

No. 803,374.

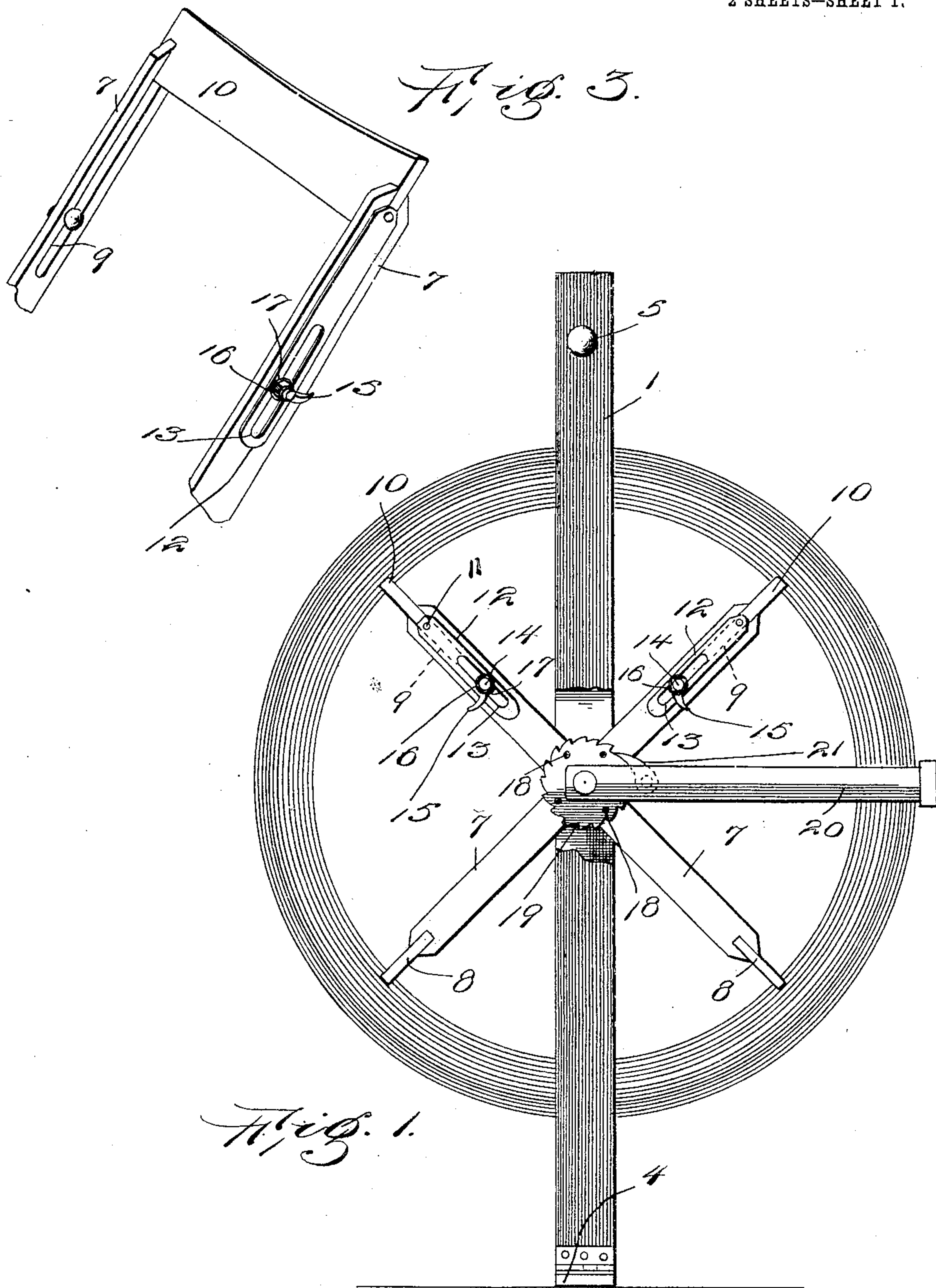
PATENTED OCT. 31, 1905.

O. H. & F. H. VOLKERDING.

WIRE REEL.

APPLICATION FILED OCT. 19, 1904.

2 SHEETS—SHEET 1.



Witnesses
Anderson

H. M. Baldwin

Inventors

O. H. Volkerding
F. H. Volkerding

[Signature]
Attorneys

No. 803,374.

PATENTED OCT. 31, 1905.

O. H. & F. H. VOLKERDING.
WIRE REEL.

APPLICATION FILED OCT. 19, 1904.

2 SHEETS—SHEET 2.

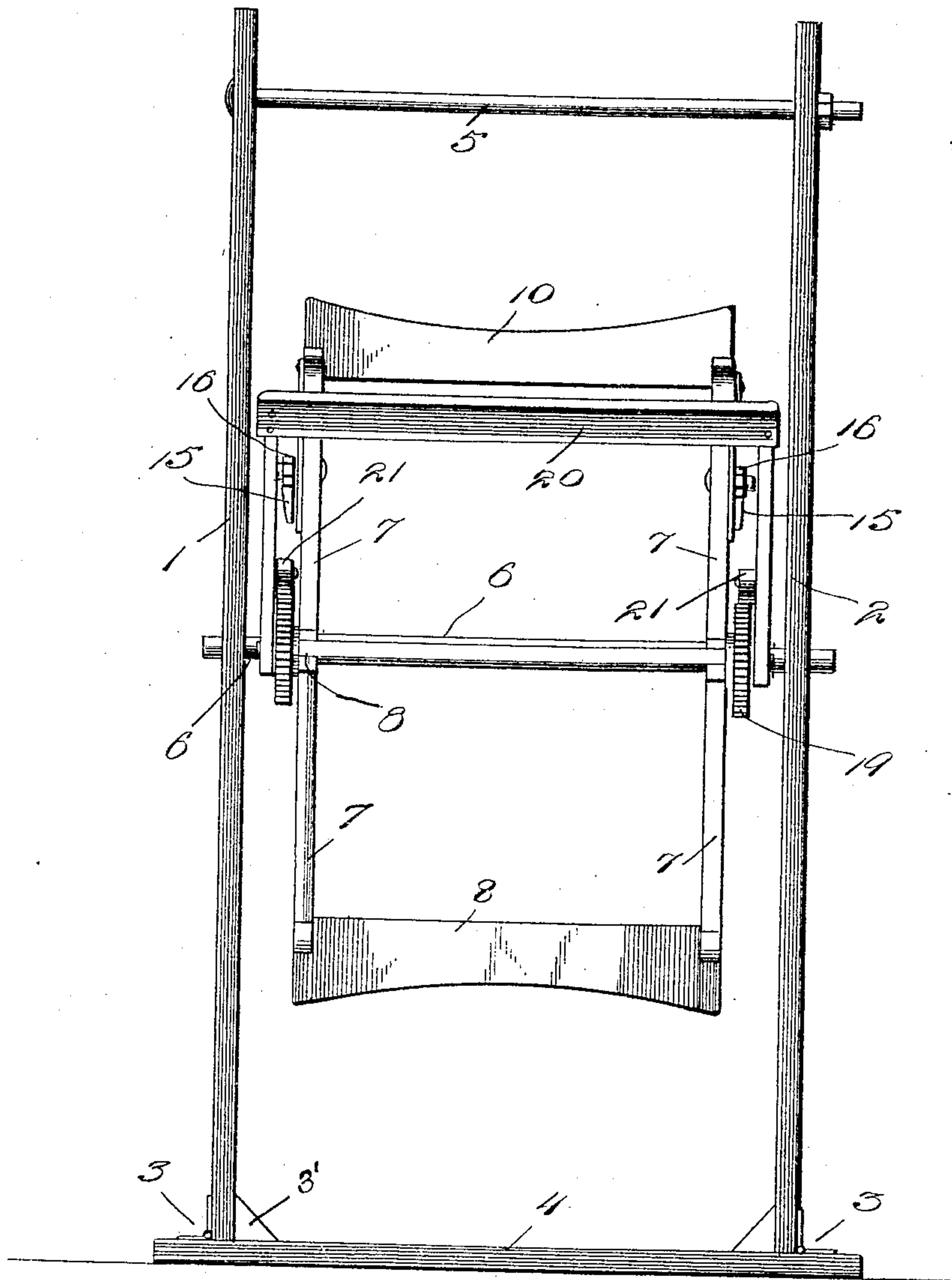


Fig. 2.

Witnesses

Am. Simpson

H. H. Baldwin

Inventors

O. H. Volkerding
F. H. Volkerding

[Signature]
Attorneys

UNITED STATES PATENT OFFICE.

OTTO H. VOLKERDING AND FREDERICK H. VOLKERDING, OF AUGUSTA,
MISSOURI.

WIRE-REEL.

No. 803,374.

Specification of Letters Patent.

Patented Oct. 31, 1905.

Application filed October 19, 1904. Serial No. 229,130.

To all whom it may concern:

Be it known that we, OTTO H. VOLKERDING and FREDERICK H. VOLKERDING, citizens of the United States, residing at Augusta, in the county of St. Charles, State of Missouri, have invented certain new and useful Improvements in Wire-Reels; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to reels for fence-wire, and has for its object to provide a construction which may be used for winding up loose wire by rolling the reel along the ground upon which the wire is laid.

It is particularly adapted for winding up wire as it is removed from old fence-posts, the practice being to draw all of the staples excepting those at one end of the wire and then to attach the free end of the wire to the reel and roll the reel along the ground to wind the wires thereonto.

A further object of the invention is to provide, in connection with the wheel, a supporting-frame, which may be attached thereto or detached therefrom and which when attached to the reel may be held in erect position by grasping the frame direct or by grasping the handle, so that the reel will be supported above the ground to wind wire thereon under such conditions as make this mode of operation of advantage.

A further object of the invention is to provide an improved structure that will permit of shifting the wire-supporting portions of the reel inwardly or toward each other to facilitate removal of the roll of wire after it is formed.

Other objects and advantages of the invention will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the invention having wire wound thereon. Fig. 2 is an elevation at right angles to Fig. 1, with the wire removed. Fig. 3 is a perspective view of one of the wire-supporting arms.

Referring now to the drawings, there is illustrated a supporting-frame comprising sides 1 and 2 or uprights hinged to a base 4, as illustrated at 3, so that the upper ends thereof

may be moved toward and away from each other, the movement of the upper ends toward each other being limited by corner-blocks 3' and there being provided a long bolt-bar 5, that is engaged through the upper ends of the uprights to hold them against separation.

Journaled in the uprights 1 and 2 is an axle or shaft 6, and upon this axle are secured the reel sides 7, each side being formed of two pieces connected intermediate of their ends and at right angles by halving, so that each side is in the form of a spider. Each arm of each spider has its outer end slotted, as illustrated, the slots of two arms of each set or spider having cross-pieces 8 fixed therein. The other two arms of each set or spider have their slots 9 longer than those containing the cross-pieces 8, and in these longer slots are slidably arranged the cross-pieces 10.

To the ends of the cross-pieces 10 are secured plates 12, having longitudinal slots therein, and which plates are disposed against the outer faces of the corresponding spider-arms. Through the slots of the plates and the corresponding arms are engaged bolts or pins 14, provided with the cam-levers 15 and the nuts 16, there being a washer 17 upon the inner end of the pin 14 between the inner face of the arm and the nut 16. With this construction by shifting the cam-levers, the inner faces of which bear normally against the plates 12, the plates may be clamped to or released from the arms to permit of adjustment of the cross-pieces 10 or to hold them against movement.

Secured to the axle 6 at the outer side of each spider are ratchet-wheels 19, which may be attached to the arms of the spiders by means of screws 18.

In order that the reel may be rolled along the ground when removed from between the uprights 1 and 2, a handle is provided, illustrated at 20 and comprising side members pivotally engaged with the end portions of the axle at one end and connected at their opposite ends by a cross-bar. By this means the reel may be rolled along the ground over the wire to wind the latter onto the reel.

When it is desired to remove the roll of wire from the reel, it is only necessary to manipulate the cam-levers to release the plates 12 and to then shift the cross-pieces 10 inwardly, when the roll of wire may be removed, it being noted that the cross-pieces 8

and 9 have their outer longitudinal edges concaved to better retain the roll of wire during the winding operation.

To hold the reel against return rotation 5 when it is used in its supporting-frame, pawls 21 are pivoted to the sides of the handle 20 in position to engage the ratchet-wheels 19, and if it is desired to unwind the wire from the reel it is only necessary to throw the pawls 10 into opposite positions, as illustrated.

What is claimed is—

1. In a device of the class described, a base; uprights each hingedly connected to the base; a shaft journaled in the uprights; sets of arms 15 forming the ends of the reel mounted upon the axle, each arm having a slot in its outer end; cross-pieces arranged in corresponding slots of each set of arms; plates secured to corresponding ends of cross-pieces; and means 20 associated with the said plates and corresponding arms to loosen and tighten corresponding cross-pieces in adjusted relation with respect to their arms.

2. In a device of the class described, a base; uprights each hingedly connected to the base; 25 a shaft journaled in the uprights; sets of arms forming the ends of the reel mounted upon the axle, each arm having a slot in its outer end; cross-pieces arranged in corresponding slots of each set of arms; plates secured to the 30 corresponding ends of cross-pieces; means associated with the said plates and corresponding arms to loosen and tighten corresponding cross-pieces in adjustable relation with respect to their arms; a ratchet-wheel carried by the 35 reel and an operating-lever mounted upon the shaft said lever having a pawl for engagement with said ratchet-wheel.

In testimony whereof we affix our signatures in presence of two witnesses.

OTTO H. VOLKERDING.

FREDERICK H. VOLKERDING.

Witnesses:

THEO. I. HEMSATT,

JOHN DIEKROTGER.