

No. 671,248.

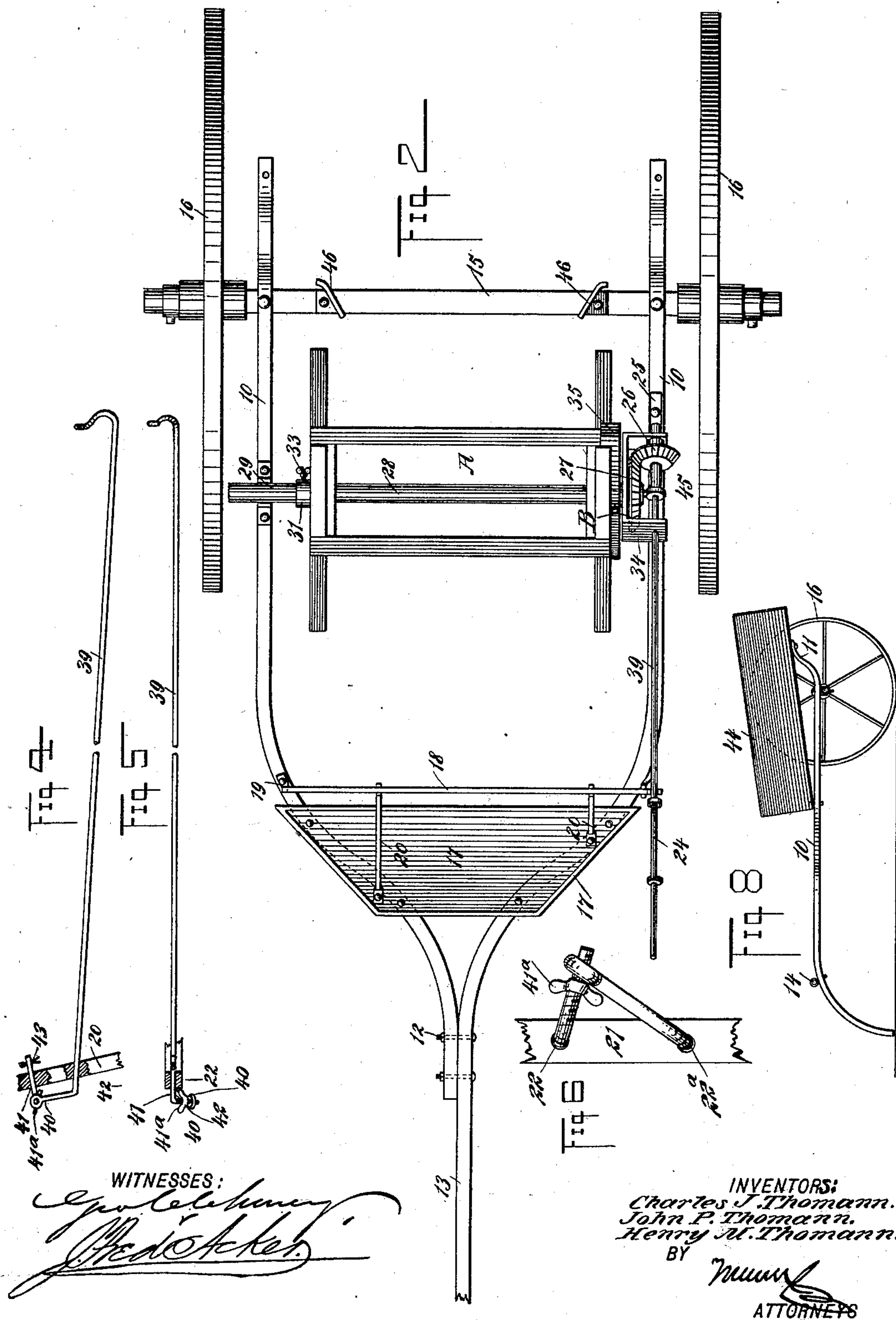
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C. J., J. P. & H. M. THOMANN.
BARB WIRE REEL AND CARRIER.

(Application filed Nov. 27, 1900.)

(No Model.)

2 Sheets—Sheet 2.



UNITED STATES PATENT OFFICE.

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BARB-WIRE REEL AND CARRIER.

SPECIFICATION forming part of Letters Patent No. 671,248, dated April 2, 1901.

Application filed November 27, 1900. Serial No. 37,873. (No model.)

To all whom it may concern:

Be it known that we, CHARLES J. THOMANN, JOHN P. THOMANN, and HENRY M. THOMANN, citizens of the United States, and residents of Riverside, in the county of Washington and State of Iowa, have invented a new and Improved Barb-Wire Reel and Carrier, of which the following is a full, clear, and exact description.

One purpose of our invention is to provide a new and improved machine for reeling, unreeling, and stretching barb-wire, check-row wire, &c., and to construct the machine so that it will be light, durable, and economic and will carry the wire-spool in a convenient and well-balanced manner.

Another purpose of the invention is to provide means for readily and conveniently turning the spool to reel or to unreel the wire and likewise to so mount the carrier for the reel that the carrier may be placed in such position that a wire may be quickly and readily removed therefrom or placed thereon.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a side elevation of the improved machine. Fig. 2 is a plan view thereof. Fig. 3 is a detail view of a portion of the reel-carrying shaft, the shaft being shown elevated and the driving-gear and pivot for the shaft being in section. Fig. 4 is a side elevation of a shifting-rod for a brake used in connection with the driving mechanism for the reel. Fig. 5 is a plan view of the said shifting-rod, illustrating also a slight modification in the fastening device for the said shifting-rod. Fig. 6 is a rear elevation of a portion of a brace and a rear end view of a brake mechanism partially supported by said brace. Fig. 7 is a transverse section through the shifting-shaft, illustrating the application of the brake thereto; and Fig. 8 is a side elevation of the frame of the machine and a box-body supported thereon, the view being drawn upon a small scale.

The frame of the machine consists, preferably, of two side bars 10, which have their forward ends 11 bent upward and forward or formed with a compound curve, as best shown in Fig. 1. The rear portions of the side bars are brought together and secured by bolts 12 or their equivalents, as illustrated in Fig. 1, and one side bar, which is longer than the other, is continued rearward and may be curved downward to form a tongue or pole 13. This tongue or pole may be and usually is provided with an eyebolt 14, through which a cross-bar may be passed to facilitate moving the machine or to which a hitching rope or chain may be attached. The forward portion of the frame is firmly secured upon an axle 15, and the axle is provided with supporting-wheels 16, loosely mounted thereon.

At the rear portion of the frame or adjacent to the tongue 13 a tray 17 is secured upon the frame, which tray is adapted for carrying fence-staples and tools, and in front of the said tray 17, at a suitable elevation above the said tray, a cross-bar 18 is supported by legs 19, secured to the side members of the frame. This cross-bar 18 is likewise supported by braces 20, which are attached to the tray, and a third brace 21 is employed, which extends forward from the cross-bar 18 at or near the right-hand side thereof. This forward brace 21 is provided with apertures 22 and 22^a.

When the machine is being operated, the operator standing at the pole or tongue may readily guide the machine by grasping the cross-bar 18, and this cross-bar at its right-hand end constitutes a bearing for a drive-shaft 23, as shown in Figs. 1 and 2. This drive-shaft at its rear end is provided with an attached crank-arm 24, and the forward end of the drive-shaft is journaled in a bearing 25, which is secured upon the upper face of the right-hand member of the frame at a point near the axle 15. This drive-shaft is provided with a pinion 26 and an enlargement 26^a in front of the pinion. This pinion meshes with the teeth of a bevel-gear 27, the bevel-gear 27 being secured to the right-hand end of a reel-supporting and driving shaft 28, the left-hand end of which reel-shaft 28 is loosely mounted in a suitable bear-

ing 29 at the left-hand side of the frame, as shown in Fig. 2. The reel A may be of any desired construction, and its heads are provided with apertures 30, through which the shaft 28 may loosely pass. One head of the reel is preferably provided with a collar 31, (shown in Fig. 2,) and this collar carries a thumb-nut 33, which enables the reel to be firmly secured on the shaft 28 and turn with said shaft.

A plate B serves as a bearing for the inner right-hand end of the shaft 28, the shaft passing freely through the plate, and this plate is located between the reel-head and the bevel-gear 27, as shown in Fig. 3, and constitutes a shield for the gearing. The plate B is provided with a member 34 at each end, which members extend from the plate outward at a right angle thereto, and each member 34 of the plate B is provided with an opening through which the main drive-shaft 23 loosely passes. Thus it will be observed that the plate B, in addition to constituting a bearing for the reel-shaft 28, constitutes likewise a hinge, enabling the reel-shaft 28 to be carried to an upper inclined position, (shown in Fig. 3,) and when the shaft 28 is in such position a reel may be readily placed on the shaft or removed therefrom. The reel A when placed on the shaft is supported at the right-hand portion of the shaft by causing a clamping-bar 35, attached to the reel-shaft 28, to engage with the right-hand head of the reel, as shown in Figs. 1 and 2.

Sometimes the wire will unreel too easily or the reel-shaft may be turned too quickly in reeling the wire. It is therefore necessary to provide a means for checking the rotation of the main drive-shaft 23 or rendering it hard to turn. This is accomplished by placing a brake 36, preferably a strap-brake, around the drive-shaft 23 at the enlargement 26^a on the shaft 23. This brake is provided at one end with an eye 37, the other end 38 of the brake being attached to the frame. A shifting-bar 39 is employed in connection with this brake, which bar is capable of rotary movement. The forward end of the shifting-bar has an upward extension, which is pivotally connected with the eye 37 on the brake, and the straight or body portion of the shifting bar or rod 39 is passed through a bearing 38^a, as shown in Fig. 7. This shifting rod or bar 39 is carried upward and rearward, and at its rear end is usually provided with a crank-arm 40, having an opening therein, through which opening a member of an angle-bar 41 is passed, the other member of said bar being passed through the opening 22 in the forward brace 21, connected with the cross-bar 18. The end of the angle-bar which is passed through the opening in the shifting-rod carries a thumb-nut 41^a. By turning the shifting bar or rod 39 the brake is made to bear with more or less tension upon the drive-shaft 23, or the brake may be so set that the shaft 23 will turn freely therein. The

angle-bar 41 may be held in position by a cotter-pin 43 or similar device, as shown in Fig. 4. The rear portion of the shifting rod or bar is passed through the opening 22^a in the brace 21 and is held in adjusted position by the thumb-nut 41^a.

In Fig. 8 we have illustrated the frame with all of the gearing, reel-supporting, and operating devices removed, and instead a box-body is secured to the frame, resting upon the upturned rear ends of the frame and upon the members thereof at a point near the center. Thus it will be observed that the frame and the box-body make a convenient go-cart.

In connection with the reel-shaft 28 it may be stated that a pin 44 may be and preferably is loosely mounted in the right-hand end of said shaft, and this pin is provided with an eye 45. It will be observed that the pin 44 constitutes a bearing for the right-hand end of the reel-shaft, and thus takes off undue strain from the bearing plate or shield B. Guides 46 are located on the upper face of the axle, which guides have their inner faces inclined forwardly in opposite directions, and the wire when it is being reeled is made to engage with one or the other of the guides. These guides may be of any desired height. Preferably they are made of such height that they will extend slightly above the upper surface of the reel-head, as shown in Fig. 1.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with a wheel-supported frame, and a shaft adapted to receive a reel removably journaled at one end of said frame and provided at its opposite end with a hinge-bearing, of a gear secured to an end of the said shaft, a driving-shaft supported by the frame, and a pinion carried by the drive-shaft and arranged to mesh with the reel-shaft.

2. The combination, with a wheel-supported frame, of a shaft adapted to receive a reel, a bearing for one end of the shaft having a hinged connection with the frame, a bearing for the opposite end of the said shaft open at its upper portion, a drive-shaft, a gear connection between the drive-shaft and the reel-shaft, and a brake for the drive-shaft, as set forth.

3. The combination, with a frame, an upright located at one side of the frame, a bearing carried by the said upright, a drive-shaft journaled in the said bearing and in a bearing which is secured to the said frame, whereby the drive-shaft is given an inclination, and a pinion carried by the said drive-shaft, of a plate having extensions at its ends, which extensions loosely receive the drive-shaft, a reel-shaft journaled in said plate, a gear secured to an end of the reel-shaft thus journaled, which gear meshes with a pinion on the drive-shaft, the opposite end of the reel-shaft being removable from its bearing which is located on the frame, as set forth.

4. The combination, with a wheel - supported frame, a cross-bar located at an elevation above the frame near one end, braces connected with the said cross-bar, a drive-
5 shaft journaled at one end in the said cross-bar and at its opposite end in a bearing of the frame, and a pinion carried by the drive-shaft, of an angle-plate loosely mounted on the drive-shaft, a reel-shaft one end of which
10 is journaled in the said angle-plate, a gear secured to the end of the reel-shaft thus journaled, adapted to engage with the said pinion, the opposite end of the reel-shaft being removable from its bearing, an auxiliary piv-
15 otal bearing for the end of the reel-shaft car-

rying the gear, a brake mounted on the drive-shaft, a shifting - bar connected with the brake, and a locking device for the shifting-bar carried by one of the said braces, for the purpose set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CHARLES J. THOMANN.
JOHN P. THOMANN.
HENRY M. THOMANN.

Witnesses:

FRANK DAUTREMONT,
CHARLES V. DAUTREMONT.