Serial No. 415,415.

To all whom it may concern:

Be it known that I, LEVI M. NEHER, a citizen of the United States, residing at Milford, in the county of Kosciusko and State of Indiana, have invented a new and useful Improvement in Spring Binding-Posts, of which the following is a specification.

My invention relates to improvements in connecting devices for terminal wires of electric circuits.

The principal object of my invention is to provide a simple, economical and easily-manipulated connector or spring clamp, which will be neat and compact in its structure and which may be formed in one piece stamped from a sheet of metal having the contact surfaces in holes punched through the metal, thus presenting the ends of the grain of the metal to the conductor inserted therein, it being understood that the metal does not so readily corrode on the surfaces punched across the grain as on the rolled surface of the sheet metal, and also that the surfaces within the holes are better protected from dirt and corrosion and will remain much cleaner and brighter than the exposed surface of the sheet metal, thereby insuring a more certain and uniformly good electrical contact. These and other objects will more fully appear from the following specification, taken in connection with the accompanying drawings which illustrate my invention, while the novel features are more particularly pointed out in the appended claims.

In the drawings Figures 1 and 2 are perspective views of a simple form embodying the essential features of the invention. Figs. 3 and 4 are perspective views of modifications in design.

The binding post consists of a metal punching bent upon itself near the middle to form opposing flat surfaces 1 and 2 each of which is formed to cooperate with the other in clamping the connecting wire; one end being somewhat narrower than the body of the connector and bent at right angles toward the opposing member forming a tongue 9 containing a hole 8 punched across the grains of the sheet metal to provide a contacting surface; the other end being formed and bent in the form of an inverted U as shown at 3, 4 and 5, the center portion 4 having a transverse opening 6 for the admission of the tongue 9, and the side portions 3 and

5 having contact holes 7 (hole in 5 is not visible in drawing, being on back side) which align with hole 8 when the opposing members 1 and 2 are compressed, the slot 6 forming a perfect guide for the tongue 9 so that an exact alinement of the holes 7 and 8 is assured.

In Fig. 1 the connector is shown in its simplest form and in normal condition, the ends of the opposing sides being somewhat separated.

In Fig. 2 the same connector is shown as having been compressed and connected to wire 11 which is firmly clamped against the metal-grain-end surfaces in the holes of the parts 3, 5 and 9 and securely held by the retractive force of the opposing members.

In Fig. 3 the connector shown is identical with the one just described except that the inverted U portion is formed outward from the body of the connector instead of inward as in the first instance. With this construction the end portion 5 may be prolonged as shown or otherwise as adaptation to various uses may require.

In Fig. 4 the connector shown is made double, providing for two connecting wires, and is especially adapted for electrically connecting and disconnecting two wires to and from each other, as is often necessary for making tests of electric circuits. While this figure illustrates a double connector it also clearly shows that a connector embodying my invention may be made wider so as to connect three or four or any desired number of wires together.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is—

1. A connecting device for terminal wires consisting of a single piece of resilient sheet metal looped on itself with the ends adapted to be normally separated from each other, said loop having one end formed into a tongue or projecting portion with a hole traversing the metal thereof, and the other end having a slot to receive the tongue and provided with holes traversing the metal thereof, the several holes aligning when the tongue has entered the slot.

2. A connecting device for terminal wires consisting of a single piece of resilient sheet metal looped on itself with the ends adapted normally to be separated from each other, one member or end having a transverse slot

between two holes, and being bent in the shape described so as to engage with the tongue of the opposite end to admit and clamp the terminal wire.

5 3. A connecting device for terminal wires consisting of a single piece of resilient sheet metal looped on itself with the ends adapted to be normally separated from each other, said loop having one end formed into a plu-
10 rality of similar tongues or projecting portions and the other end with a plurality of slots adapted to receive the tongues, each tongue having a hole traversing the metal
15 thereof to admit a connecting wire and the slotted end having means coacting with the holes in the tongues to receive and retain the terminals of electric conductors.

4. A connecting device for terminal wires consisting of a single piece of resilient sheet
20 metal looped on itself with the ends adapted normally to be separated from each other, one member or end having two or more transverse slots, each formed between a set
25 of two holes, and being bent in such shape as will allow the tongues of the opposite members to enter the slots, the two holes opposite each slot thus alining with the hole of the engaging tongue, for the admission of a connecting wire.

30 5. A connecting device for terminal wires consisting of a single piece of resilient sheet metal, having a body member and an opposing spring member projecting upwardly
35 therefrom, then parallel therewith, then downward toward and, when compressed, through a slot in the body member, a hole being provided in the end portion that passes into the slot to aline with holes in the body member and to admit and hold the connect-
40 ing wire.

6. A connecting device for terminal wires consisting of a single piece of resilient sheet metal, having a body member and an oppos-

ing spring member projecting upwardly therefrom, then parallel therewith, then
45 downward toward the body member, said body member being bent at or near its outward end first upward, then inward, and then downward toward the body member, thus forming a loop similar to an inverted
50 U, there being a transverse slot in the middle part of such loop for the reception of the tongue of the opposing spring member and a hole in each side of said loop to correspond with a hole in the tongue of the op-
55 posing spring member, so that when the two members are sprung together the three holes will be in alinement whereby a connecting wire may be inserted and firmly held by the retractive force of the opposing spring
60 members.

7. A connecting device for terminal wires consisting of a single piece of resilient sheet metal, having a body member and an op-
65 posing spring member projecting upwardly therefrom, said body member being bent at or near its outward end first upward, then outward, and then downward, thus forming a loop similar to an inverted U, there being a transverse slot in the middle part of such
70 loop for the reception of the tongue of the opposing spring member, and a hole in each side of said loop to correspond with a hole in the tongue of the opposing spring member, so that when the two members are
75 sprung together the three holes will be in alinement whereby a connecting wire may be inserted and firmly held by the retractive force of the opposing spring members.

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

LEVI M. NEHER.

Witnesses:

JACOB B. NEFF,

C. A. SPARKLIN.