No. 840,915. PATENTED JAN. 8, 1907.

G. H. COVE.

BATTERY BINDING POST.

APPLICATION FILED MAR. 3, 1906.

Fig. 1.

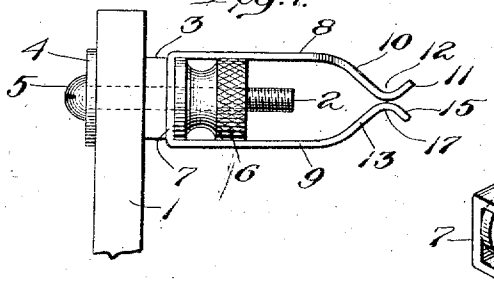


Fig. 2.

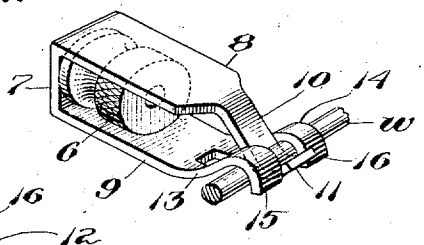


Fig. 3.

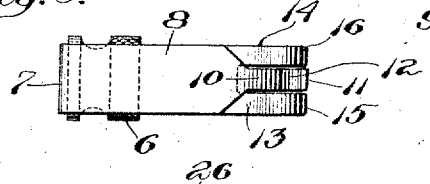


Fig. 4.

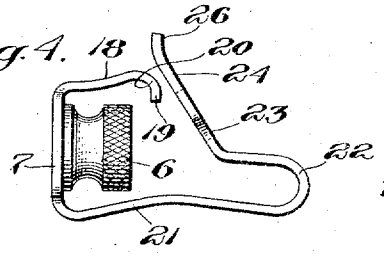
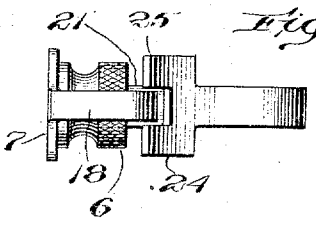


Fig. 5.



Witnesses:
Wm. J. Pike.
M. A. Jones

Inventor:
George H. Cove,
by Geo. S. Maxwell,
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE H. COVE, OF ROXBURY, MASSACHUSETTS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO FRANK R. KIMBALL AND ONE-HALF TO HAMPTON V. HAYWARD, OF BOSTON, MASSACHUSETTS.

BATTERY BINDING-POST.

No. 840,915. Specification of Letters Patent. Patented Jan. 8, 1907.

Application filed March 3, 1906. Serial No. 303,986.

To all whom it may concern:

Be it known that I, GEORGE H. COVE, a citizen of Canada, residing at Roxbury, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Battery Binding-Posts, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

In use batteries for automobiles are subjected to continual jar and vibration, which loosens the nuts of the binding-posts, so that frequently trouble is experienced from this source, but without the driver being able to locate it, and sometimes the wires become actually disconnected and cause a great deal of delay and inconvenience in hunting for the source of the trouble in the sparking apparatus of the motor.

Accordingly my invention has for its purpose to provide simple means for keeping the nuts from coming off while at the same time preventing any pull upon the connecting-wire, my invention aiming to provide means capable of being slipped onto any battery, which at the same time is strong, automatic, and inexpensive.

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

In the drawings, Figure 1 represents in side elevation one form of my invention applied to a usual battery carbon. Fig. 2 is a perspective view of the attachment illustrating its manner of use. Fig. 3 is a top plan view thereof, and Figs. 4 and 5 are views, in side elevation and top plan, respectively, of a slightly-different embodiment of my invention.

For convenience of illustration I have shown a usual carbon 1 and its binding-screw 2 permanently secured thereto by a nut 3, washer 4, and screw-head 5. The ordinary construction is to provide simply a clamping-nut for the threaded end 2 of the binding-screw, which serves to pinch or clamp the contact wire against the nut 3, so that the wire and clamping-nut are very liable to work loose when subjected to the constant vibration of the automobile or the like. Accordingly I have provided a nut 6, preferably having the shape and construction of the usual clamping-nut, with a metal band permanently secured thereto as an article of manufacture, said band being normally retained in its adjusted position by the service wire itself, so that it is impossible for the nut to work off from the screw 2. As shown in Figs. 1 to 3, this band consists of a single piece of metal extending across the back of the nut 6, as indicated at 7, and projecting forwardly therefrom in two parallel arms 8 9, preferably engaging the knurled end of the nut, so as to give strength and firmness and increase the clamping strength of the springs 8 9, the former being cut away to form a narrow tongue 10, bent forwardly at its free end 11 to form a hollow 12, and the spring 9 being cut away longitudinally to form two embracing tongues 13 14, bent downwardly at their outward ends 15 16 to form a hollow 17, arched upwardly in opposition to the downwardly-arched hollow 12, said tongue 10 fitting between the tongues 13 14.

In use the attachment is screwed onto the battery binding-screw 2 into the position shown in Fig. 1, and then the operator grasps the two springs 8 9 between his thumb and finger and pinches them together until the tongues have passed by each other a considerable distance, so as to permit the service-wire *w* to be placed readily between them, as shown in Fig. 2, whereupon he ceases to pinch the springs toward each other, and they immediately grasp firmly the wire *w*, as shown in said Fig. 2. This not only serves to hold the wire in position, but makes it impossible for the nut to work loose, as the wire *w* holds the nut unremittingly in place.

In Fig. 4 I have shown a somewhat-different construction in which the operator grasps one spring only instead of grasping both of the springs in order to engage or disengage the service-wire. Said attachment comprises a nut 6 and a single strip of spring metal, the same as before, secured at 7 to the back side of the nut and having a tongue 18 extending over forwardly and bent downwardly at its front end 19 to form a hollow receiving part 20, while the lower end of the

spring extends forwardly at 21 and is thence bent backwardly at 22 and upwardly at 23, where it spreads into two tongues 24 25 to embrace the tongue 18, said two tongues 24 25 being bent outwardly at their free ends, as shown at 26, to coöperate with the hollow 20 for holding the wire in the same way as shown in the other construction in Fig. 2. The construction just described is used the same way as described for the other construction, the nut being screwed in place the same as before, and then the operator engages the upper and lower sides of the projecting loop of spring metal constituting the lower member of the device and pinches said loop together, thereby lowering the free end thereof beneath the tongue 18 sufficiently to receive the electric wire between the forward face of the tongues 24 25 and the hollow portion 20 of the tongue 18. He then releases his pinching grasp, whereupon the electric wire is clamped firmly and permanently and serves thereafter to prevent the nut 6 from jarring loose.

My attachment is not only simple, being composed of one piece or strip of spring metal secured to the nut, but it is strong and inexpensive, exerts no pull on the wire whatever either in use or when being clamped onto the wire. It can be used in place of the ordinary nut on any battery and in all cases serves effectually to prevent the nut from loosening and coming off by the continuous jar of the engine and vehicle.

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

1. As an article of manufacture, a binding-post attachment for electric batteries, consisting of a nut provided on its opposite sides with forwardly-extending spring members having their free ends bent and normally separated, one of said free ends having a longitudinal recess to receive the terminal of the opposite member when they are pressed or sprung past each other, for receiving and clamping a service-wire.

2. As an article of manufacture, a binding-post attachment for electric batteries, consisting of a single strip of spring metal having a U-shaped bend at its rear portion, securing means carried by said U-shaped bend between the opposite projecting members thereof, one member having a downwardly-bent tongue, and the other member having upwardly-bent embracing-tongues adapted to receive said downwardly-bent tongue between them, the extreme free ends of said tongues being oppositely bent to form coöperating engaging hollows for holding a wire when said tongues are sprung past each other into holding position.

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

GEORGE H. COVE.

Witnesses:
GEO. H. MAXWELL,
WM. J. PIKE.

Corrections in Letters Patent No. 840,915.

It is hereby certified that Letters Patent No. 840,915, granted January 8, 1907, upon the application of George H. Cove, of Roxbury, Massachusetts, for an improvement in "Battery Binding-Posts," were erroneously issued to "Frank R. Kimball and Hampton V. Hayward" as owners of the entire interest, whereas said Letters Patent should have been issued to said *George H. Cove and Frank R. Kimball and Hampton V. Hayward*, they being joint owners of said invention as shown by the record of assignments in this office; and that in line 7 of the grant and line 3 of the heading of the printed specification, the words "one-half" should read *one-fourth;* and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 5th day of February, A. D., 1907.

[SEAL.]

F. I. ALLEN,
Commissioner of Patents.

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