(No Model.)

J. W. BUCHANAN.

WIRE REEL.

No. 483,830. Patented Oct. 4, 1892.

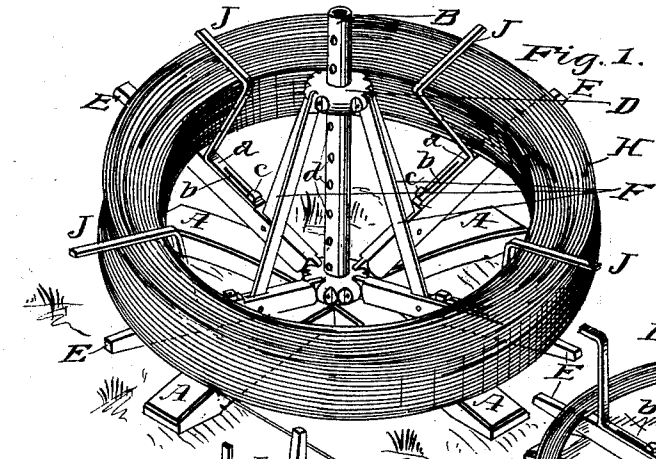

Fig. 1.

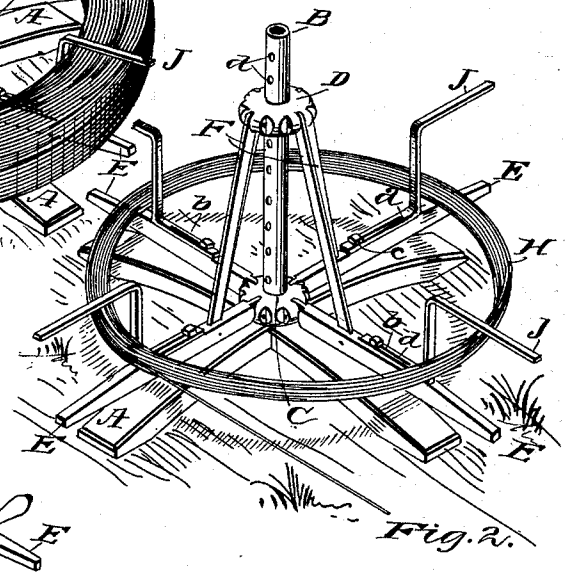

Fig. 2.

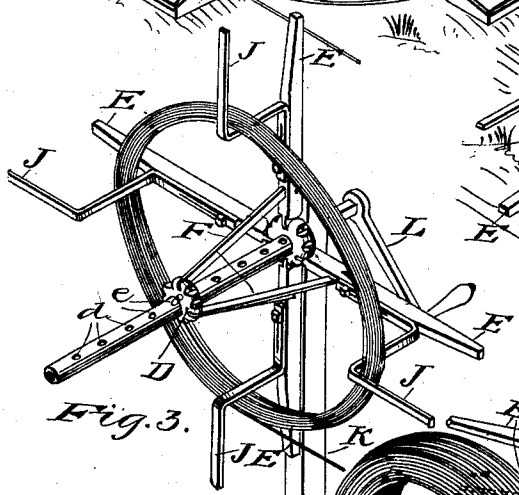

Fig. 3.

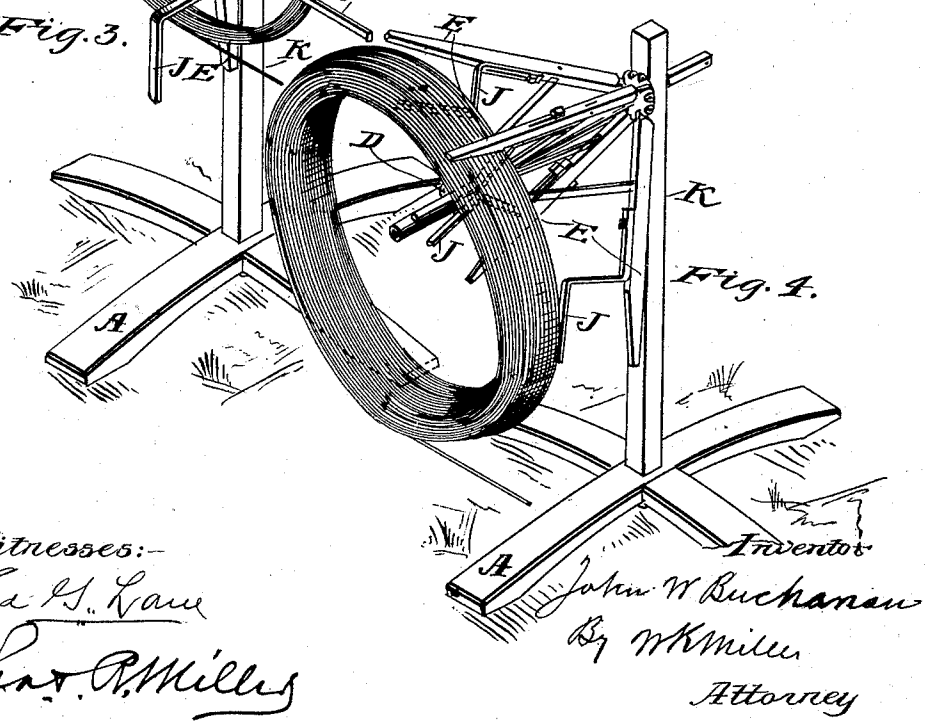

Fig. 4.

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UNITED STATES PATENT OFFICE.

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WIRE-REEL.

SPECIFICATION forming part of Letters Patent No. 483,830, dated October 4, 1892.

Application filed February 27, 1892. Serial No. 422,989. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. BUCHANAN, a citizen of the United States, and a resident of Smithville, county of Wayne, State of Ohio, have invented a new and useful Improvement in Wire-Reels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to an improvement in wire-reels; and it consists in providing a reel that will serve as a swift as well as a reel that will expand under the weight of the wire to keep the wire taut.

With these ends in view my invention relates to certain features of construction and combination of parts, as will be hereinafter described, and pointed out in the claim.

Figure 1 of the accompanying drawings is a view in perspective illustrating my invention when used as a swift, having thereon a full hank or coil of wire. Fig. 2 is a similar view showing the swift expanded to keep the wire taut; Fig. 3, a similar view showing my invention when used as a reel; Fig. 4, a similar view showing the reel collapsed for the removal of the wire.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

Referring to Figs. 1 and 2, in which the invention is arranged for use as a spool or swift, from which the wire is taken as required, A represents the base, which may be made of any suitable material, having at its central portion an aperture vertical therethrough to form a journal-box, in which is placed a vertical spindle B, on which is provided a fixed head C and a sliding adjustable head D. Arms E are pivotally secured to the head C at one end, the other or free end being permitted to vibrate transverse to the head, as hereinafter explained. On the arms E adjustable brackets J are provided, having a portion *a*, parallel with and resting on the arm E, in which portion is provided an elongated aperture *b*, through which a bolt *c* is passed to secure the bracket to the arm in desired adjustment. The middle portion of the bracket standing at right angles with the arm E will form a shoulder or support for the wire, by which the hank or coil is held central to the spindle B, the free ends of the arm E and the free parallel portion of the bracket forming a U-shaped receptacle for the wire. The arms E are connected with the head D by links F, the ends of which are pivotally secured in the heads, as shown, by which means the arms E may be secured in desired adjustment transverse the head C by sliding the head D on the spindle and securing it in desired adjustment by placing a pin in one of the perforations *d* in the spindle on each side of the head D; or, as shown in Figs. 1 and 2, the pin may be removed to allow the weight of the wire H, pressing the arms E down, to draw the bracket J outwardly to follow the coils as they become slack in the course of unwinding, thus forming a gravity tension on the wire, as shown in Fig. 2.

To receive the bundle of wire, the arms E are drawn up toward the spindle and the bundle dropped into the U-shaped receptacle formed by the outer end of the arm E and the bracket F.

The bracket F may be adjusted longitudinally on the arms E by the aperture *b* and bolt *c* to adapt the reel to different sizes of coils of wire. This, to a certain extent, may be accomplished by adjusting the head D on the spindle.

For the purpose of reeling wire into hanks or bundles a post K is provided, the lower end of which is adapted to enter the central aperture in the base A, having at its upper end an aperture that forms a journal-box, in which is supported the spindle B in horizontal position, as shown in Fig. 3. The arms E are held at right angles to the spindle by the adjustment of the head D in the spindle, in which position the head is secured by the pin *e*. To revolve the reel to take up and form the wire in coils, a crank L is placed on the end of the spindle, as shown.

To remove the coil, the pin *e* is removed to allow the reel-arms to collapse or fold in toward the spindle and the coil lifted and carried away from the reel.

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

The combination, with a suitable support,

of a rotary spindle, a head C, mounted on said spindle near one of its end portions, arms E, pivotally secured to said head to vibrate transverse thereto, brackets J, secured to the arms E to slide thereon, sliding head D, and links F, connecting the arms with the sliding head, substantially as described.

In testimony whereof I have hereunto set my hand this 11th day of February, A. D. 1892.

JOHN W. BUCHANAN.

Witnesses:
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S. P. SCHWAMM.