(No Model.)

# H. MILLER.

## FENCE WIRE SPOOL CARRIER AND WINDER.

No. 450,030. Patented Apr. 7, 1891.

Fig 1

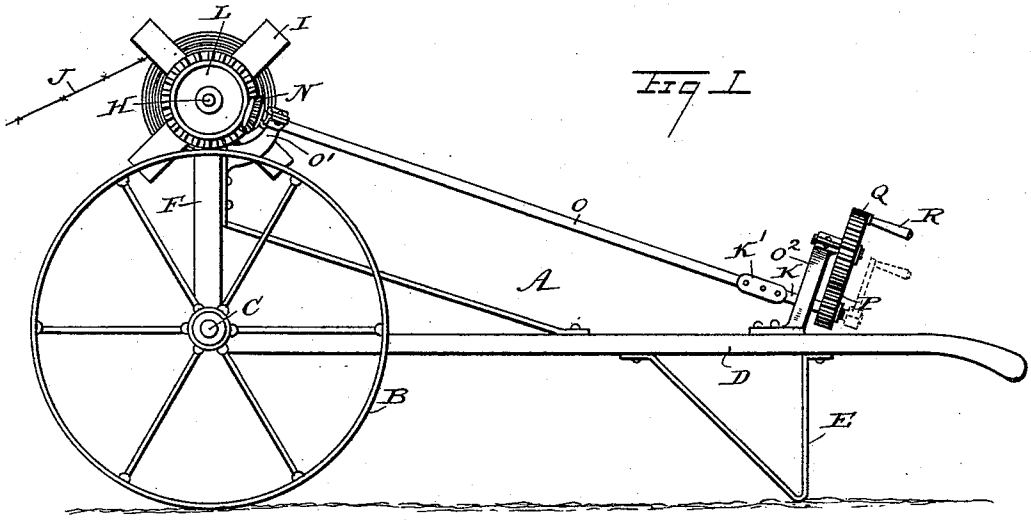



Fig 2

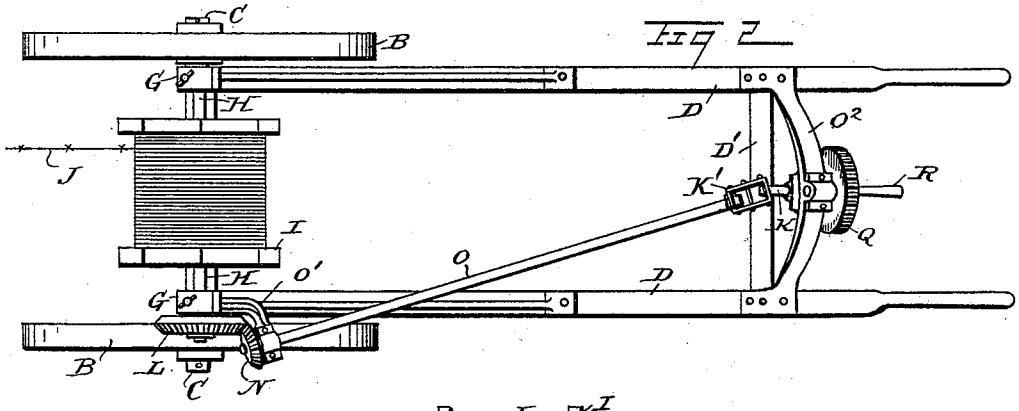



Fig 4

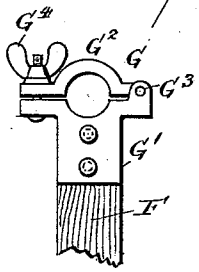
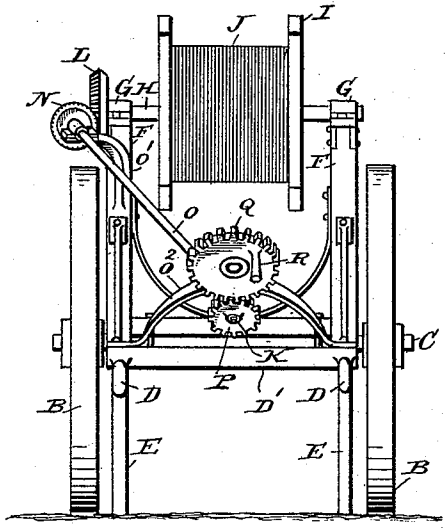



Fig 3




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# UNITED STATES PATENT OFFICE.

HEZEKIAH MILLER, OF BRAYTON, ASSIGNOR OF ONE-HALF TO JOHN B. HASH, OF EXIRA, IOWA.

## FENCE-WIRE-SPOOL CARRIER AND WINDER.

SPECIFICATION forming part of Letters Patent No. 450,030, dated April 7, 1891.

Application filed March 22, 1890. Serial No. 344,932. (No model.)

*To all whom it may concern:*

Be it known that I, HEZEKIAH MILLER, of Brayton, in the county of Audubon and State of Iowa, have invented a new and Improved Fence-Wire-Spool Carrier and Winder, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved machine specially designed for use in making wire fences and adapted to carry the wire-spool, and means for readily and conveniently turning the spool to wind up or unwind the wire.

The invention consists in the particular construction and arrangement of parts, as hereinafter fully described, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement. Fig. 2 is a plan view of the same. Fig. 3 is an end view of the same, and Fig. 4 is an enlarged side elevation of one of the shaft-bearings.

The improved machine is provided with a two-wheeled truck A, having the two wheels B, mounted to turn on the stationary axle C, supporting horizontally-extending handles D, connected at their outer ends with each other by a suitable cross-bar D′. In order to hold the handles D in a horizontal position, rest-brackets E are secured to the under sides of the said handles to rest on the ground, as shown in Figs. 1 and 3. On the inner ends of the handles D, directly above the axle C, are secured posts F, provided at their upper ends with bearings G, in which is mounted to turn a transversely-extending shaft H, arranged above the wheels B and adapted to receive the spool I, carrying the wire J for building the fence. On one end of the shaft H is secured a bevel gear-wheel L, meshing into a bevel-pinion N, secured on an inclined and rearwardly-extending shaft O, mounted to turn at one end in a suitable bearing formed on a bracket O′, secured to one of the posts F. The other end of the shaft O is connected by a universal joint K′ with a shaft K, mounted to turn in suitable bearings in a bracket or bridge $O^2$, secured to the handles D.

The shaft K extends toward the handle ends of the handles D and carries at its end a pinion P, in mesh with a spur-wheel Q, mounted to turn on a stud secured on the bracket $O^2$. A handle R extends from one face of the said spur-wheel Q, for conveniently turning it, so as to rotate the pinion P and the shafts K and O, which latter, by the gear-wheels N and L, imparts a rotary motion to the shaft H, carrying the spool I.

In order conveniently to place the spool I on the shaft H, the bearings G of the latter are preferably made as illustrated in Fig. 4, so that the shaft H can be conveniently removed and replaced for removing and replacing the spool I. Each bearing G is provided with a socket G′, fastened to the respective post F, on which is pivoted at $G^3$ the upper part $G^2$ of the bearing G, the opposite end of this half-bearing $G^2$ being secured to the other half part by a suitable screw $G^4$, having a winged nut, which permits of rapidly removing the bolt from the bearing, so as to swing the pivoted part $G^2$ upward to enable the operator to remove the shaft H.

The operation is as follows: When the bearings G are opened, the shaft H can be conveniently removed for placing the spool I, carrying the wire J, upon the said shaft. When this is accomplished, the shaft is returned to its bearings, and the pivoted parts $G^3$ of the bearings are again fastened to the lower parts G′, as is shown in the drawings. One end of the wire J is then fastened to the fence-post and the operator takes hold of the handle D of the truck A and moves the latter forward along the line of the fence, so that the wire J unwinds from the spool I as the truck travels along. When the operator has reached the next following fence-post, he rests the truck on the ground and then turns the handle R of the gear Q, so as to impart a rotary motion to the shaft H to wind up the wire on the spool I, thus stretching that part of the wire extending between the two posts. The wire is then fastened to the second post and the operator again moves the truck A along to the next post, repeating the above-described operation until the entire fence is finished. In taking down the fence the operator starts at one end of the wire J, places the same on the empty spool I, and then turns

the handle R so that the wire is wound upon the spool, the truck A being moved along on the ground in the direction of the line of the fence.

It will be seen that the machine is very simple and durable in construction and that it can easily be moved along the ground to wind the wire upon or unwind it from the spool I, so that one man can very readily and quickly set up or take down a fence without the aid of others. It will also be seen that by locating the crank R at the middle of the cross-bar $O^2$ it will be in proper position for either a right or left handed operator, and the operator will not have to step outside of the frame to turn the crank.

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

A fence-wire-spool carrier and winder comprising the wheeled truck having shaft-bearings at its forward end and handles at its opposite end, a spool-shaft H, mounted in said bearings and having a bevel-gear L on one end, a bracket O′, adjacent to said gear and provided with a bearing, a bracket $O^2$, connecting the sides of the truck adjacent to the handles, a short shaft K, mounted on said bracket at the center thereof and provided with a pinion P, a pinion Q, mounted on top of the bracket $O^2$ and meshing into pinion P, a handle R, projecting from pinion Q, between the two handles, an oblique shaft O, mounted at its forward end in the bearing on bracket O′ and provided with a bevel-gear N, meshing into gear L, and the universal joint connecting the adjacent ends of shafts O K, substantiatly as set forth.

HEZEKIAH MILLER.

Witnesses:
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