(No Model.)

J. M. BOWYER.

REEL FOR ELECTRIC CONDUCTORS.

No. 351,488. Patented Oct. 26, 1886.

Fig. 2

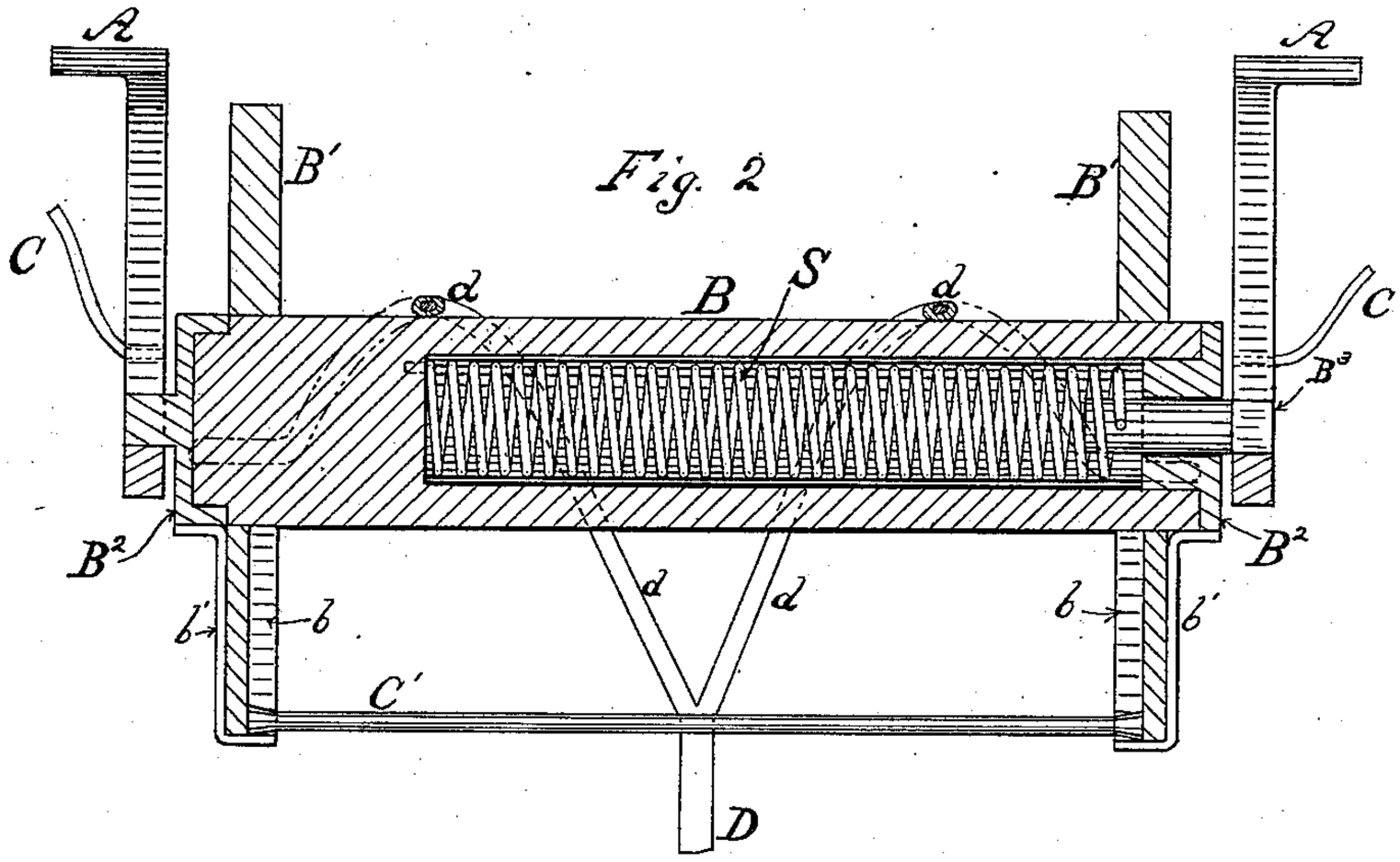
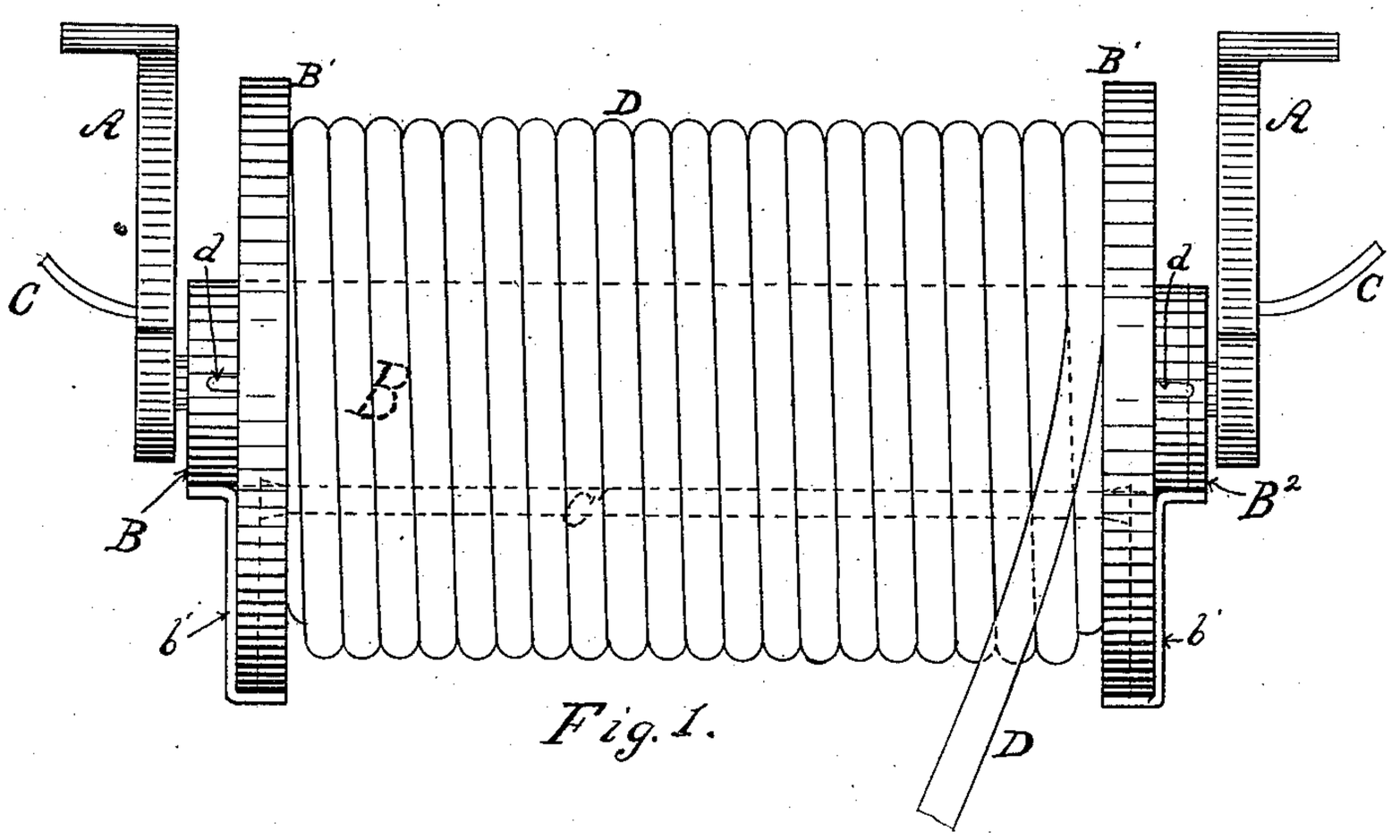


Fig. 1.



Witnesses,
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UNITED STATES PATENT OFFICE.

JOHN M. BOWYER, OF ERIE, PENNSYLVANIA.

REEL FOR ELECTRIC CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 351,488, dated October 26, 1886.

Application filed May 29, 1886. Serial No. 203,644. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. BOWYER, lieutenant United States Navy, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Reels for Electric Conductors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to reels for electric conductors; and it consists in certain improvements in the construction thereof, as will be hereinafter fully described, and pointed out in the claims.

My device is intended chiefly for use on tables or desks having thereon an electric call-button connected by proper conductor with a call-bell in another room, and serves to hold a sufficient length of conductor-wire to enable the table to be moved freely about the room. The device, however, may be used on any movable object.

The accompanying drawings illustrate my invention, as follows:

Figure 1 is a side elevation of the reel and and its hangers with the conductor-wire wound thereon. Fig. 2 is a longitudinal vertical section view of the same, with the conductor-wire unwound.

A A are the hangers, which are made of metal.

B is the drum of the reel, and B′ B′ are the end flanges, which parts are made of wood or other non-conducting substance.

B^2 B^2 are metallic caps at the ends of the drum, one of which is formed like a gudgeon and the other has an opening in the center for the journaling of a stem, B^3, which is squared at its outer end and sets in a square seat in the hanger A, and its inner end is attached to a spring, S, contained within the drum B. This spring is so adjusted that it will be wound up as the conductor is unwound, and when the strain is removed it will rotate the reel and wind up the conductor.

C C are conductor-wires leading from each hanger to whatever instrument there may be on the table to which the reel is attached by the hangers A A—such, for instance, as a press button or key.

D is the main insulated conductor, which contains two or more wires, *d d*, which are separated on the reel and run to the metallic plates or caps B^2 at each end of the drum. It will thus be seen that electric communication may be established from the wires C C, through the metallic hangers A A, the journals of the reel, the caps B^2 B^2, and the wires *d d*.

On the inside of the flanges B′, I form two slots, *b b*, opposite each other, and I place a wire, C′, on the drum with its ends in said slots *b*. A piece of metal, *b′*, closes the end of each slot and extends down the outside of the flanges and rests on the caps B^2. When the wire rod C′ is at the outer end of the slots *b*, it will rest on the metal strips *b′*, and thus form a circuit between the wires *d d*. When the conductor D is wound on the reel, the rod C′ is kept against the drum, but when the conductor is nearly unwound from the reel the rod C′ will fall down into the position shown in Fig. 2, and establish a circuit which will of course sound the call-bell, and thus give notice that any further movement of the table will cause damage. If the circuit should be a long one and the call-bell so far removed that it would not be heard, then a special alarm-bell should be placed on the circuit where it will be heard. With this device on a table it can be moved about the room freely, and the conductor will pay out or wind up automatically.

My device may be used for a great variety of electrical devices besides call-bells—such, for example, as portable electric lights, &c.

What I claim as new is—

1. In a reel for electrical conductors, the combination of a spring-actuated reel, hangers supporting said reel, conductors connecting hangers with the electrical device mounted on the object on which said reel is mounted, and electrical conductors attached to and winding on said reel, which are in metallic connection through the journals of said reel with the said hangers.

2. In a reel for electrical conductors, the combination, substantially as set forth, of the hangers A A, the spring-actuated drum B, supported by said hangers, the electrical con-

ductors C C, connected with said hangers, the electrical conductors *d d*, connected with said reel, and means, substantially as shown, for establishing electrical communication between the conductors C C and the conductors *d d* through the journals of the reel.

3. In a reel for electrical conductors, the combination, substantially as set forth, of the hangers A A, the conductors C C, connected with said hangers, the spring-actuated non-conductor reel B B′, having metallic journals seated in said hangers, the conductors *d d*, winding on said reel and connected conductively with said journals, the radial slots *b* in the flanges of said reel, metallic plates *b′*, closing the outer ends of said slots and extending to the metallic journals, and the metallic rods C′, adjusted loosely within said slots, substantially as and for the purposes mentioned.

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

JOHN M. BOWYER.

Witnesses:
ROBT. H. PORTER,
C. SMALLEY.