R. KNEISLEY.

CLOTHES LINE REEL.

APPLICATION FILED NOV. 28, 1908.

930,390. Patented Aug. 10, 1909.

Fig. 2

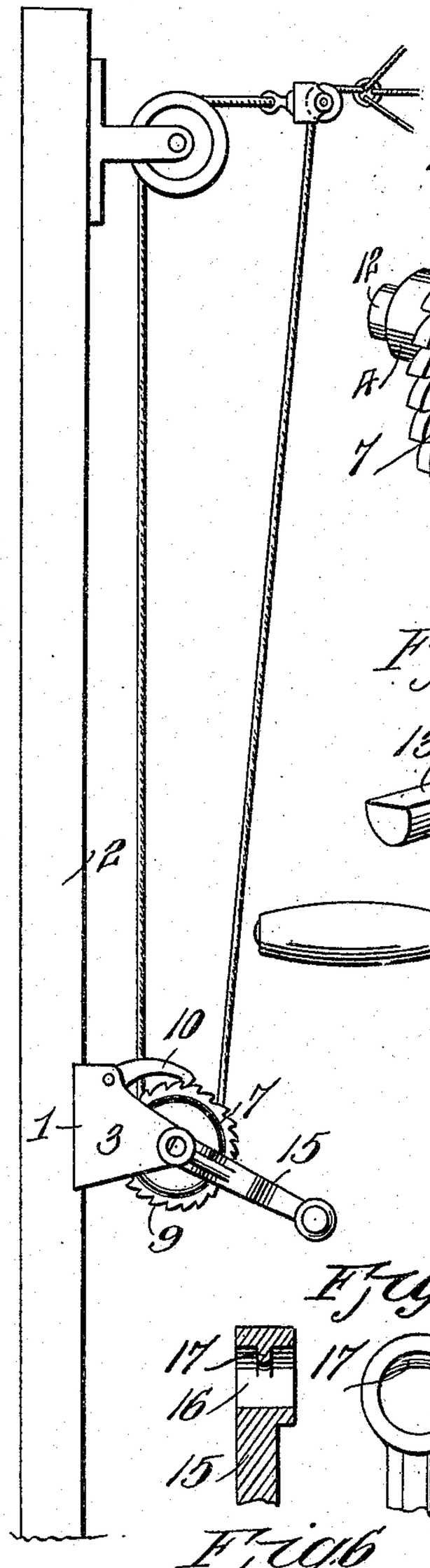

Fig. 1.

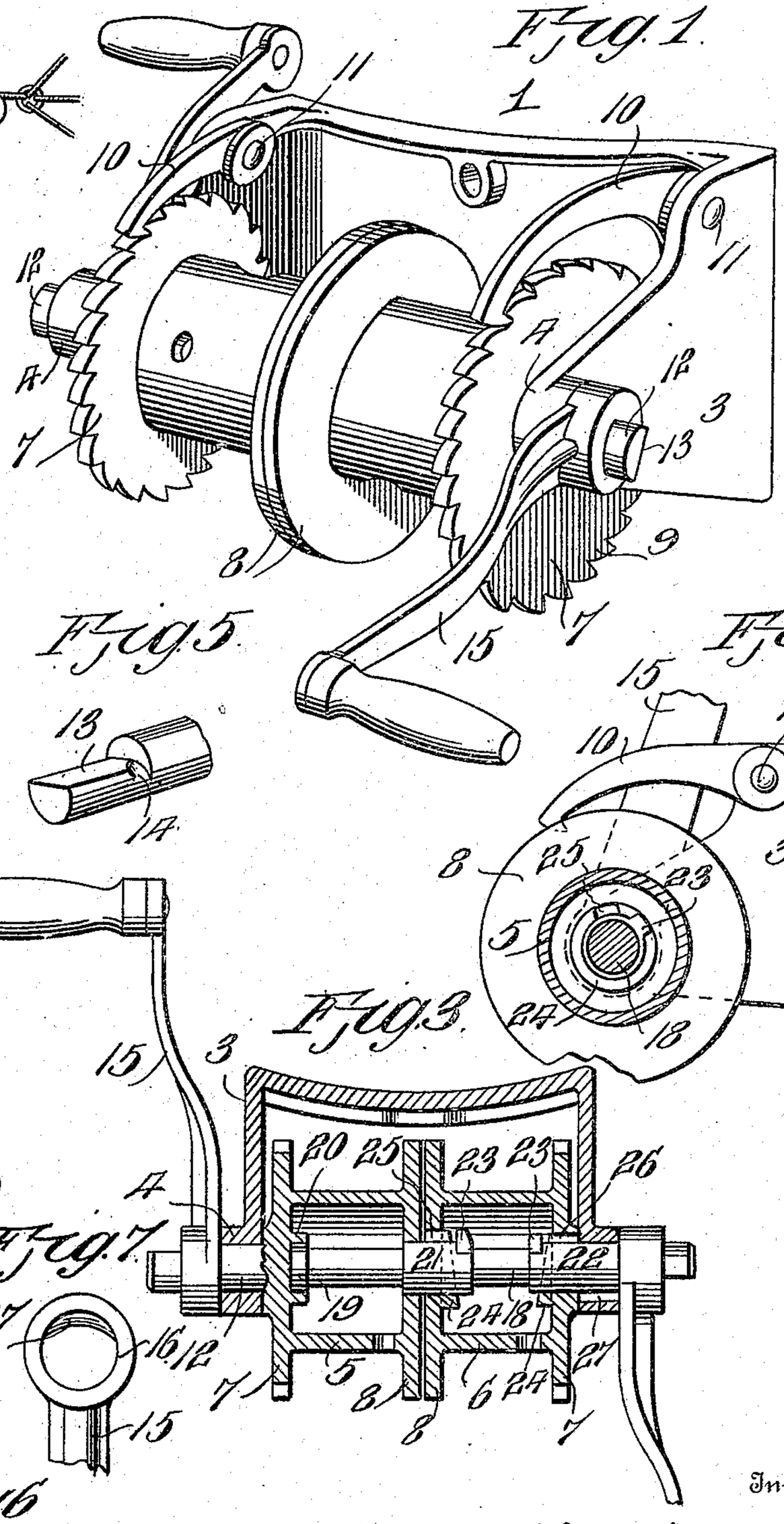

Fig. 5.

Fig. 4

Fig. 3.

Fig. 7.

Fig. 6

Witnesses

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UNITED STATES PATENT OFFICE.

RUSSELL KNEISLEY, OF CARROLLTON, MISSOURI.

CLOTHES-LINE REEL.

No. 930,390. Specification of Letters Patent. Patented Aug. 10, 1909.

Application filed November 28, 1908. Serial No. 464,883.

To all whom it may concern:

Be it known that I, RUSSELL KNEISLEY, a citizen of the United States, residing at Carrollton, in the county of Carroll and State of Missouri, have invented new and useful Improvements in Clothes-Line Reels, of which the following is a specification.

This invention relates to clothes line reels, the object of the invention being to provide a simple and convenient reel embodying a plurality of independently operable sections adapted to have wound thereon a clothes line, and a hoisting line by the operation of which the line which supports the clothes may be hoisted to the necessary elevation above the ground and also placed under the necessary tension to properly support the clothes.

With the above general object in view, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of the reel embodying the present invention. Fig. 2 is a side elevation on a reduced scale showing the manner of supporting the reel and mounting the clothes line and the hoisting line. Fig. 3 is a longitudinal section through the reel and the supporting bracket thereof. Fig. 4 is a vertical cross section through the same. Fig. 5 is a detail perspective view of one end of the journal or shaft. Fig. 6 is a detail sectional view of the hub portion of one of the operating cranks. Fig. 7 is a side elevation of the same.

The machine comprises essentially a supporting bracket embodying a base 1 of concavo-convex form in cross section, the concavo side thereof being disposed toward the support which, in Fig. 2 is shown in the form of a post 2. At opposite ends of the base 1 there are forwardly projecting side wings or extensions 3 having bearings 4 for the shaft and journal of the reel. The reel comprises a drum which is made in separate and independently operable sections 5 and 6. Each of said sections comprises a hollow cylindrical body and end flanges or heads 7 and 8 the outer flanges or heads 7 being provided with ratchet shaped teeth 9 adapted to be engaged by pawls 10 which are pivotally connected to the bracket at 11, said pawls being designed to prevent the reel sections from rotating in a backward direction after the clothes line and hoisting line have been tightened by winding the same upon the reel sections. One of the reel sections 5 is provided with a central outwardly projecting journal 12 the outer end of which is flattened as shown at 13 and also provided with a key notch 14, the end portion of the journal being shaped in the manner described for engagement therewith of an operating crank 15 having an opening 16 to receive the end of the journal and provided within said opening with a web or segmental key 17 adapted to bear against the flat side 13 of the journal while by giving the crank a partial turn the web or key is caused to enter and engage the notch 14 thereby forming an interlocked engagement between the crank and journal which prevents the crank from working in the journal during the operation of winding up the drum section. The other drum section is provided in its opposite sides with journal openings to receive a reel shaft 18 which as shown in Fig. 3 passes entirely through said drum section and is provided at its inner end with an enlarged journal portion 19 which is received in a socket in the other drum section formed by providing said drum section with an internal annular flange 20. The shaft 18 is also provided with other journal portions 21 and 22, the journal portion 21 being received in corresponding openings in the adjacent inner ends of the two drum sections while the journal portion 22 is received in an opening in the outer end of the drum section 6 and also in the bearing formed in the adjacent extension or wing 3 of the bracket. The projecting end of the reel shaft 18 is formed in the same manner as the journal illustrated in Fig. 5 so as to receive another crank of like formation.

In order to provide for an interlocked engagement between the drum section 6 and the shaft 18, said shaft is provided with radially projecting lugs 23 which work within the hollow body of the section 6 while the drum section is provided with internal cam flanges 24 so that when the shaft 18 is turned, the lugs 23 bring up against the cam flanges 24 and obtain a firm hold thereon thereby causing the drum section 6 to be carried around with the shaft 18. By turning the shaft 18 in the reverse direction, the same is disengaged from the drum section thus leaving the shaft free to be removed.

In order to provide for the removal of the shaft 18 from both of the drum sections and

also from the bracket, the drum section 6 is provided with notches 25 and 26 in the opposite ends thereof forming extensions in the journal openings and being of sufficient size to allow for the passage therethrough of the lugs 23. The bearing opening in one of the wings or extensions 3 is provided with a corresponding notch or groove 27 for the same purpose, namely, to allow for the passage of the lugs 23, so that by turning the notches 25 and 26 into alinement with the notch or groove 27 the shaft 18 may be withdrawn from the drum sections and the bracket. This enables the drum section 6 to be removed after which the other drum section 5 may be removed by first moving the same lengthwise until the journal 12 thereof passes out of engagement with its bearing in the bracket. The drum section 5 may then be moved laterally out of engagement with the supporting bracket. Thus the several parts of the complete reel may be readily disconnected and reassembled.

I claim:—

1. A reel comprising a bracket, a drum supported thereby and embodying independently rotatable sections, a journal fast on one section and having a bearing in the bracket, a shaft passing through the adjacent section and journaled in the bracket and the first mentioned section and interlocking means on said shaft and the section through which it passes, each of said sections being operable independently by means of a crank.

2. A reel comprising a bracket, a drum supported thereby and embodying independently rotatable sections, a journal fast on one section and having a bearing in the bracket, a shaft passing through the adjacent section and journaled in the bracket and the first mentioned section, and interlocking means on said shaft and the section through which it passes consisting of lugs on the shaft and cam projections on the adjacent reel section, each of said sections being operable independently by means of a crank.

3. A reel comprising a bracket, a drum supported thereby and embodying independently rotatable sections, a journal fast on one section and having a bearing in the bracket, a shaft passing through the adjacent section and journaled in the bracket and the first mentioned section, interlocking means on said shaft and the section through which it passes consisting of lugs on the shaft and cam projections on the adjacent reel section, each of said sections being operable independently by means of a crank, the last named reel section and the bracket being formed with notches for the passage of the lugs on the shaft.

4. A reel comprising a bracket, a drum supported thereby and embodying independently rotatable sections, a journal fast on one section and having a bearing in the bracket, a shaft passing through the adjacent section and journaled in the bracket and the first mentioned section, and interlocking means on said shaft and the section through which it passes, each of said sections being independently operable by means of a crank, the projecting ends of the journal and shaft being provided with notched and flattened sides forming key seats and each crank being formed with a key providing for detachable and interlocked engagement between the operating cranks and said journal and shaft.

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

RUSSELL KNEISLEY.

Witnesses:
G. H. FRAME,
ERCELL SUAVELY.