Dec. 11, 1923. 1,476,778

E. H. TATE

HOLDER FOR COILED WIRE

Filed Jan. 17, 1923

FIG. 4.

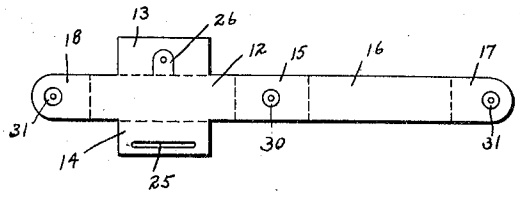


FIG. 1.

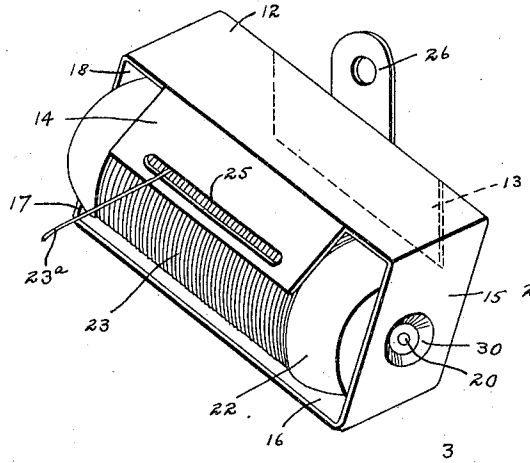


FIG. 3.

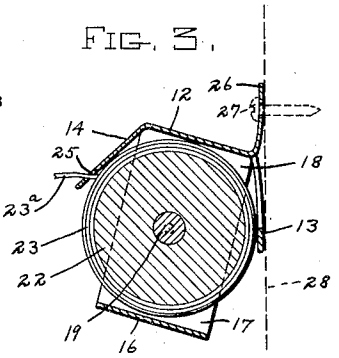
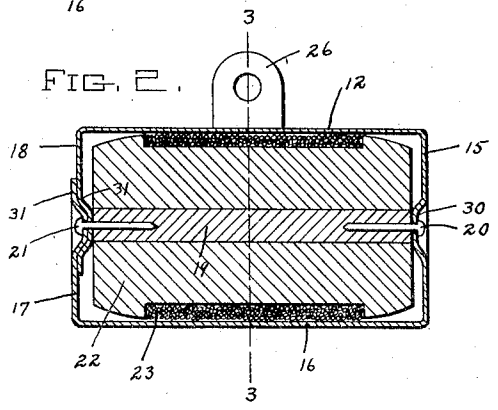


FIG. 2.



INVENTOR

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UNITED STATES PATENT OFFICE.

EDWARD H. TATE, OF MALDEN, MASSACHUSETTS.

HOLDER FOR COILED WIRE.

Application filed January 17, 1923. Serial No. 613,113.

To all whom it may concern:

Be it known that I, EDWARD H. TATE, a citizen of the United States, residing at Malden, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Holders for Coiled Wire, of which the following is a specification.

This invention has for its object to provide improved means for confining a winding of wire on a spool on which it is wound, in such manner as to prevent undesirable expansion of the winding and the formation of loose convolutions, and at the same time permit the wire to be freely unwound and withdrawn from the winding as required.

The invention is embodied in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings forming a part of this specification,—

Figure 1 is a perspective view of a holder embodying the invention.

Figure 2 is a longitudinal section of the same.

Figure 3 is a section on line 3—3 of Figure 2.

Figure 4 is a plan view of the blank from which the frame element of the holder is formed.

The same reference characters indicate the same parts in all of the figures.

My improved holder is composed of a frame and a spool journaled to rotate in the frame, and adapted to hold a winding of wire. The frame is formed from an elongated sheet metal blank, shown on a reduced scale by Figure 4. Said blank includes an upper side portion 12, having at one of its edges a rear lateral wing 13, and at the opposite edge a front lateral wing 14, a continuous intermediate portion 15, a lower side portion 16, extending parallel with the upper side portion and connected therewith by the intermediate portion, and overlapping end portions 17 and 18, bent from the upper and lower side portions. The said portions form a rectangular frame open at opposite sides. 19 represents a cylindrical rod attached at one end by a fastener 20, to the intermediate portion 15, and at its opposite end by a fastener 21, to the overlapping parts of the end portions 17 and 18. 22 represents a spool journaled to rotate on the rod 19, and carrying a winding 23 of wire. The wings 13 and 14 are inclined downwardly from the upper side portion 12, and are arranged to stand in close proximity to opposite sides of the winding 23 and confine the outer convolutions of the winding against undesirable expansion, so that there is no liability of the displacement and entangling of any of the convolutions of the wire. The side portions 12 and 16 are also in close proximity to opposite sides of the winding, and additionally confine said outer convolutions.

The front wing 14 is preferably provided with an elongated slot 25, which guides the leading end 23^a of the wire, and prevents it from moving across and becoming entangled with the heads of the spool, and between the heads and the frame.

The frame is provided with a perforated supporting ear 26, adapted to be secured by a fastener 27 to a support, such as a wall 28. Said ear is cut out from the rear wing 13, and is bent upward from the upper side portion 12, substantially in alinement with the rear wing, so that the ear and wing are adapted to bear simultaneously on the support 29, an extended base being thus provided, so that the holder may be firmly supported.

The intermediate portion 15 is provided with an inwardly projecting base 30, on which one end of the rod 19 is seated. The overlapping parts of the end portions 17 and 18 are provided with bosses 31, one nested in the other, the opposite end of the rod 19 being seated on the inner boss 31. The ends of the spool are thus spaced from the adjacent portions of the frame, as shown by Figure 2, so that the rotation of the spool is not retarded by contact with said portions.

I claim:

1. A coiled wire-holder, comprising a frame formed from an elongated sheet metal blank, and including an upper side portion having rear and front lateral wings at its opposite edges, an intermediate portion, a lower side portion extending parallel with the upper side portion and connected therewith by the intermediate portion, and overlapping end portions bent from the upper and lower side portions, the frame formed by said portions being rectangular and open at opposite sides; a rod extending through the center of said frame, and fixed at one end to the intermediate portion, and at its opposite end to the overlapping parts of the

end portions, and a wire-holding spool journaled on said pin, the said wings being inclined from the upper side portion, and arranged to stand in close proximity to opposite sides of a winding of wire on the spool, and confine the outer convolutions of said winding, the said upper and lower side portions being also arranged to stand in close proximity to opposite sides of the winding and additionally confine said convolutions.

2. A coiled wire-holder substantially as specified by claim 1, the said front wing being provided with an elongated slot, adapted to guide the wire withdrawn from the winding.

3. A coiled wire-holder substantially as specified by claim 1, said frame being provided with a perforated supporting ear cut from the said rear wing and bent upward from the upper side portion substantially in alinement with the rear wing, so that said ear and wing are adapted to bear on a supporting surface.

4. A coiled wire-holder substantially as specified by claim 1, the said intermediate portion and the overlapping parts of the said end portions being provided with inwardly projecting bosses, forming seats for the ends of said rod, so that the ends of the spool are spaced from the adjacent portions of the frame.

In testimony whereof I have affixed my signature.

EDWARD H. TATE.