

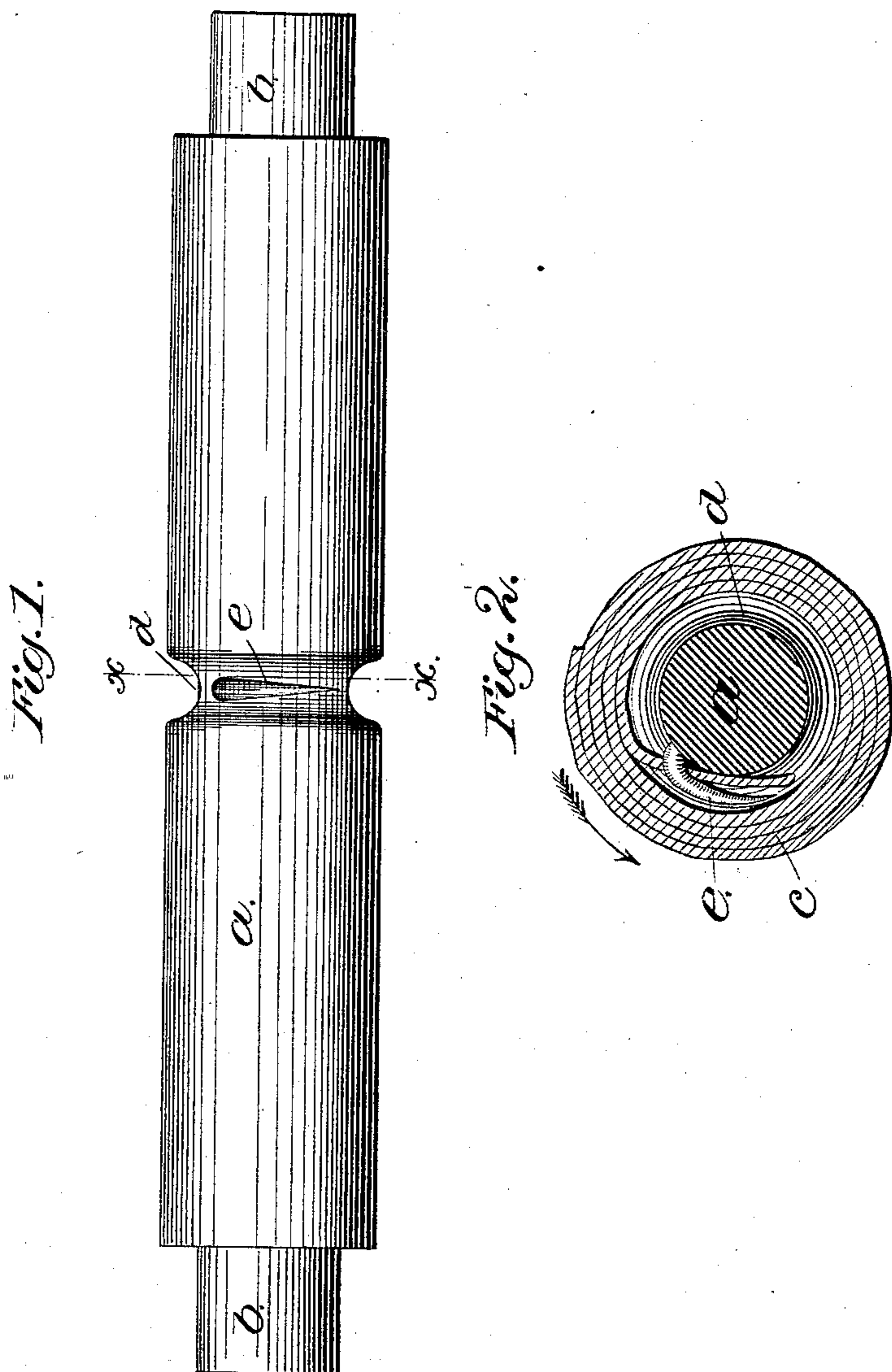
(No Model.)

O. W. KENISON.

CLOTH HOLDING ROLLER FOR LOOMS.

No. 277,742.

Patented May 15, 1883.



Witnesses.

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UNITED STATES PATENT OFFICE.

ORRIN W. KENISON, OF LAWRENCE, MASSACHUSETTS.

CLOTH-HOLDING ROLLER FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 277,742, dated May 15, 1883.

Application filed February 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, ORRIN W. KENISON, of Lawrence, county of Essex, State of Massachusetts, have invented an Improvement in Cloth-Holding Rollers for Looms, of which the following description, in connection with the accompanying drawings, is a specification.

My invention has for its object to securely hold the end of a piece of fabric to be, and as it is being, wound upon a roll, in such manner, however, that the fabric, when wound upon the roll, may be readily and easily removed therefrom, without unwinding the fabric, by simply turning the wound cloth backward upon the roll, such movement of the fabric freeing its inner end from the roll upon which it was wound.

In this my invention I provide the surface of the roll with a depression at right angles to its axis, in which is placed the point of a hook extended in the direction of rotation of the said roll when the fabric is being wound thereon, and with which the end of the piece of fabric to be wound upon the roll is engaged, and by which it is held as the fabric is wound upon the roll. This hook, being located in a recess such as described in the roll, does not interfere with pulling the wound fabric from the end of the roll after the end of the fabric next the roll has been disengaged from the said hook by moving the wound fabric axially on the roll sufficiently far to remove the end of the fabric from the point of the hook.

Figure 1 represents my invention embodied in a roll such as is employed in looms to receive the fabric as it is woven; and Fig. 2 is a cross-section thereof on the dotted line *x x*, Fig. 1, several laps of thick fabric being shown as wound upon the roll.

The roll *a*, having journals *b*, is the same as rolls commonly employed on looms to receive the fabric *c* being woven in the loom. In practice this roll receives its motion of rotation by the action against the fabric of a rough or other proper surfaced friction roll, or drum, or cylinder, which acts upon the fabric on the roll *a*, and rotates the latter to wind the fabric thereon, as is well understood.

In accordance with my invention I have provided the roll *a* with an annular groove, *d*, in which I have secured a fabric-holding hook,

e, the point of which is placed in the direction of rotation of the said roll when the fabric is being wound thereon, as shown, the said groove being sufficiently deep to receive the point of the said hook, and preferably the entire hook, so that no part of it is permitted to extend out beyond the periphery of the roll *a*. By placing the point of the hook or extending it in the direction shown the hook so holds the fabric that the latter cannot slip from the hook by reason of strain thereon in the direction of the axis of the roll. The end of the fabric *c* to be wound upon the roll *a* is caught upon the hook *e*, as shown in Fig. 2, and is held firmly while the roll is rotated to wind the fabric thereon. This hook prevents any longitudinal slipping on the roll of the mass of fabric wound thereon, and obviates oiling the selvage-edges of the fabric—an objection now not uncommon in looms not provided with my invention. A suitable amount of fabric *c* having been wound upon the roll *a*, may be withdrawn directly from one end of the roll, after first turning the mass of fabric upon the roll in the direction of the arrow shown in Fig. 2 far enough to remove the inner end of the piece of fabric from the hook *e*. As soon as the end of the fabric has been removed from the hook *e* the latter, being contained in the recess *d*, will not impede or obstruct the withdrawal of the mass of fabric from the end of the roll *a*. I may employ more than one hook *e*, if desired.

I am aware that cloth-receiving rollers have been provided with pins upon which to impale the inner ends of the cloth being wound thereon, as in United States Patents Nos. 81,170 and 129,554; but in said patents the pins are not so shaped as to permit the cloth to be detached therefrom by a backward movement of the roll of cloth without unwinding the same, as herein described, which is the chief object of my invention.

In my invention the hook-receiving groove is but little wider than the largest diameter of the hook, so that as the mass of fabric is turned backward the surface of the roll at the side of the recess in which the hook is placed acts to detach the cloth from the hook *e*.

I claim—

The cloth-receiving roll provided with the

narrow hook-receiving recess at right angles to the axis, combined with the hook *e*, located in the said recess, with its point in the direction of the motion of rotation in winding, and
5 shaped to assist in detaching the cloth from the hook as the mass of cloth is turned on the roll, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ORRIN W. KENISON.

Witnesses:

W. FISK GILE,
GEORGE L. WEIL.