No. 613,951. Patented Nov. 8, 1898.

H. W. WOODS.

WIRE REEL FRAME.

(Application filed Apr. 2, 1898.)

(No Model.)

FIG. 1.

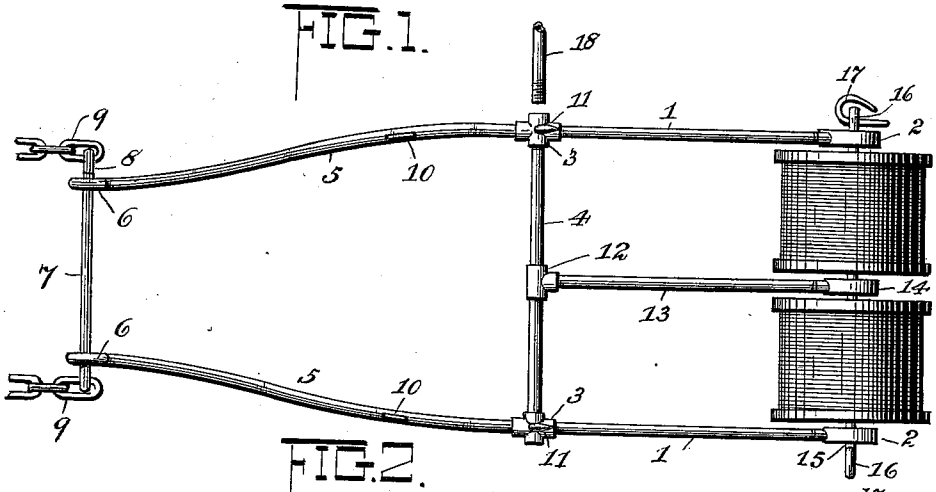


FIG. 2.

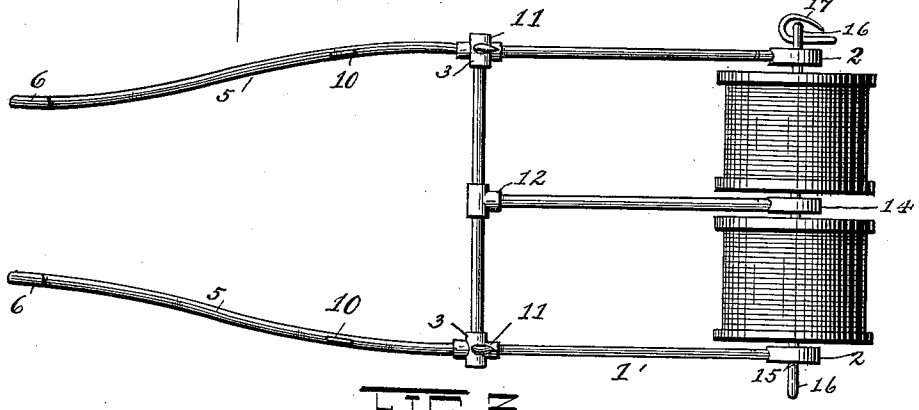
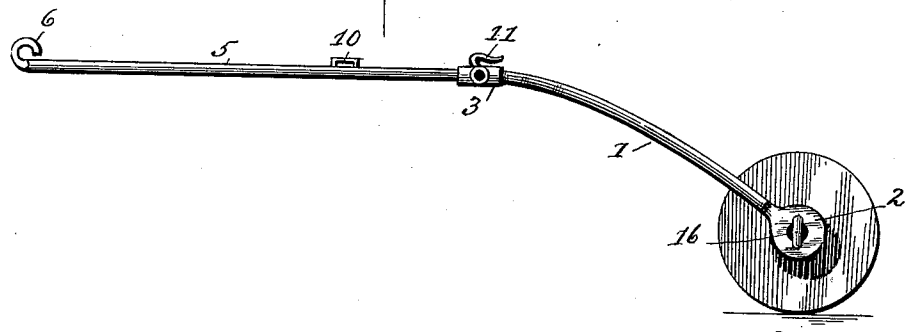


FIG. 3.



Witnesses
Saml R. Turner
Chas. S. Hyer.

Inventor
Herbert W. Woods.
By P. A. D. Lacey,
his Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HERBERT W. WOODS, OF ESTHERVILLE, IOWA.

WIRE-REEL FRAME.

SPECIFICATION forming part of Letters Patent No. 613,951, dated November 8, 1898.

Application filed April 2, 1898. Serial No. 676,181. (No model.)

To all whom it may concern:

Be it known that I, HERBERT W. WOODS, a citizen of the United States, residing at Estherville, in the county of Emmet and State of Iowa, have invented certain new and useful Improvements in Wire-Reel Frames; and I 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 wire-reel frames adapted for conveniently disposing wire strands for fence-building and for other purposes; and it consists, essentially, of a frame, preferably made up of jointed tubular members, removably supporting at the rear a bearing-rod on which the wire-reels filled with wire and as furnished in the market are rotatably mounted and serve of themselves as trailing wheels or rollers for the device, the said frame being extensible to accommodate varying numbers of the reels and also provided at the front with thills for the attachment of a draft-animal and so constructed as to be quickly arranged for connection to the rear end of a wagon or other vehicle.

The invention further consists of the details of construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

The object of the invention is to facilitate wire-fence building or other work where wire is employed and conveniently mount the ordinary wire-reels in connection with the frame in such manner that one or more strands of wire may be regularly laid along a course adjacent to the point where a fence is to be put up or other similar work carried on, thereby dispensing with the many disadvantages incident to unwinding the wire strands by hand and expediting the work sought to be completed.

In the accompanying drawings, Figure 1 is a top plan view of the improved device, showing two reels therein and arranged for attachment to the rear of a vehicle. Fig. 2 is a similar view showing the device ready to have the draft-animal attached thereto. Fig. 3 is a side elevation of the improved device.

Referring to the drawings, wherein similar numerals of reference are employed to indicate corresponding parts in the several views, the numeral 1 designates outer rear frame-bars, which in this instance are preferably made tubular and have eyes 2 at their rear ends. The front ends of said frame-bars are secured to the rear portions of four-way unions 3, and transversely connecting the said unions is a cross-bar 4. To the front end of the said unions 3 thills 5 are attached and are curved to comfortably fit the body of a draft-animal, as will be readily understood, and have at their front ends eyes 6, which, as shown in Fig. 1, are adapted to removably receive a draft-bar 7, also having on its opposite ends eyes 8, of less dimension than the eyes 6, so that the said bar may be readily withdrawn from or applied to the said thills. The eyes 8 of the bar 7 are intended to removably receive links of chains 9, the latter being attached to a suitable part of the rear of a vehicle.

When the device is directly operated by the draft-animal, it is arranged as shown in Fig. 2 and the thills are supplied with opposite holding-back-strap loops 10, and on the unions 3 are hooks 11 for attachment of traces or trace-chains. When the bar 7 is arranged in connection with the thills, as shown by Fig. 1, the chains 9 prevent the accidental disengagement of said bar, and at times the said bar can be used as a hand bar or grip when the device is drawn by manual power.

To the center of the cross-bar 4 a T-union is connected, and to the rear thereof is attached a separating brace-bar 13, which extends rearwardly in a plane parallel with the frame-bars 1 and has on the rear end thereof an eye 14, adapted to aline with the eyes 2. Removably mounted in the eyes 2 and 14 is a bearing-rod 15, having eyes 16 on its opposite ends, one of which is larger than the eyes 2 or 14 and the other smaller than the latter and adapted to be drawn through the same in the operation of removal. In the smaller eye 16, after the parts have been properly assembled, a suitable fastening-hook or analogous device 17 is inserted to prevent the said bar from working loose and becoming disconnected during the operation of the device.

One or more reels can be mounted in the improved frame without detracting in the least from its operation, and in so arranging

the parts the reels, as obtained in the market and having wire wound thereon, are placed between the eyes 2 and 14, so that the openings therethrough will aline with the openings in the said eyes. The bearing rod or bar 15 is then inserted through the eyes and reels and secured in place therein by the hook or analogous device 17. The frame is then attached to the rear of a vehicle or hitched to a draft-animal, as may be desired, and drawn forwardly over the ground. By this operation the opposite head-rims of the wheels bear upon the ground, and a strand of wire is gradually unwound from each of the said reels and laid thereby in regular position on the ground adjacent to a point for use. After the reels become empty they may be easily removed and full ones substituted, and the work of building a fence, running telegraph-wires, or even laying a cable will be greatly facilitated by the use of the improved device.

It will be understood also that either plain, barbed, or twisted wire may be disposed by the device, and where a number of strands are laid at one time, as in fence-building, a regular order will be preserved and entanglement of the several strands prevented, thereby permitting runners at varying elevations to be conveniently applied to the posts and stretched or otherwise manipulated.

The frame can be easily extended laterally to accommodate a plurality of reels by attaching additional cross-bars 18 to the outer portions of the four-way unions 3, as clearly illustrated in Fig. 1. When the frame is thus laterally extended, the frame-bars 1 will serve also as separating brace-bars, and the bearing rod or bar 15, used in the contracted form of the frame, as shown in the accompanying drawings, will be replaced by a longer bar or rod, and these additional parts will be furnished with each device and may vary according to the capacity.

While the parts of the frame have been described as preferably tubular to lighten the structure and increase the strength, it is apparent that the same result can be attained by making the several members of solid metal bars; but it is intended to reduce the expenses of manufacture and sale to a minimum and also the weight, so that the entire device when not in use can be conveniently stored in a wagon-shed or other place or be conveyed from the point of storage to a field or other place.

It is obviously apparent that further changes in the proportions and dimensions and also in the minor details of construction may be resorted to without in the least departing from the nature or spirit of the invention.

Having thus described the invention, what is claimed as new is—

1. In a wire-reel frame of the character set forth, the combination of opposite frame-bars, an intermediate separating brace-bar, said bars having eyes at their rear ends, a cross-bar connected by unions to the frame and separating brace bars, laterally-projecting extension-bars adapted to be attached to a portion of said unions, a pair of thills connected to a part of said unions and having eyes at their front ends, a draft-bar removably mounted in the eyes of the thills, and a bearing-bar removably mounted in the eyes at the rear ends of the frame and separating brace bars.

2. In a wire-reel frame of the character set forth, the combination of outer frame-bars having four-way unions attached to their front ends and eyes formed at their rear ends, a cross-bar attached to the inner portions of the said unions, a T-union on the said cross-bar, a separating brace-bar having its front end attached to the T-union and its rear end formed with an eye in line with the eyes in the frame-bars, a bearing bar or rod removably mounted in the eyes of the frame and separating brace bars, and also through wire-reels held spaced apart from each other by the said separating brace-bar, thills attached to the front portions of the said four-way unions and having eyes at the front ends thereof, a draft-bar removably mounted in the said eyes of the thills and of itself having eyes on the opposite ends, and laterally-projecting extensions adapted to be secured to the outer portions of the four-way unions.

In testimony whereof I affix my signature in presence of two witnesses.

HERBERT W. WOODS.

Witnesses·
F. H. RHODES,
L. A. HILL.