

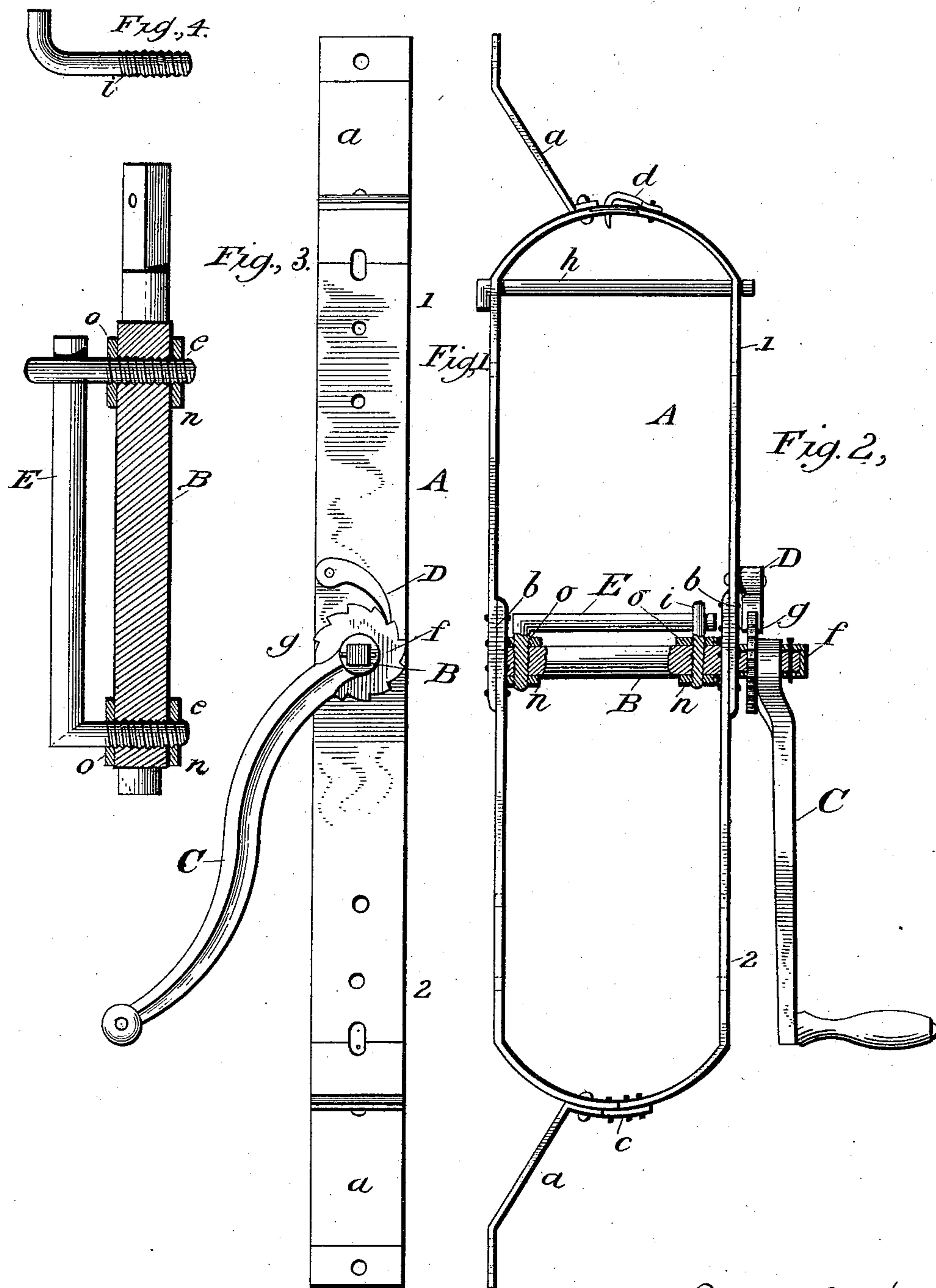
(No Model.)

D. B. KUHN.

BELT REEL.

No. 337,002.

Patented Mar. 2, 1886.



WITNESSES

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DAVID B. KUHN, OF NORWALK, OHIO.

BELT-REEL.

SPECIFICATION forming part of Letters Patent No. 337,002, dated March 2, 1886.

Application filed June 23, 1885. Serial No. 169,509. (No model.)

To all whom it may concern:

Be it known that I, DAVID B. KUHN, a citizen of the United States, residing at Norwalk, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Belt-Reels; 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 certain improvements in reels, and is more particularly designed for use in winding up machine-belts, by which the same may be kept rolled up or coiled compactly while not in use, it being applicable, also, as a storing-reel for wire, rope, and the like.

The invention consists, substantially, in the reel as constructed, and in the particular combinations of parts to be hereinafter distinctly described, and pointed out in the claims.

In many classes of machinery—such as harvesters, thrashers, and the like—it is frequently desirable that the belts by which such machinery is driven be removed, and heretofore in such instances much time and labor has been spent in rolling or coiling the belt to permit it to be more conveniently handled and stowed away.

My invention was devised for the purpose of attachment to the side of a machine, by which the belt may be readily wound up and kept until required for use, the device occupying but small space, and many inconveniences overcome by its employment.

Referring to the accompanying sheet of drawings, Figure 1 represents a side view of a device embodying my improvements. Fig. 2 is a front view thereof, partly in section; and Figs. 3 and 4 represent views in detail of certain parts to more clearly indicate their construction.

Reference being had to the several parts by the letters marked thereon, A represents the shell or casing, in which the operative parts are held, the same having at each end an arm, *a*, by which attachment is made to the side of a machine or other support. This shell is constituted of an upper and lower section, 1, 2, whose ends overlap each other and are united by rivets, as at *b b*, such manner of joiner thereof furnishing increase of bearing-

surface for a shaft, B, working therein, as shown.

The two sections are divided vertically or at top and bottom, and at the bottom are united by a hinge, *c*, while at the top they are held together by a hook, *d*, secured to one side and engaging or fitting into an opening in the opposite side.

The shaft B is formed with a shoulder, *e*, at each end, by which it is properly maintained in its bearings, and at one end is formed square, by which the attachment of the handle or crank C is made thereto. This crank is fitted upon a sleeve, *f*, on which also is rigidly held a ratchet-wheel, *g*, the attachment of the handle and wheel being made by slipping the sleeve over the square end of the shaft and securing it by a pin, as shown.

Instead of employing the sleeve, the ratchet-wheel may be secured to the end of the crank, thus dispensing with the same. I prefer, however, the construction shown.

Above the ratchet-wheel and operating therewith is a pivoted pawl or detent, D, which prevents back revolution of the shaft due to any tendency of the belt to unwind.

Passing through the two sides of the shell, either at the top or bottom thereof, is a rod or pin, *h*, by which, when the belt is wound up it is kept together tightly by simply passing this pin through its free end, and then turning the crank until the slack has been taken up. When it is desired to remove the belt, the crank and wheel are taken off and the hook *d* unfastened, whereupon the outer side of the casing may be swung downwardly, and the belt slipped from the end of the shaft, the sides of the shell being then joined together and the parts replaced as before for future use.

For the purpose of confining the belt to the shaft sufficiently tight to permit the winding of the same to be begun readily, I have provided an arm, E, having a screw-threaded elbow working through an opening in the shaft, as shown. This arm is swung outwardly to enable the end of the belt to be placed over the shaft, then it is turned back and caused to tighten or bear upon the belt to hold it, and the winding is then accomplished by simply turning the crank. The free end of the arm E fits under the curved end of a catch, *i*, by

which the same is held in place when brought under it. The arm and catch are screw-threaded, as shown, and are correspondingly adjustable by means of the nuts *n* *o*, so that
5 they can be accommodated to belts or ropes varying in thickness. It should be mentioned that when the outer side of the shell is swung downwardly previously to removing the belt it is necessary to take out the catch *i*, which
10 is done by simply unscrewing the lower nut, *n*.

It will be obvious that by not having the shell or casing divided vertically or the crank and ratchet removable from the outer end of the shaft, the belt, wire, rope, or the like could
15 be removed by taking hold of the end and drawing or pulling upon it until paid out.

While I have set forth certain constructions by which my invention is carried into effect, I do not wish to be understood as confining
20 myself thereto precisely, as it is evident that very material changes could be made therein which would come within the scope of my invention.

Having described my invention, I claim—

25 1. In a reel, the combination, with the shell constructed of two separate sides or pieces hinged together at one end and at the other end united by a fastening or hook, of the shaft held between the two sides, the sleeve on one
30 end of the shaft having secured thereto the ratchet-wheel and crank, a pawl for engaging the ratchet, and an arm and catch, which are correspondingly adjustable in the shaft, substantially as described.

2. In a reel, the combination of a shell constructed of an upper and lower section with their corresponding ends overlapped and secured, and having arms for attachment to a support, a shaft bearing in the overlapped portions thereof, an arm and catch correspondingly adjustable in the shaft, a pawl and ratchet, and an operating-crank, substantially as described.

3. In a reel, the combination, with a shell or casing, of a shaft held therein, the sleeve having secured thereon the ratchet-wheel and crank, a pawl for engaging the ratchet, and an arm and catch, which are correspondingly adjustable to and from shaft, substantially as described.

4. In a reel, the combination with the shaft, of an arm and catch correspondingly adjustable to and from the shaft, substantially as described.

5. In a reel, the combination, with the shaft having openings therethrough at or near each end, of an arm having a screw-thread working in one of said openings, and a catch working in the other, and nuts by which each is secured and adjustable, substantially as described.

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

DAVID B. KUHN.

Witnesses:

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