(No Model.)

A. CAVALLI.

REEL FOR HOLDING WIRE IN THE COIL.

No. 325,394. Patented Sept. 1, 1885.

Fig. 1.

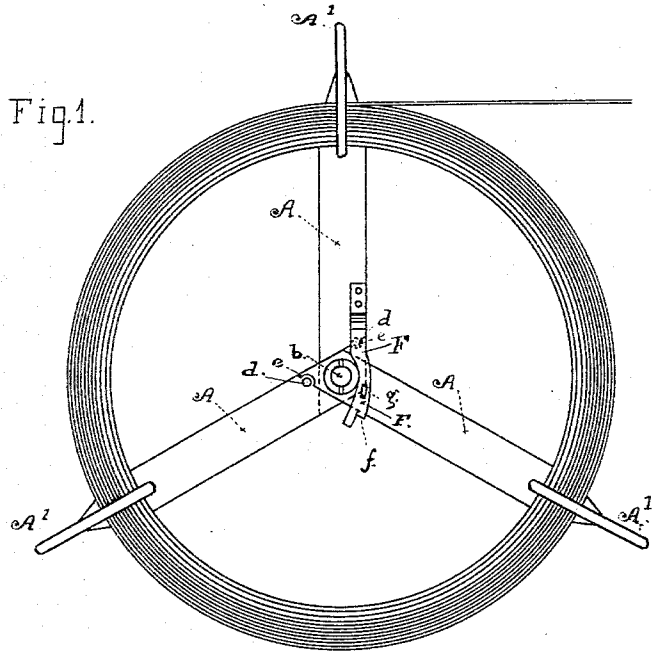


Fig. 2.

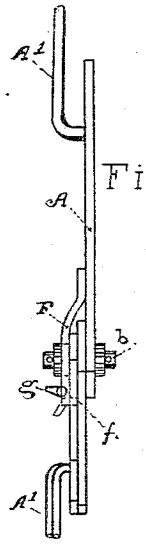


Fig. 4.

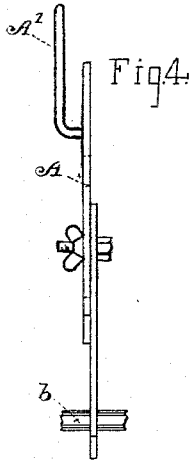


Fig. 3.

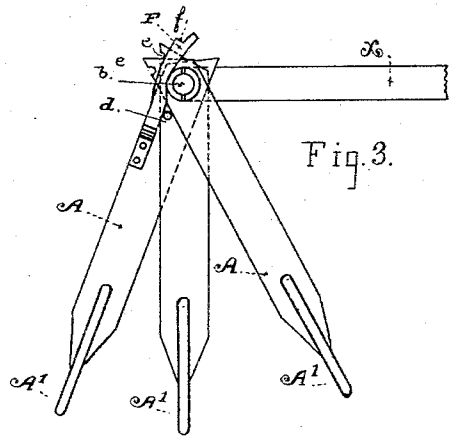
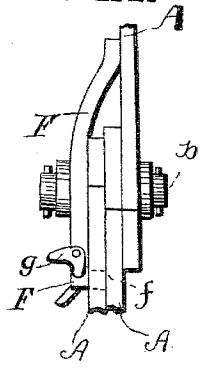


FIG. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

ANDREA CAVALLI, OF SAN FRANCISCO, CALIFORNIA.

REEL FOR HOLDING WIRE IN THE COIL.

SPECIFICATION forming part of Letters Patent No. 325,394, dated September 1, 1885.

Application filed August 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, ANDREA CAVALLI, a citizen of the United States, residing in the city and county of San Francisco, in the State of California, have invented an Improved Reel for Holding Wire in the Coil; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings that form a part of this specification.

The object of my invention is to produce a reel or holder for wire in the coil having such features that it can be readily inserted into the center of a coil of wire and caused to engage it at several points around the circle, to permit the coil to be turned and the wire drawn off as from a reel, as well as to form a frame or holder for coil-wire.

To such end the nature of my invention consists in a number of arms of equal length attached together by a pin or center hub, so that they can be folded up together into a contracted form to be inserted into the center of a coil of wire, and when thus set into the opening of the coil to be spread out radially, and their outer ends caused to take the coil or layers of the wire. To the arms a catch is applied to keep them in this spread-out condition.

The following description fully explains the construction and use of this improved reel, the said drawings being referred to by figures and letters.

Figure 1 shows the reel inserted into a coil of wire. Fig. 2 is a side view of the reel. Fig. 3 shows the reel folded up preparatory to being inserted into a coil of wire. Fig. 4 shows a construction of arm to make the reel adjustable for different sizes of coils or bundles. Fig. 5 is a detail view of the center portion of the reel on an enlarged scale, showing the cam for operating the spring.

The arms A A A are of equal length, and have each an eye in the end to take a pin, *b*. These ends, overlapping one another, are free to turn on the center pin, and they can be folded together, as in Fig. 3, or spread out radially and equidistant, like the arms of a reel, as in Fig. 1.

On the side of each arm, at the outer end, is a projecting wire, A′, that sets out from the face of the bar or arm and parallel with it, to form a slot or space for receiving the wire and holding the coil.

The position of the arms when spread out within the coil is maintained by means of a stud, *d*, on the side of one arm, near the hub, a notch, *e*, in the other arm near the end, and a spring-tongue, F, on the third arm, having a bent end, *f*, to take over the outer edge of the second arm and hold this notch against the pin. This spring is fastened at one end to the arm, but rides over the top or outer arm of the set, so that its catch *f* may take under that arm. Where this spring requires to be of considerable stiffness, as in a large-sized reel, it will be desirable to provide some means of lifting the spring to bring the catch clear of the arm, as in folding up the reel. For this purpose I apply a lifter under the free end, composed of a piece, *g*, with a cam or eccentric head under the spring and a head on the outside for turning. This eccentric part, by pressing against the arm, will serve to raise the spring when turned up.

Now, as thus constructed, the holder is readily inserted into the opening in a coil of wire by folding the arms and bringing the hooks at the end over the coil, so as to take it into the space between each hook and the arm, and then finally spreading the arms out until they are brought into position at equal distance around the circle, in which position the pin and the notch and the holding-spring will come into action to lock the arms.

The pin or center of this reel may be fixed into the end of a fixed bar or support, as at *x*, Fig. 3, to hold the coil; or this bar may be used to suspend the reel. In either case the coil of wire will be held in position for convenient rotation to draw off the wire as may be required.

The arms may be made in two separate pieces, movable on each other, and held by clamp or set screws, as shown in Fig. 4, to afford adjustment in the length of the wire and accommodate the holder to coils of different diameters.

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

1. The herein-described reel for holding wire in the coil, consisting of the folding frame A

A A, the wires A′, and the stops *d e*, and locking-spring F.

2. A folding reel adapted for insertion into a coil of wire while in the contracted or closed form, and by expansion or opening out to take the coil and give points of support around the circumference of the same, consisting of the arms A, pivoted together with the forked ends A′ A′, and the stops *d e*, and the catches F, for holding the arms when spread out, and the cam *g*, for operating the spring, substantially as herein described.

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