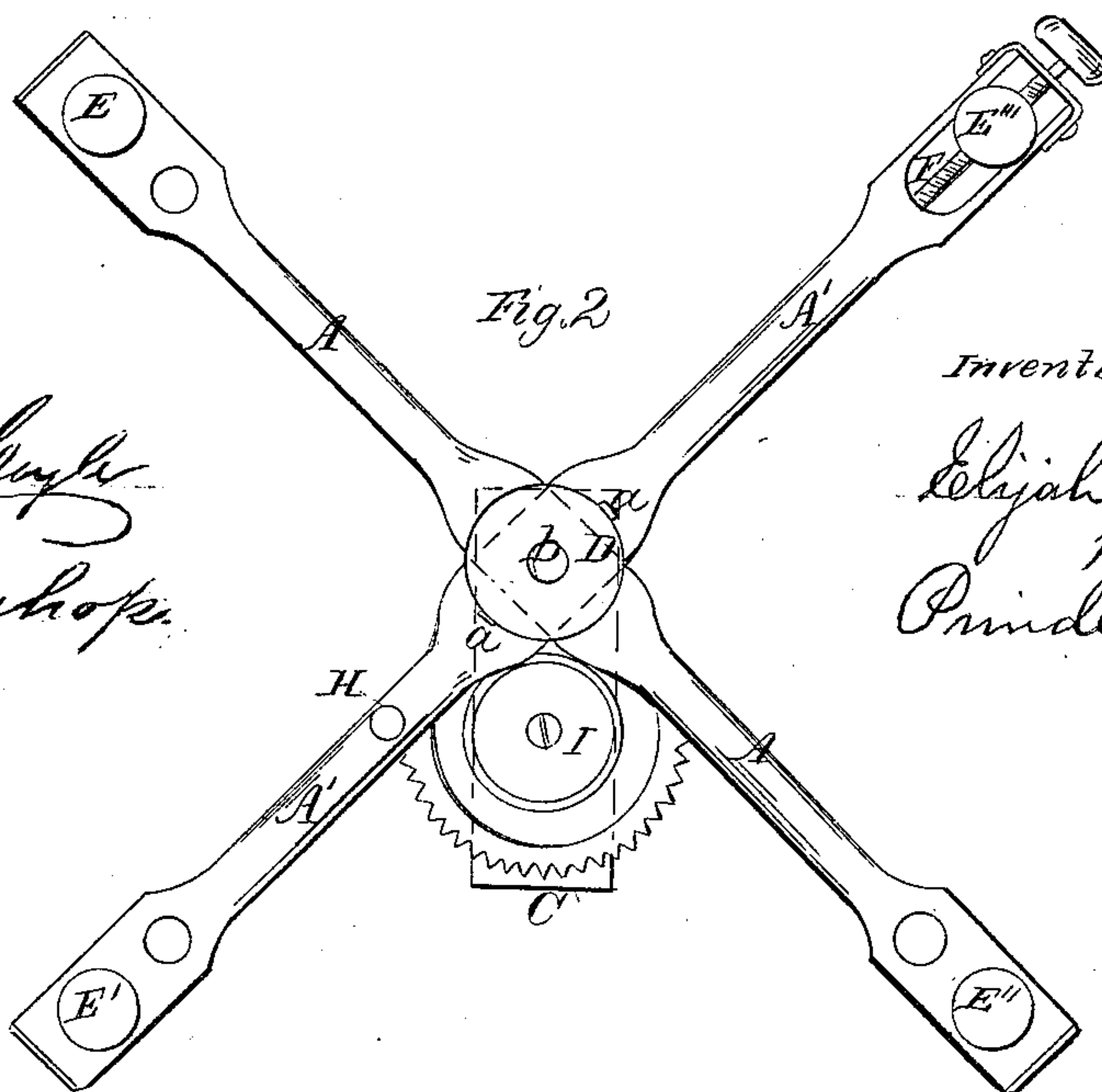
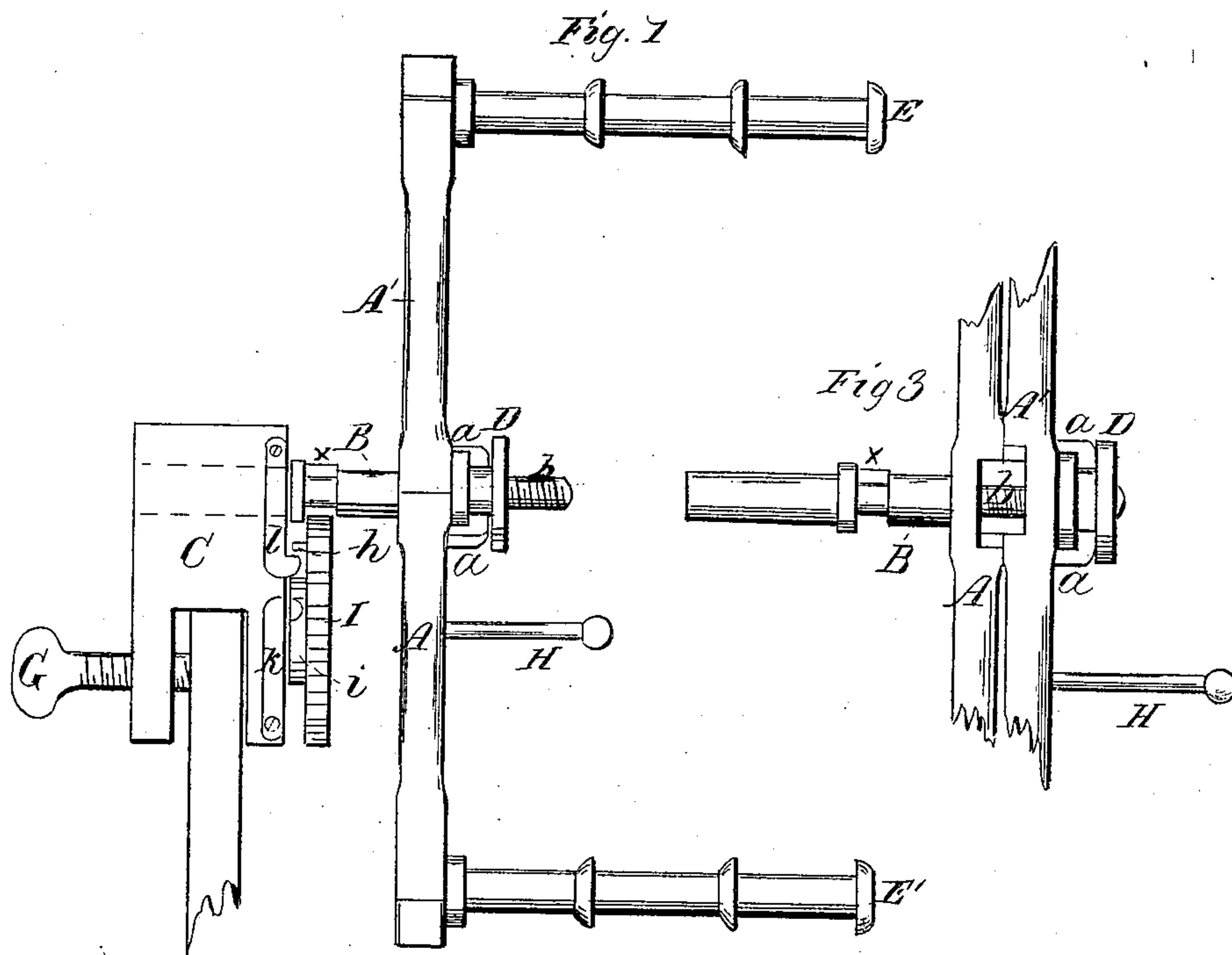


# E. Baker, Reel.

No. 84,156.

Patented Nov. 17. 1868.



witnesses

Randolph Knight  
C. H. Bishop

Inventor

Elijah Baker,  
per  
Prindle and Co.



# United States Patent Office.

ELIJAH BAKER, OF LORRAINE, ASSIGNOR TO HIMSELF AND  
AUGUSTUS L. BAKER, OF MANNSVILLE, NEW YORK.

Letters Patent No. 84,156, dated November 17, 1868.

## IMPROVEMENT IN REEL.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ELIJAH BAKER, of Lorraine, in the county of Jefferson, and in the State of New York, have invented an Improved Swift and Reel; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of the reel.

Figure 2 is a front view of the same.

Figure 3 shows the arms disconnected.

Letters of like name and kind refer to like parts in each of the figures.

My invention relates to a device known as a swift or reel for winding yarn, thread, &c., and consists principally in the manner of securing the arms together at their centre, so as to allow of their being placed at a right angle to each other when in use, or disconnected and placed nearly parallel with each other, and thus occupy less room when not in use, and in combination therewith, the employment of the adjustable pins upon which the yarn is held, by means of which any-sized skein may be held.

In the annexed drawings, A A' represent two arms, having a groove cut across the centre of each, in width corresponding to the breadth of the arms, and in depth, to one-half of their thickness, as shown in fig. 3, so that each may fit into the other when placed at a right angle. One arm, A, is secured to the shaft B, one end of which revolves freely in a hole in the block C, while the other end is provided with a screw, *b*, upon which is a nut, D. The other arm, A', is made to slide over the screw *b*, and is provided with two hooks, *a a*, projecting outwards at a right angle to the face of said arm, and placed at a suitable distance apart, so as to allow the nut D to revolve between them. The outer end of each hook is bent inwards, and fits into a groove in the nut, so as to hold it and the arm closely together, while allowing the former to revolve upon the screw.

It will be readily seen that if the nut is raised upon the screw it will carry with it the arm A', until the latter is entirely disconnected from the other arm, and may be turned so as to be nearly parallel to it, as shown in fig. 3, and thus occupy less space than when secured at a right angle to it.

Projecting outwards from the ends of the arms, at a right angle to the face thereof, are four pins, E E' E'' E''', for holding the yarn, three of which, E E' E'', are provided with a screw upon one end, passing through suitable holes in the arms, for the purpose of securing them thereto, while the fourth pin, E''', is made to slide in a longitudinal slot in the end of an arm, by means of a screw, F, passing through the lower end of said pin.

The inner end of the screw F rests in a suitable socket in the inner end of the slot, while the outer

end passes through a strap of sheet-metal covering the outer end of the arm and slot. The size of the screw is reduced where it passes through the strap, so as to leave a shoulder which bears against its inner side, by which means the screw is held in place while allowed to turn freely. A milled head is secured to the outer end of the screw, by means of which it is turned.

Two or more holes are provided in the arms for the fixed pins E E' E'', by means of which, in connection with the adjustable pin E''', any-sized skein of yarn may be fitted.

The lower end of the block C is provided with a slot one and one-quarter inch wide and two inches long, and has a thumb-screw, G, passing through one side of said block into the slot, the whole forming a clamp by means of which the reel can be firmly secured to the edge of a table, back of a chair, or to other articles of furniture.

Projecting at a right angle from the face of one of the arms, and two inches from the centre of the reel, is a pin, H, through which motion is imparted to said reel by the hand.

Pivoted to the inner face of the block C, directly beneath the shaft B, is a toothed wheel, I, containing forty teeth, which is revolved by means of a spur, *z*, in the shaft B, each revolution of said shaft turning the wheel forward one tooth, for the purpose of numbering the revolutions of the reel, and consequently the number of threads wound thereon.

Attached to the back side, and forming a part of the wheel I, is a ratchet, *i*, engaged with a click, *k*, attached to the block C, which prevents the wheel from being turned backward. A pin, *h*, inserted in the back of the wheel, between its outer edge and the ratchet, raises a spring, *l*, secured to the block C, which, when released, snaps back with sufficient sound to attract attention, and indicates that the reel has made forty revolutions and wound one knot of the skein.

The operation of this device is easily understood. When used for winding yarn, it is secured in an upright position to the back of a chair, or other article of furniture, the end of the yarn tied around one of the pins, and the reel revolved, winding the yarn around the pins. Before commencing to wind, the reel should be revolved until the spring *l* snaps, and the end of the yarn then secured to the pin, so that when the spring again snaps or warns, it indicates that forty threads, or one knot, have been wound, and the operator pauses, ties a thread around those wound, and commences winding again, tying together the threads as often as the spring *l* warns, until a sufficient number of knots is wound to form a skein, which is then removed and another started.

When used for holding thread or yarn for winding upon a spool or in a ball, the reel should be secured to



the edge of a table, in a horizontal position, the pins adjusted to near the size required, and the skeins placed around them, when, by moving outwards the adjustable pin E'', the skein is tightened and held securely in place while being unwound.

The advantages claimed for this device over all others in use intended for a similar purpose are, that while more simple in construction, and consequently cheaper, it is more compact and convenient, as it can be readily attached to a chair, table, or other article of furniture, the pins adjusted to fit the skein and put in operation, and after use it can be made to occupy but little space by disconnecting the arms and turning them parallel with each other.

Having thus fully set forth the nature and merits of my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The screw *b*, nut D, and hooks *a a*, in combination with the arms A A', by means of which said arms may be secured together or disconnected, for the purpose herein specified.

Also, in combination with the above, the pins E E' E'' E''', the latter made adjustable by means of the screw F, substantially as and for the purpose herein shown and described.

In testimony that I claim the foregoing, I have hereunto set my hand, this 2d day of October, 1868.

ELIJAH BAKER.

Witnesses:

NEWELL G. BAKER.

JNO. B. BAKER.