

No. 821,029.

PATENTED MAY 22, 1906.

W. E. DOW.
ELECTRIC BINDING POST.
APPLICATION FILED AUG. 21, 1905.

Fig. 1.

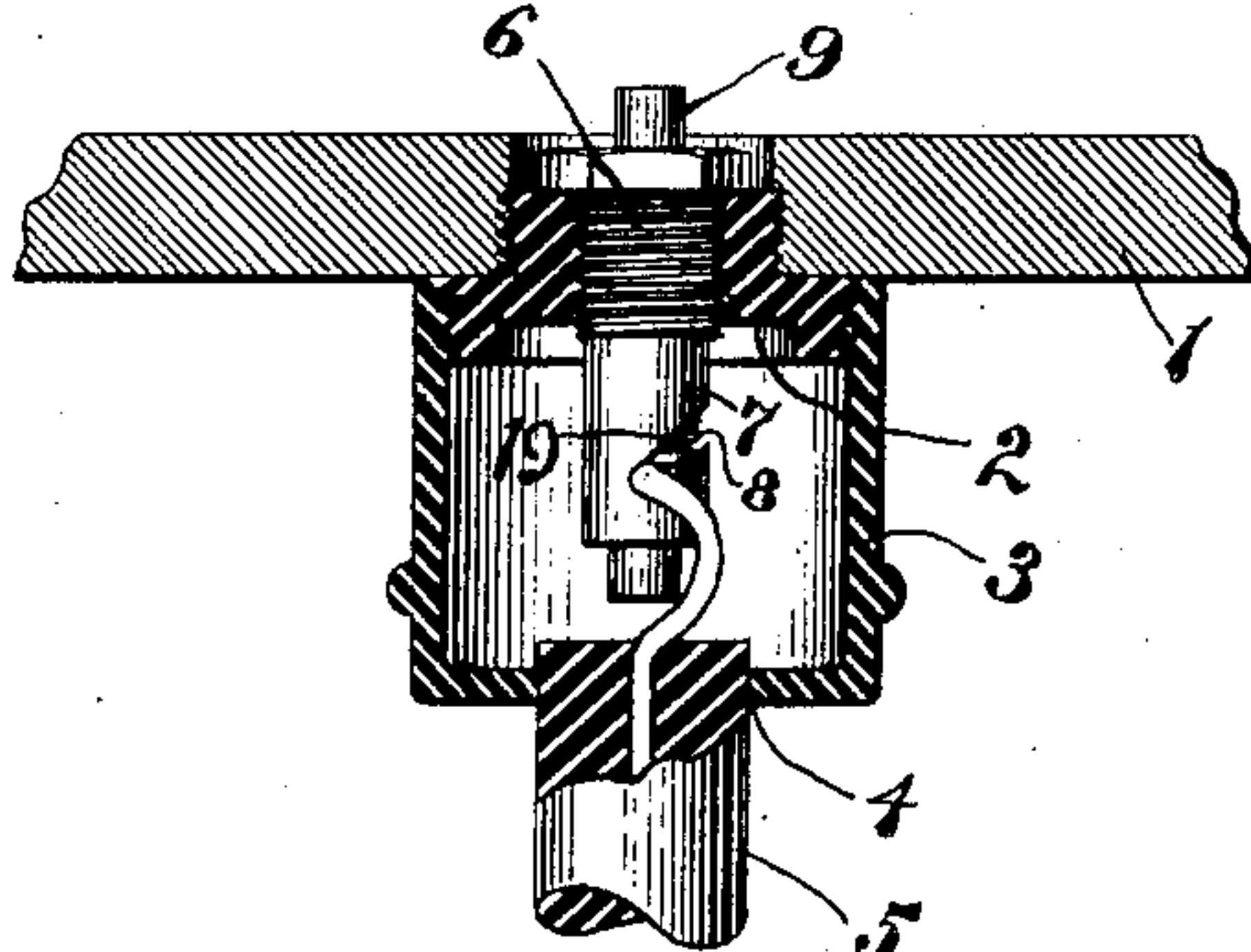


Fig. 2.

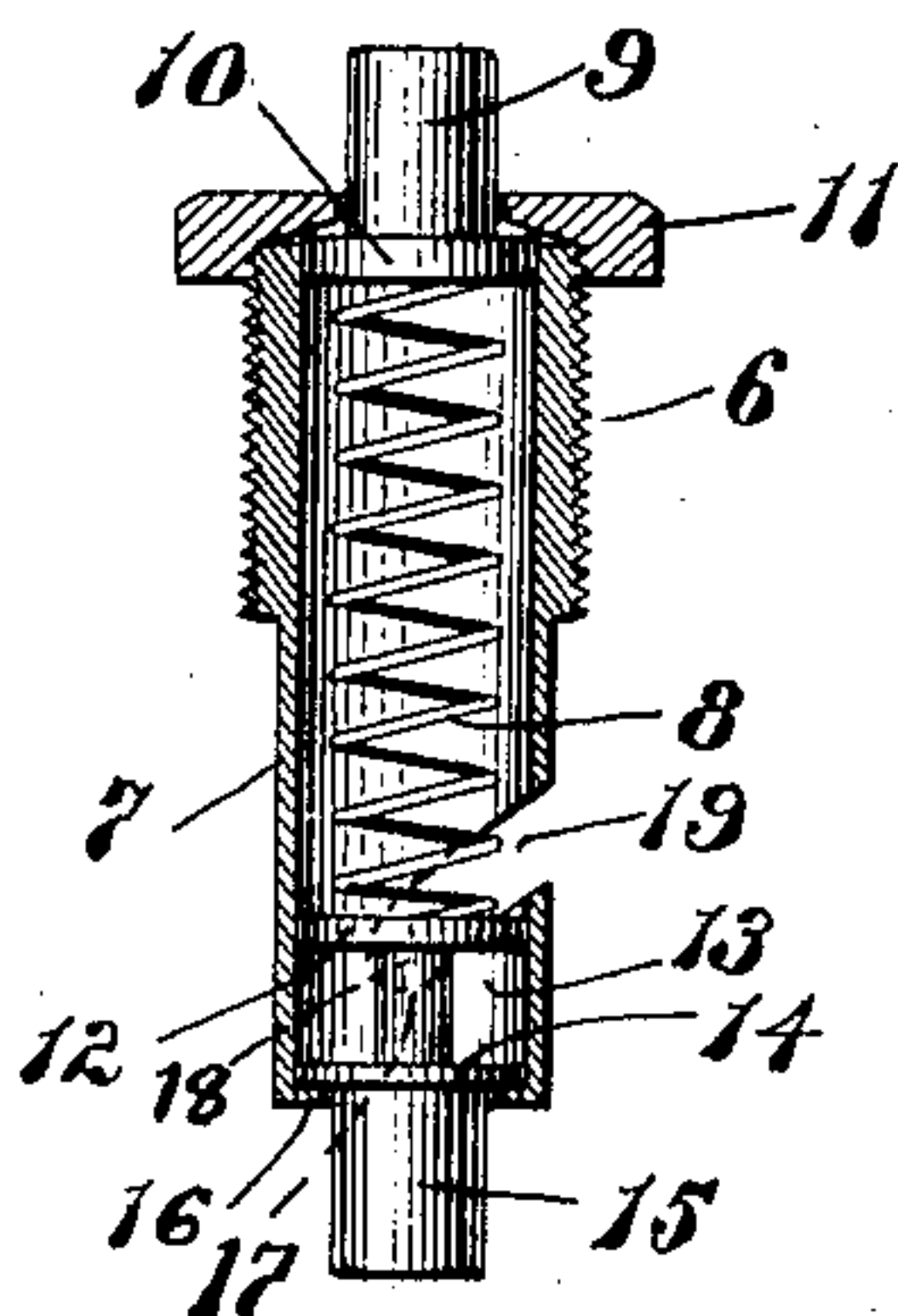


Fig. 3.

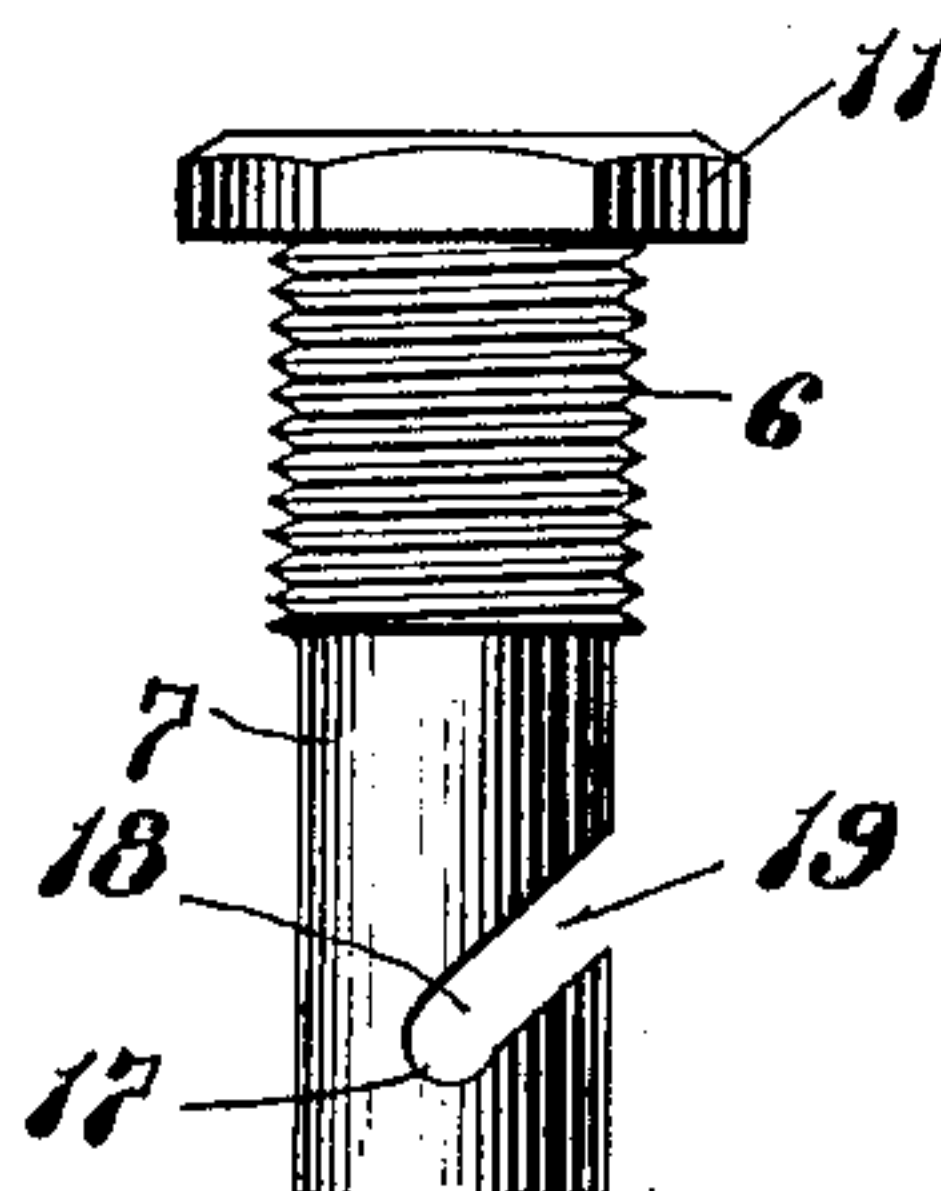


Fig. 4.

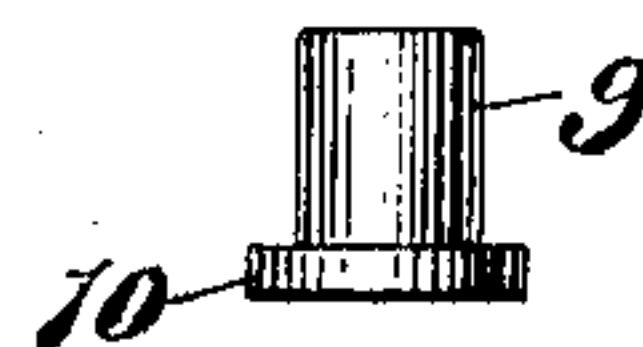


Fig. 5.

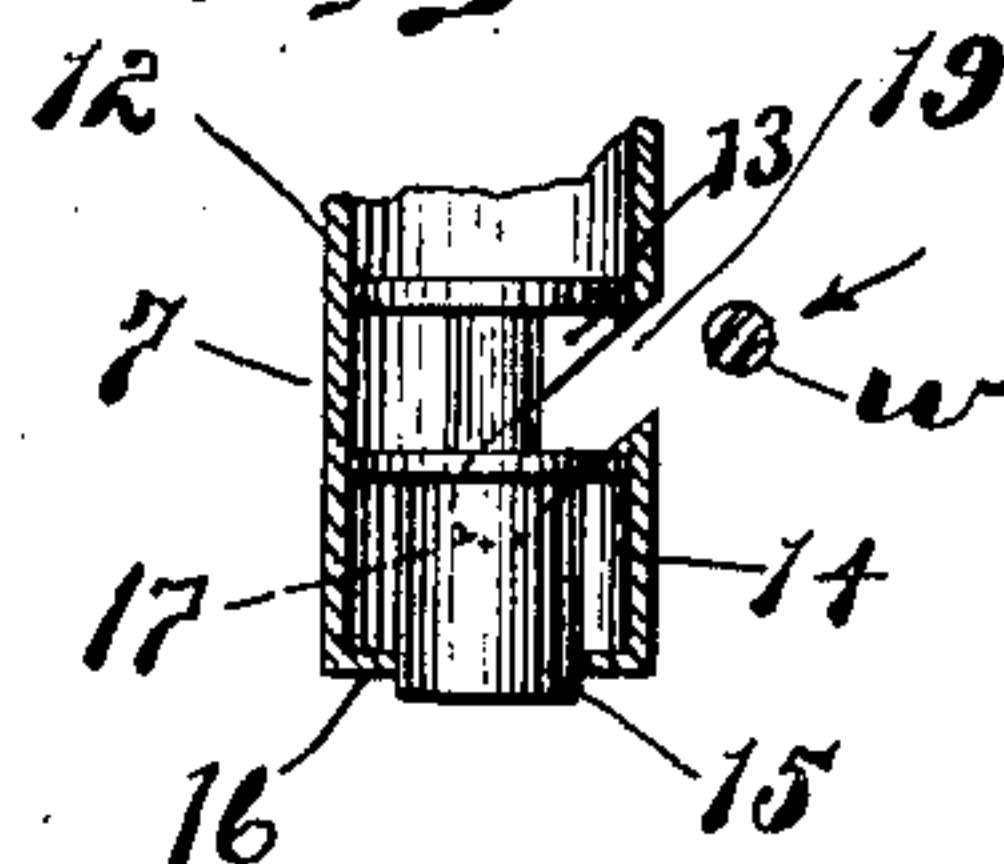
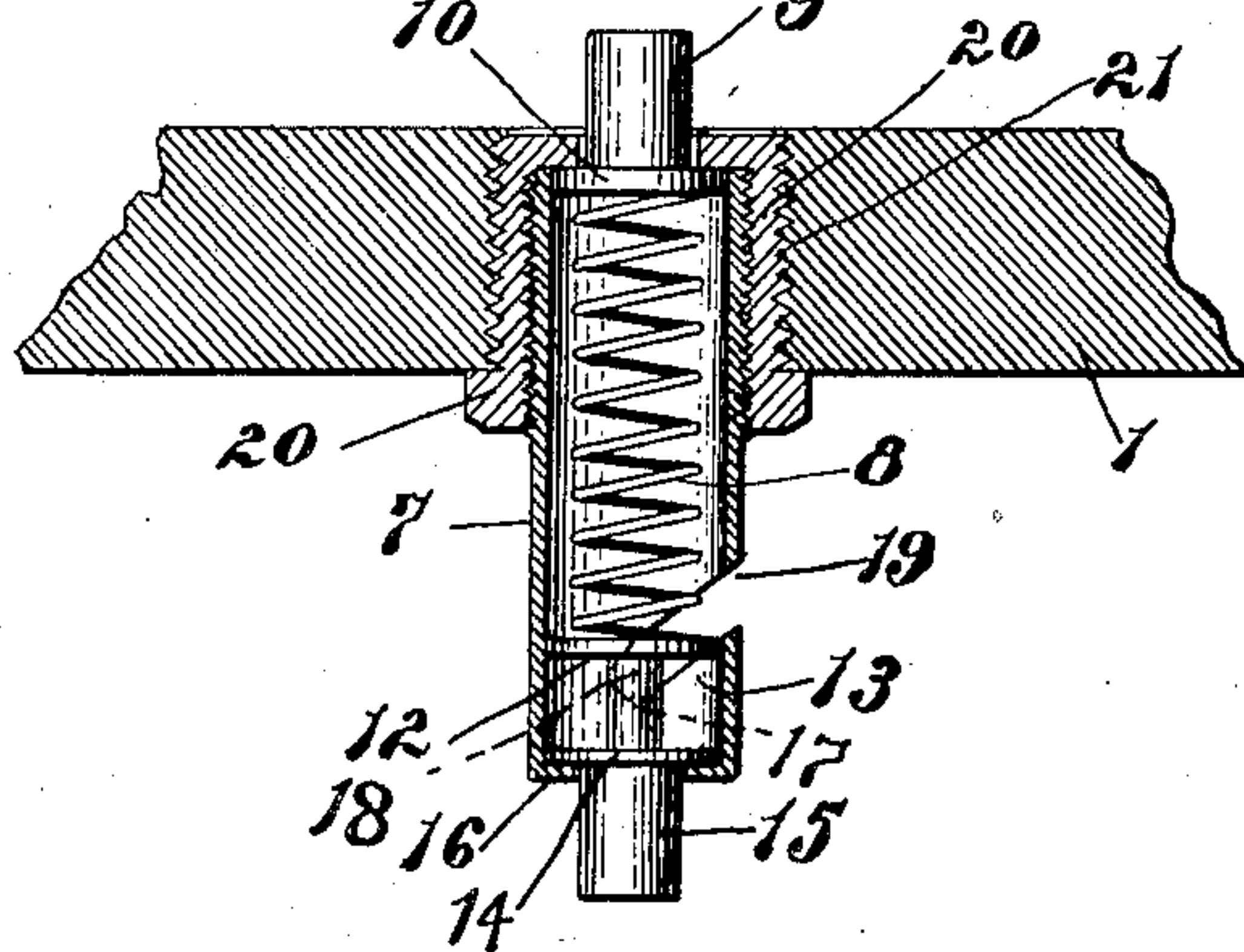


Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

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ELECTRIC BINDING-POST.

No. 821,029.

Specification of Letters Patent.

Patented May 22, 1906.

Application filed August 21, 1905. Serial No. 274,969.

To all whom it may concern:

Be it known that I, WILLARD E. DOW, a citizen of the United States, residing at Braintree, in the county of Norfolk and State of Massachusetts, have invented an Improvement in Electric Binding-Posts, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

My invention, while adapted to general use, is particularly intended for automobiles and other places where a quick and more or less automatic securing of the circuit-wire is desired and also, preferably, where an automatic contact is made, my invention preferably including both an automatic contact device and an automatically-operating binding-post.

In carrying out my invention, as herein shown in its preferred form, I provide a hollow post containing a hole, preferably in the form of a slot, for receiving the wire, and within the post is a spring-held clamp for automatically engaging when released the wire placed in said hole or slot, and at the opposite end of the spring or other controlling device is the contact-post which automatically makes contact with the battery or other circuit-terminals.

The constructional details of my invention and further advantages thereof will be pointed out in the course of the following description, reference being had to the accompanying drawings, in which I have shown two of the preferred constructions of my invention.

In the drawings, Figure 1 shows my binding-post in side elevation, the surrounding cap being shown in section. Fig. 2 is an enlarged sectional view of the binding-post proper. Fig. 3 is a view in side elevation of the barrel or hollow post. Fig. 4 shows the contact-block. Fig. 5 is a fragmentary sectional view showing the automatic clamp in side elevation; and Fig. 6 is a view similar to Fig. 1, showing the form of my invention employed for low-tension current, Fig. 1 showing the form for high-tension current.

I have illustrated my device as I provide it for automatic coil-closing boxes. In the bottom of such a box I screw or otherwise secure the plug end 2 of a cap or casing of insulation, whose removable portion 3 is apertured at 4 to receive an insulated wire 5, adapted to carry usual high-tension current.

The binding-post proper is threaded at 6 and centrally mounted in the plug end or boss 2, as clearly shown in Fig. 1.

Referring more particularly to Fig. 2, it will be seen that the binding-post comprises a hollow barrel 7, containing suitable means for maintaining the parts in position, herein shown as a spring 8, at the upper end of which is a contact 9, whose head 10 bears on said spring, being retained by a nut 11, and at the opposite end of the spring is a clamp comprising a head 12 and an annular recess or cut-away portion 13 adjacent a guiding-flange 14 and operated by a stem or plunger 15, being retained within the barrel by a flange or shoulder 16. When in locking position, the head 12 of the clamp almost, but not quite, closes down over the lower end 17 of an opening 18, herein shown as extending out at one side of said barrel to constitute a slot 19, so that when the operator desires to secure a circuit-wire he simply presses upwardly on the stem or plunger 15, thereby raising the clamp to the position shown in Fig. 5, whereupon the wire *w* is caused to enter the slot in the direction of the arrow, Fig. 5, beneath the head 12 of said clamp, whereupon the latter is released and immediately carries the wire *w* under the action of spring 8 down forcibly against the ends 17 of the holes 18.

In use when it is desired to connect a high-tension conductor, such as that shown in Fig. 1, the cap 3 is unscrewed and allowed to slip down over the wire 5, the insulation of the latter being cut away at its free end so as to leave bare the conductor proper. The plunger 15 is thereupon pressed upwardly so as to raise the clamp in position to receive the wire, which is inserted sidewise into the slot 19 beneath the head 12. The operator then releases the plunger 15, which is immediately forced down by spring 8 into clamping engagement with said wire. The cap 3 is then raised and screwed onto the hub 2. All this is accomplished in a moment.

With low-tension currents it is unnecessary to provide the casing, and accordingly I modify the construction, as shown in Fig. 6, where it will be seen that I have elongated the nut 11 so as to form a tubular nut 20, having coarse external threads 21 for screwing into the wood at the bottom of the coil-box or such other place as it may be used, the contact-post 9 projecting yieldingly upward

above said bottom the same as shown in Fig.

1. In practice for automobile work I make these posts the size shown in Fig. 1, although it will be understood that they will be varied to suit the size of wire and other relations in which they may be used.

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

10 1. A binding-post, comprising a hollow post provided with a diagonal slot in one side, and a spring-actuated clamp sliding in said post transversely of said slot and occupying a releasing position when opposite the
15 mouth of said slot and a clamping position when adjacent the lower, inner end of said slot.

2. A binding-post, comprising a hollow post provided with a diagonal slot in one side,
20 a spring in said post, a headed contact movably retaining said spring at one end of said post and a headed clamp engaging the opposite end of said spring and movable past said slot.

25 3. A binding-post, comprising a hollow, apertured post, externally threaded at one end, and having a shouldered opening at its opposite end, a headed clamp in said post having an operating-stem projecting through
30 said end opening, a spring engaging said clamp, a movable contact at the opposite end of said post held yieldingly by said spring, and a retaining-nut engaging the threaded end

of said post and retaining all the parts within the latter.

4. A binding-post, comprising a hollow, diagonally-slotted post containing oppositely-projecting yielding devices at its opposite ends and an intervening spring normally holding them apart, one of said devices being provided with clamping means for clamping movement with relation to the diagonal slot to bind a circuit-terminal therein, and the other of said devices constituting a yielding contact.

5. A binding-post, comprising a hollow, apertured post containing oppositely-projecting yielding devices at its opposite ends and an intervening spring normally holding them apart, one of said devices being provided with clamping means for clamping movement with relation to the aperture to bind a circuit-terminal therein, and the other of said devices constituting a yielding contact, the adjacent end of said post being externally threaded, and a cap-shaped nut internally threaded to fit said post and externally threaded for mounting purposes.

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

WILLARD E. DOW.

Witnesses:

GEO. H. MAXWELL,
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