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H. J. HICK

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STAND FOR REELS

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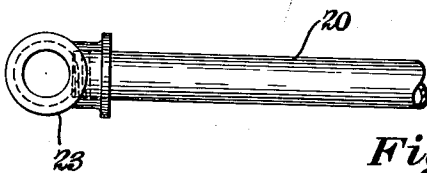
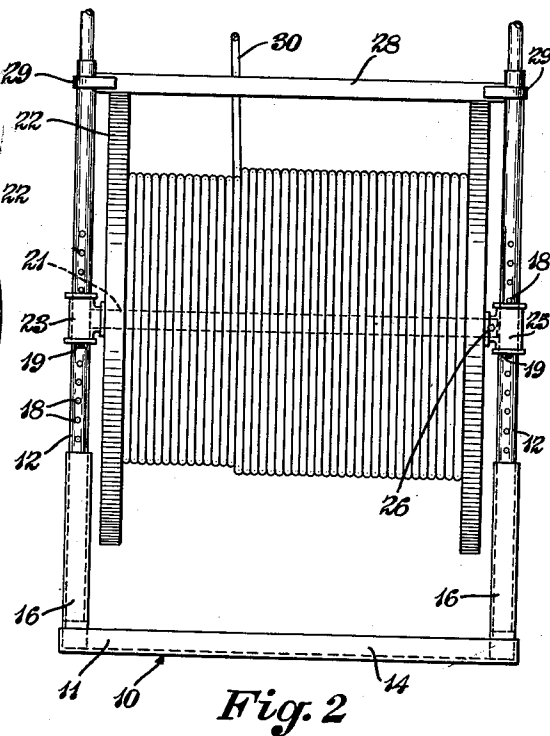
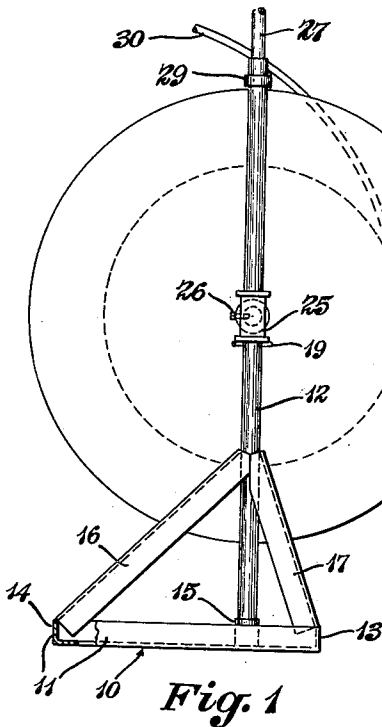


Fig. 3

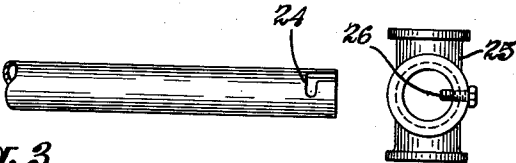


Fig. 4

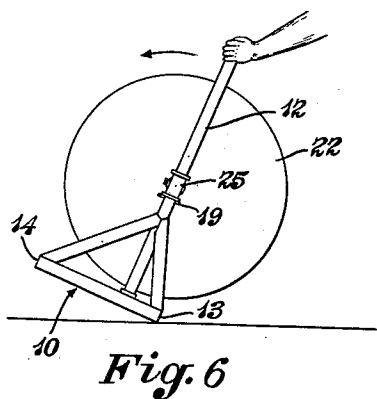


Fig. 5

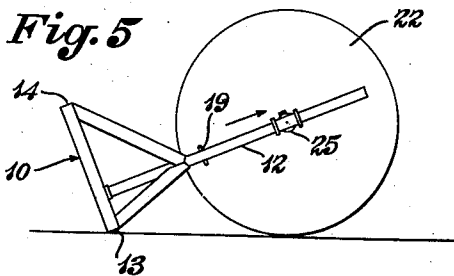


Fig. 6

Inventor
Harry J. Hick

By *Freese and Bishop*
Attorneys

UNITED STATES PATENT OFFICE

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STAND FOR REELS

Harry J. Hick, St. Cloud, Fla., assignor to
Jack V. Abblett, Alliance, Ohio

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6 Claims. (Cl. 242-139)

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The invention relates to stands for supporting reels, and more particularly to a stand adapted to support relatively heavy reels of cable, wire and the like in position to permit the cable or the like to be quickly and easily dispensed therefrom.

It is desirable to mount reels of cable, wire and the like in such manner that the cable, etc., may be quickly and easily withdrawn therefrom, either in storerooms or salesrooms, where portions of the cable or wire are dispensed from time to time, or out in the field where the cable or wire is withdrawn from the reel for use.

Such reels are frequently quite heavy, and it is a difficult and strenuous job for workmen to mount them upon such stands or supports as are now in use for this purpose.

In order to overcome this difficulty, the present invention contemplates the provision of a stand which permits even the heaviest reels of cable and the like to be quickly and easily mounted thereon with a minimum of effort.

To this end, the improved reel stand may comprise a base having a spaced pair of pipe uprights thereon, and a shaft or axle for the reel, comprising a straight length of pipe having a T-connection fixed to one end and a second T-connection adapted to be detachably connected to its other end, whereby this shaft or axle may be inserted through the center opening in the reel, the detachable T-connection attached thereto, and the stand tilted, so that the spaced uprights thereon are slidably inserted through said T-connections, after which the stand may be easily and readily tilted to upright position, supporting the reel journalled upon the shaft thereof so that the cable or wire may be easily uncoiled therefrom.

The invention also has for an object the provision of stop means upon the uprights for positioning the shaft or axle at the proper height to permit easy manipulation of the reel.

Another object is to provide stop means above the shaft, whereby the stand may be tilted to position where the reel will contact with the floor or ground, so that the device may be used as a trundle to roll the reel upon the floor or ground to any desired location.

A further object is to provide such a reel in which the uprights are located off center, near one edge of the stand, so as to facilitate the tilting of the stand to upright position with the reel thereon.

A still further object is to provide a reel stand of the character referred to, having a simple wire

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drag or brake for preventing the cable or wire from being unwound too rapidly from the reel.

It is also an object of the invention to insert removable lengths of pipe into the upper ends of the spaced uprights, to form handles providing additional leverage when very large and heavy reels are to be supported on the stand.

The above objects, together with others which will be apparent from the drawing and following description, or which may be later referred to, may be attained by constructing the improved reel stand in the manner hereinafter described in detail and illustrated in the accompanying drawing, in which:

Figure 1 is a side elevation of a reel stand embodying the invention, showing a reel of cable supported thereon in condition to be easily dispensed therefrom;

Fig. 2 a front elevation of the reel, showing the manner in which the wire drag or brake is operated by withdrawing cable or wire from the reel;

Fig. 3 a detached elevation of the section of pipe forming the shaft or axle for the reel, with one T-connection fixed thereto;

Fig. 4 a detached elevation of the removable T-connection for the shaft or axle;

Fig. 5 a diagrammatic view showing the manner in which the spaced uprights of the stand are inserted into the T-connections of the shaft or axle, in order to mount the reel upon the stand; and,

Fig. 6 a diagrammatic view, showing the manner in which the stand is tilted to upright position to support the reel in condition to permit the cable or wire to be dispensed therefrom.

Referring now more particularly to a preferred embodiment of the invention illustrated in the accompanying drawing, in which similar numerals refer to similar parts throughout, the improved stand comprises a substantially rectangular base 10, which may be formed of angle irons 11 of suitable length, welded or otherwise connected together at their corners.

A spaced pair of uprights are provided, preferably in the form of sections of pipe, as indicated at 12, one of these uprights being located at each end of the elongated base 10 and preferably, as best shown in Fig. 1, at points much closer to the rear side 13 than to the front side 14 of the base.

The lower ends of these uprights may be provided with caps or collars 15, which may be welded or otherwise secured to the end members of the base 10, and the uprights are rigidly braced by

means of the struts 16 and 17 at the front and rear sides thereof, which may be welded at their lower ends to the base 10 and at their upper ends to the uprights 12.

Each upright 12 may be provided with a series of spaced apertures 18, for the purpose of receiving stop members, such as the cotter pins 19, which are provided for properly positioning the reel shaft or axle upon the uprights as will be later described.

The shaft or axle for the reel may be in the form of a straight section of pipe, as indicated at 20, of suitable diameter to freely pass through the central opening 21 of a conventional reel, as indicated at 22.

Upon one end of the pipe 20 is permanently attached a T-connection 23 and the other end of the pipe 20 may be provided with any suitable means, such as the bayonet slot 24, for detachably securing the T-connection 25 thereon, as by the stud or pin 26. The T-connections 23 and 25 are of suitable size to permit the uprights 12 to be slidably inserted therethrough.

When it is desired to mount a reel upon the shaft, the shaft or axle pipe section 20 is inserted through the central opening 21 of the reel and the detachable T-connection 25 is attached to the shaft in the manner above described.

The stand is then tilted rearward, so that the uprights 12 may be inserted through the T-connections 23 and 25, as shown in Fig. 5, the cotter pins 19 upon the uprights 12 limiting the movement of the uprights through the T-connections.

The upper ends of the uprights 12 may then be grasped in the hands, as indicated in Fig. 6, and the stand is tilted forwardly to upright position, as shown in Fig. 1, supporting the reel journalled upon the shaft 20, so that the cable or wire may be unwound therefrom.

In actual practice it has been found that very heavy reels may thus be easily mounted upon this stand, the leverage produced by the uprights 12 permitting the stand, with the reel thereon, to be easily tilted to upright position with a minimum of labor.

In cases where exceptionally large and heavy reels are to be mounted upon the stand, removable pipe sections 27 may be inserted into the upper ends of the upright 12, forming handles which provide considerable leverage, so that the operator may more easily tilt the stand, with the heavy reel thereon, to upright position.

By locating the uprights 12 at points closer to the rear of the base 10, as shown in the drawing, it has been found that the stand may be more easily and quickly tilted to upright position, after the reel has been placed thereon, as the center of the reel will thus more quickly pass over the fulcrum or point of contact of the base 10 with the floor or ground as the stand is tilted toward upright position.

For the purpose of providing a drag or brake upon the reel, so as to prevent the reel from rotating too rapidly when the cable or wire is withdrawn therefrom, a wire drag brake may be provided in the form of a bar or rod 28 having eyes 29 at opposite ends for slidably inserting upon the upper end portion of the uprights 12.

As the cable or wire 30 is withdrawn from the reel, it will be pulled over this drag brake 28, forcing the same into frictional engagement with the periphery of the reel 22 and thus controlling the movement of the reel so that it will not be rotated too rapidly.

If it is desired to use the stand as a trundle, in order to roll the reel upon the floor or ground

to transport it from one place to another, additional cotter pins such as shown at 19 may be placed in openings 18 above the T-connections 23 and 25.

The stand may then be tilted rearwardly until the reel is in contact with the floor or ground, after which the stand may be swung to substantially horizontal position, upon the shaft 29 as a pivot, and the workman may grasp the stand and either pull or push to roll the reel upon the floor or ground to the desired location.

It will be evident from the above that a simple, efficient and easily operated stand is thus provided, upon which a reel may be mounted with a minimum of labor and exertion, and which will support the reel in position to permit the cable or wire to be easily withdrawn therefrom as desired.

I claim:

1. A stand for supporting a reel, said stand comprising a base, a spaced pair of uprights upon the base, a shaft upon which a reel may be journalled, a T-connection upon each end of the shaft, the upper ends of said uprights being unobstructed whereby the stand may be tilted at an angle so that the uprights may be inserted through the T-connections and the stand tilted back to vertical position to mount a reel thereon said T-connections being slidably mounted upon the uprights and stop means upon the uprights for contact with the lower ends of the T-connections.

2. A stand for supporting a reel, said stand comprising a base, a spaced pair of uprights upon the base, said uprights being located adjacent to one side of the base, a shaft upon which a reel may be journalled, a T-connection upon each end of the shaft, the upper ends of said uprights being unobstructed whereby the stand may be tilted at an angle so that the uprights may be inserted through the T-connection and the stand tilted back to vertical position to mount a reel thereon said T-connections being slidably mounted upon the uprights and stop means upon the uprights for contact with the lower ends of the T-connections.

3. A stand for supporting a reel, said stand comprising a base, a spaced pair of uprights upon the base, a shaft upon which a reel may be journalled, a T-connection upon each end of the shaft, one of said T-connections being detachably connected to the shaft, the upper ends of said uprights being unobstructed whereby the stand may be tilted at an angle so that the uprights may be inserted through the T-connections and the stand tilted back to vertical position to mount a reel thereon said T-connections being slidably mounted upon the uprights and stop means upon the uprights for contact with the lower ends of the T-connections.

4. A stand for supporting a reel, said stand comprising a base, a spaced pair of uprights upon the base, said uprights being located adjacent to one side of the base, a shaft upon which a reel may be journalled, a T-connection upon each end of the shaft, one of said T-connections being detachably connected to the shaft, the upper ends of said uprights being unobstructed whereby the stand may be tilted at an angle so that the uprights may be inserted through the T-connections and the stand tilted back to vertical position to mount a reel thereon said T-connections being slidably mounted upon the uprights and stop means upon the uprights for contact with the lower ends of the T-connections.

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5. A stand for supporting a reel, said stand comprising a base, a spaced pair of uprights upon the base, a shaft upon which a reel may be journaled, a T-connection upon each end of the shaft, one of said T-connections being permanently attached to one end of the shaft, there being a bayonet slot in the other end of the shaft, the other T-connection having a stud for detachable connection to said bayonet slot, the upper ends of said uprights being unobstructed whereby the stand may be tilted at an angle so that the uprights may be inserted through the T-connections and the stand tilted back to vertical position to mount a reel thereon said T-connections being slidably mounted upon the uprights and stop means upon the uprights for contact with the lower ends of the T-connections.

6. A stand for supporting a reel, said stand comprising a flat base, a spaced pair of uprights upon the base located adjacent to one side of the base, a shaft upon which a reel may be journaled, a T-connection upon each end of the shaft, one of the T-connections being detachably connected to the shaft so that it may be removed to insert the adjacent end of the shaft through a reel and then detachably connected to said end of the

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shaft, the upper ends of the uprights being unobstructed, whereby the stand may be tilted toward said one side at an angle so that the uprights may be inserted through the T-connections and the stand may then be tilted back to vertical position to permit the shaft carrying the reel to slide downwardly upon the uprights, and stop means upon the uprights for contact with the lower ends of the T-connections to limit the downward movement of the shaft and reel relative to the stand.

HARRY J. HICK.

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