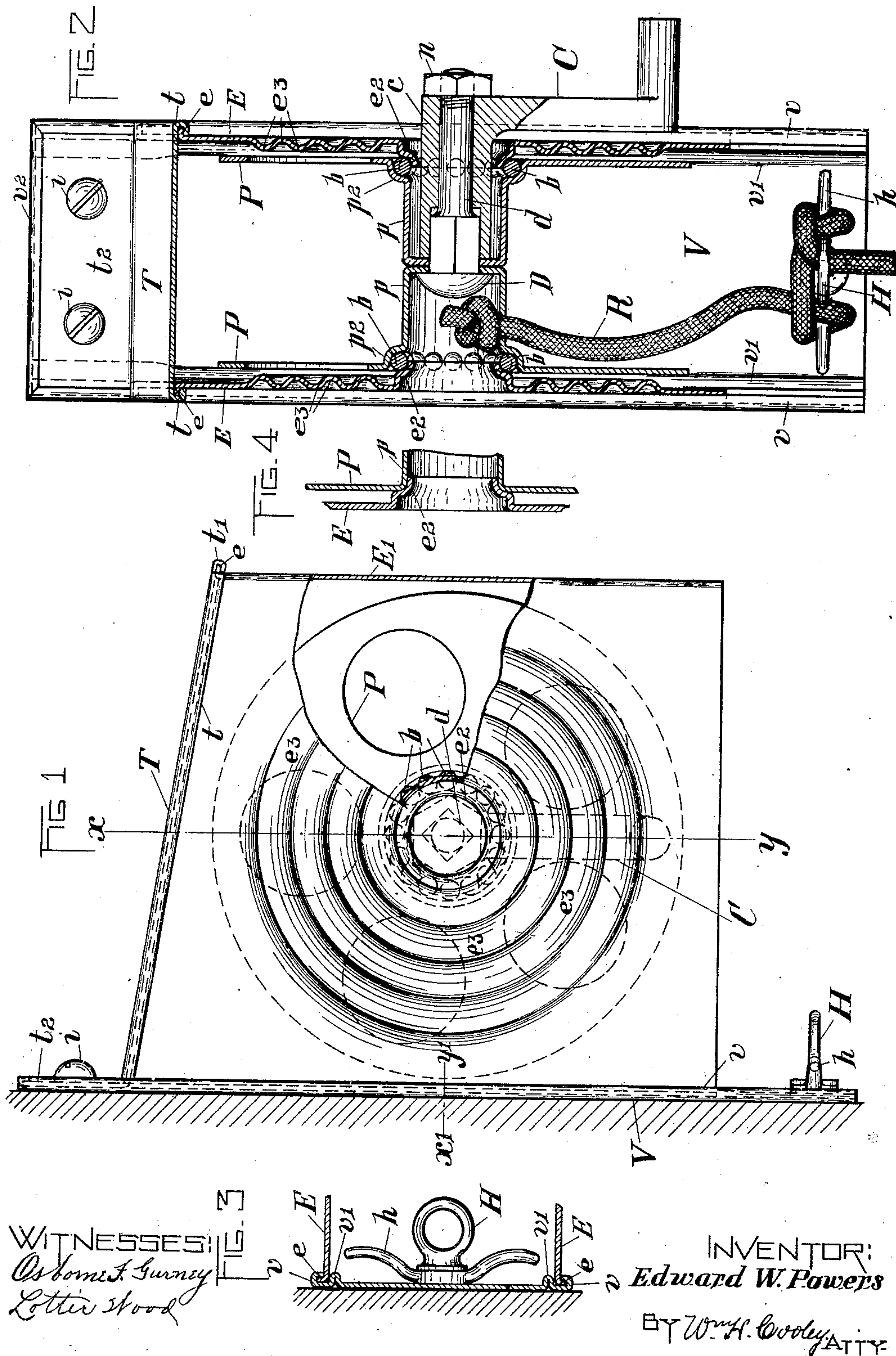


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CLOTHES LINE REEL.  
APPLICATION FILED MAY 6, 1908.

924,933.

Patented June 15, 1909.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

EDWARD W. POWERS, OF ROCHESTER, NEW YORK.

## CLOTHES-LINE REEL.

No. 924,933.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed May 6, 1908. Serial No. 431,091.

*To all whom it may concern:*

Be it known that I, EDWARD W. POWERS, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York, have invented a new and Improved Clothes-Line Reel, of which the following is a specification.

The object of my present invention is to provide a reel which may be cheaply constructed and with a minimum number of parts, and in which also the support and casing may be made of sheet metal of minimum weight.

With these objects in view, my invention comprises the construction, cooperation and arrangement of parts set forth in the following specifications, in which reference is made to the accompanying drawings, which are as follows:—

Figure 1 is a side view of my reel and supporting casing with a part of the side thereof toward the observer broken away to show more clearly the internal mechanism. Fig. 2 is a vertical transverse sectional view taken along the line  $x-y$  of Fig. 1 with all parts to the right of such line removed. Fig. 3 is a horizontal sectional view of the back plate and a part of the side walls of the supporting casing of my reel taken along the line  $x^1-y^1$  of Fig. 1. Fig. 4 shows in a view similar to Fig. 2 a modified detail as will be explained.

Similar letters refer to similar parts in the different figures of drawing.

Referring to the drawings, my reel proper is formed of two substantially similar disks P—P stamped of sheet metal with holes therethrough, as indicated, to lessen the weight and with central cup-formed depressions or hubs  $p-p$  having their bottom walls in a plane parallel with the plane of the main body portion of such disks and having through such bottom walls, preferably square, holes adapted to receive the squared portion of an ordinary carriage bolt D. A crank C is provided having a hub  $c$  thereon with a hole therethrough, the inner end of which is squared out to receive and fit approximately the squared portion of the body portion of the bolt D, while a part of such hole is rounded to fit more approximately the round portion of the body of such bolt. Upon the outer end of the body portion  $d$  of the bolt D is threaded a nut  $n$ . The bolt D, it will be seen then, comprises means for clamping together the disks P, the hub  $c$  of

the crank C operating as a sleeve between the nut  $n$  and the abutting bottoms of the hubs  $p$  which in turn are against the head of the bolt D, the squared portion of the bolt cooperating with the squared out hole to receive the same in the hub of the crank C to lock the hub upon the bolt and to cause the bolt to turn with the crank. Through one of the cup-like depressions, preferably the one in the left hand disk P, as seen in Fig. 2, there is provided an opening through which to insert the inner end of the clothes line or rope R, the end of which may be formed into a knot, as indicated in Fig. 2, after being inserted through such hole therefor.

For supporting and inclosing the reel, I provide a casing comprising side walls E and the front wall  $E^1$  formed from one piece of sheet metal bent up as indicated and having a horizontally extending flange  $e$  formed around its top adapted to engage within the formed up channels therefor  $t$  and  $t^1$  on the top T, which top has an upward extension  $t^2$ .

The back plate for my casing consists of a sheet metal plate V having the formed up channels  $v$  on its edges, just inside of which are seen the folds  $v^1-v^1$  adapted to hold the side walls of the casing E in place, such side walls E having flanges  $e$  turned on their rear edges and adapted to engage within the channels  $v-v$ . The folds  $v^1-v^1$  are flattened down near the top of the plate V, as seen in Fig. 2, so as to be out of the way of the top T and extensions  $t^2$  thereon. The back plate V has formed across its top a channel  $v^2$  adapted to receive the upward projection  $t^2$  on the top piece T.

The side walls E have formed therein a series of concentrically arranged corrugations  $e^3$ , such corrugations being also concentric with inwardly turned flanges  $e^2$  which extend a short distance within the outer ends of the cup-shaped depressions  $p$  in the centers of the disks P of the reel, and within which they may engage directly, as indicated in Fig. 4, although I prefer in many cases to form in the outer corners of the cup-like depressions  $p$  in the disks curved sections  $p^2$  cooperating with the curved flanges  $e^2$  on the side walls E to form ball races to receive the balls  $b$ , as clearly shown in Fig. 2. Through the projection  $t^2$  on the top T are formed two holes alined with two similarly positioned holes in the upper end of the wall plate V to receive two screws  $i$  by means of



which the upper end of the casing is screwed against the wall of a building or any other suitable support.

Through the lower end of the back plate V is formed a hole to receive the screw eye H under the head of which is seen the combined hook and washer *h* adapted to form a means for releasably securing the clothes line R in such a way as to receive all the strain exerted upon the clothes line and protect the reel and casing against such strain. Any desired length of the clothes line R may be unwound from the reel and secured to a suitable support at its outer end and the line then releasably engaged around the hook *h* in such a way as to hold the line and cause all the strain exerted thereby to come upon the hook H.

What I claim is:—

1. In a device for the purpose described, two disk-like members formed of sheet metal with hollow hubs; means for securing such hubs together to form a reel; a case for the reel and bearing supports for the reel comprising inturned flanges on the side walls of the case extending within such hubs.

2. In a device for the purpose described, a reel having centrally disposed circular depressions; a case and bearing supports for the reel comprising inturned flanges on the side walls of the case adapted to engage within such depressions.

3. In a device for the purpose described, a reel comprising two disk-like members having cup shaped hubs; a bolt extending through such hubs for securing the same together and an operating crank having a hub with a hole therethrough adapted to engage over the bolt and within a hub on one of the disks and a nut on the bolt for holding the crank in place and clamping the bottom

walls of the hubs between the head on the bolt and the hub on the crank.

4. In a device for the purpose described, a reel comprising two disk-like members having cup shaped hubs; a bolt extending through such hubs for securing the same together and an operating crank having a hub with a hole therethrough adapted to engage over the bolt and within a hub on one of the disks and adapted also to engage the bolt to turn the same and a nut on the bolt for holding the crank in place and clamping the bottom walls of the hubs between the head on the bolt and the hub on the crank.

5. In a device for the purpose described, a reel comprising two disk-like members having cup shaped hubs; a bolt extending through such hubs for securing the same together and an operating crank having a hub with a hole therethrough adapted to engage over the bolt and within a hub on one of the disks and a nut on the bolt for holding the crank in place and clamping the bottom walls of the hubs between the head on the bolt and the hub on the crank; a case for the reel and bearing supports for the reel comprising inturned flanges on the side walls of the case extending within the hubs on the reel.

6. In a device for the purpose described, a reel comprising two disk-like members formed of sheet metal having inwardly extending cup shaped hubs integrally formed therewith and means engaging the inner bottom walls of such hubs for clamping such disk-like members together.

EDWARD W. POWERS.

Witnesses:

LOTTIE WOOD,  
OSBORNE F. GURNEY.