No. 781,091. PATENTED JAN. 31, 1905.

W. P. PHILLIPS.

SPRING BINDING POST.

APPLICATION FILED MAY 23, 1904.

Fig. 1.

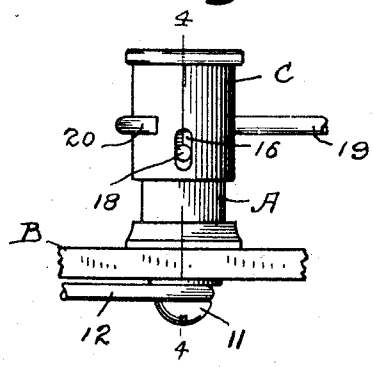


Fig. 2.

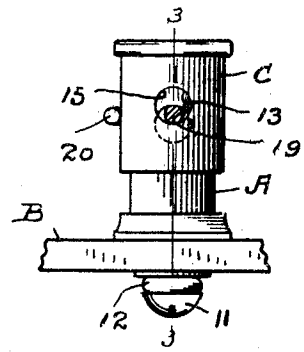


Fig. 3.

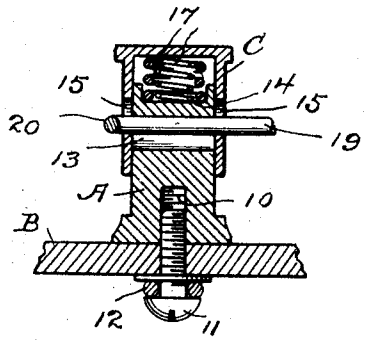
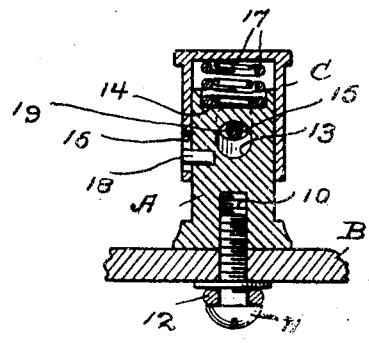


Fig. 4.



WITNESSES.

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By A. M. Wooster Atty.

No. 781,091. Patented January 31, 1905.

UNITED STATES PATENT OFFICE.

WALTER P. PHILLIPS, OF NEW YORK, N. Y., ASSIGNOR TO THE UNITED PRESS, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

SPRING BINDING-POST.

SPECIFICATION forming part of Letters Patent No. 781,091, dated January 31, 1905.

Application filed May 23, 1904. Serial No. 209,230.

To all whom it may concern:

Be it known that I, WALTER P. PHILLIPS, a citizen of the United States, residing at New York, county of New York, State of New York, have invented a new and useful Spring Binding-Post, of which the following is a specification.

My invention has for its object to provide a binding-post adapted for general use in making electrical connections which shall be relatively simple and inexpensive to produce, will insure perfect electrical connection at all times, will permit the convenient and practically instantaneous attachment and detachment of the upper connection, and will hold said connection firmly and beyond the possibility of disengagement. It is of course well understood that the jarring loose and breakage of the upper connection and the difficulty of making quick and convenient attachment and detachment of the upper connection, as in replacing a resonator with a sounder, or vice versa, and at the same time insuring perfect electrical contact is one of the great difficulties telegraphers have to contend with.

In order to accomplish the desired result, I have devised the novel binding-post, of which the following description, in connection with the accompanying drawings, is a specification, reference characters being used to indicate the several parts.

Figure 1 is an elevation of my novel binding-post as in use; Fig. 2, an elevation from a point of view at right angles to the point of view in Fig. 1; Fig. 3, a section on the line 3 3 in Fig. 2, and Fig. 4 is a section on the line 4 4 in Fig. 1.

My novel binding-post comprises, essentially, a solid metal block A, adapted for attachment to a table B, and a spring-actuated shell C, which partly incloses the block. The block is provided on its under side with a threaded hole 10, that receives a screw 11, which passes through the table and to which the under connection 12 is attached.

13 denotes a transverse hole through the block, and 14 a socket which I preferably form in the top of the block to receive the lower end of the spring and prevent it from working to one side, where it might engage the inner wall of the shell and interfere with the proper freedom of movement of the latter. The shell is preferably drawn from sheet metal and is provided in opposite sides with holes 15 and intermediate the holes in one side with a slot 16.

17 denotes springs, one or more being used, as preferred, which rest in socket 14 and the upper ends of which bear upon the inner side of the shell, acting to force the shell upward with considerable power. The shell is secured to the block by means of a pin 18, the outer end of which lies in slot 16 in the shell and the inner end of which is driven firmly into a hole in the block, the engagement of the outer end of the pin with the lower end of the slot serving to limit the upward movement of the spring-actuated shell when there is no upper connection attached to the post. The holes 15 in the shell are in vertical alinement with hole 13 in the block and are adapted to be placed substantially in horizontal alinement therewith by pressing the shell downward firmly against the power of the spring or springs. Normally, however, the holes in the shell are out of horizontal alinement with the hole in the block, owing to the fact that the shell is held in the raised position by the spring or springs. When it is desired to connect an upper electrical connection with or to detach it from the post, the operator simply presses the shell downward against the power of the spring or springs sufficiently to place the holes in the shell substantially in horizontal alinement with the hole in the block. The end of the upper connection, which I have indicated by 19, may then be passed through the holes in the shell and the block. The pressure upon the shell is then relieved, and the spring or springs force the shell upward, gripping and binding the connection firmly between the under side of the holes in the shell and the upper side of the hole through the block, as clearly shown in Figs. 2 and 3. In

practice this grip of the spring-actuated shell and the block upon the upper electrical connection is sufficient to lock it securely in place, so that it will not jar loose or become loosened under any of the normal conditions of use and at the same time will permit the connection to be instantly detached and a new connection attached by simply pressing downward upon the shell to release the connection and then releasing the shell as soon as a new connection has been passed through the holes in the shell and the block. As an additional safeguard, the operator may bend the end of connection 19 about the outer side of the shell, as at 20.

The spring or springs 17 are entirely protected from dampness or contact by the shell C, within which said spring or springs are confined, thereby giving the utmost durability to the device.

Having thus described my invention, I claim--

A binding-post comprising a metal block having a transverse hole and a socket in the top, a shell partly inclosing the block and having holes in vertical alinement with the hole in the block, and a spring confined within the shell one end of said spring resting in the socket the other end bearing against the inner side of the end of the shell whereby the holes in the shell are normally held out of horizontal alinement with the hole in the block, substantially as shown, for the purpose specified.

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

WALTER P. PHILLIPS.

Witnesses:
A. M. WOOSTER,
S. W. ATHERTON.