(No Model.)

J. W. LYON.

REEL FOR TAPE MEASURES.

No. 569,792. Patented Oct. 20, 1896.

Fig. 2.

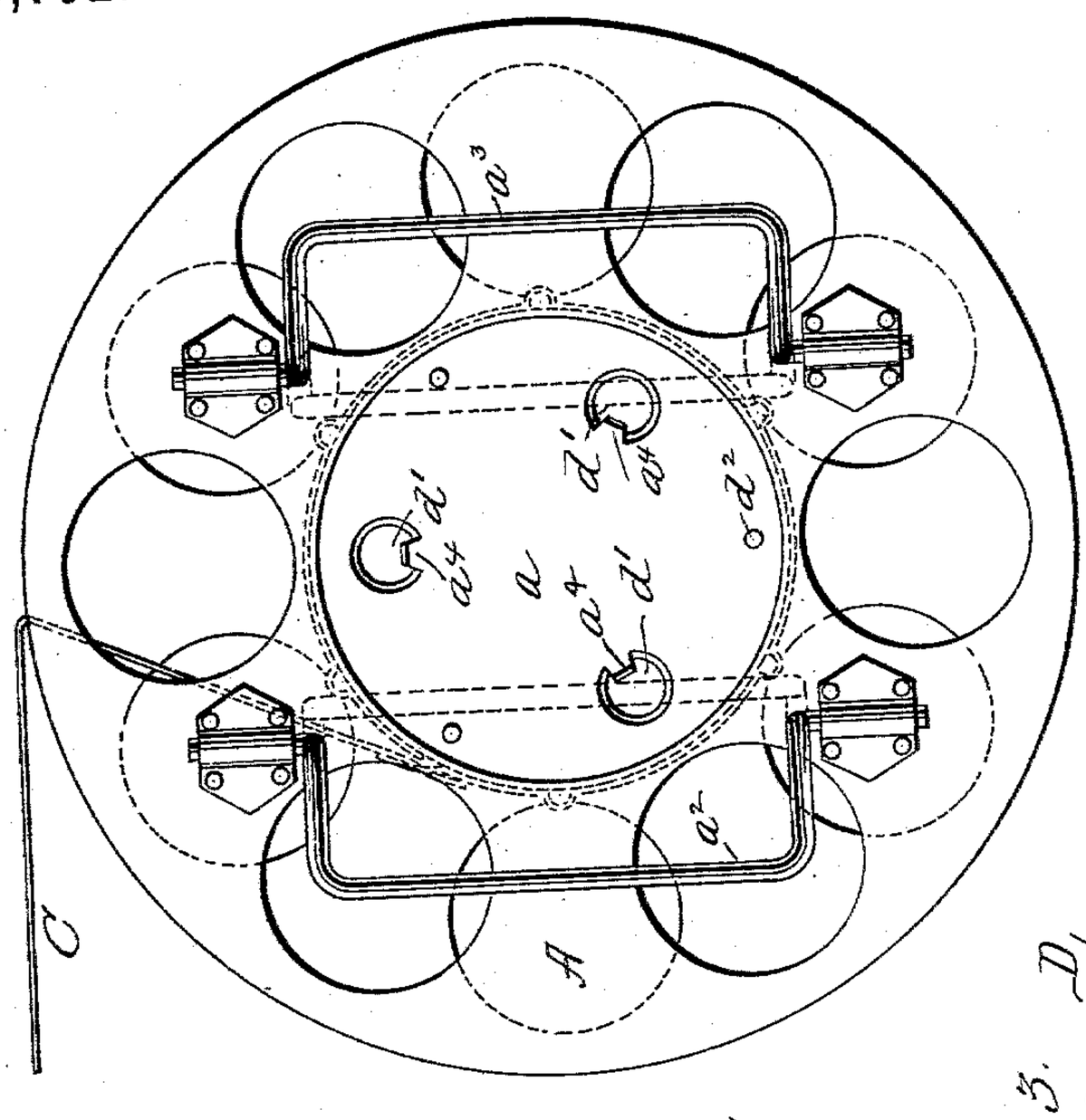


Fig. 3.

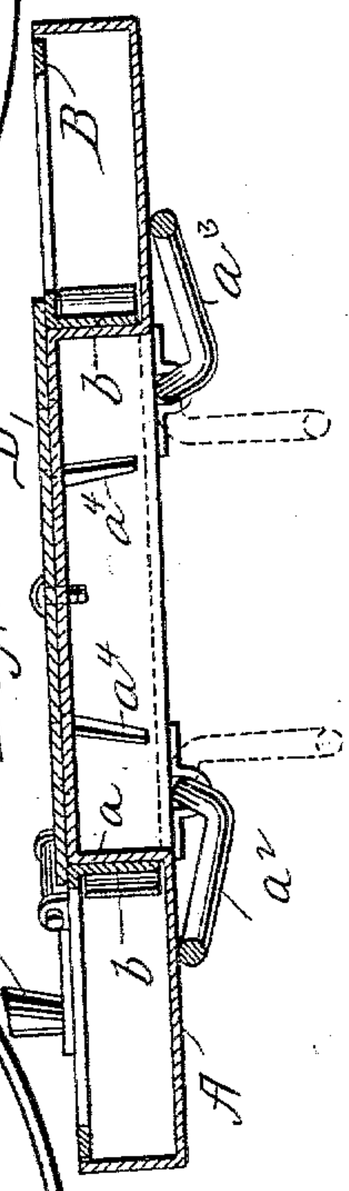
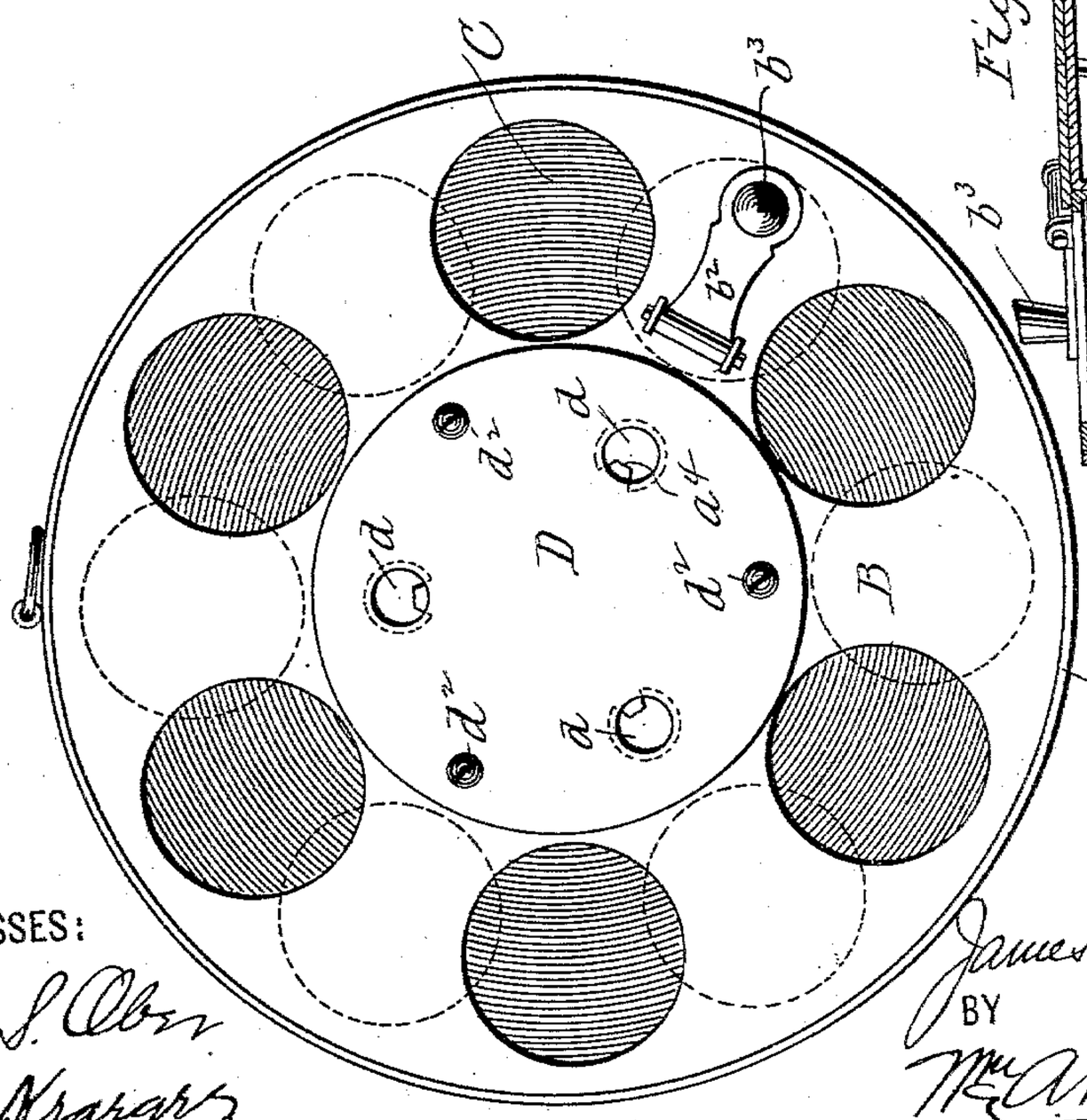


Fig. 1.



WITNESSES:

Frank S. Aber

John Krueger

INVENTOR

James W. Lyon

BY

Wm. A. Rosenbaum

ATTORNEY

UNITED STATES PATENT OFFICE.

JAMES W. LYON, OF BROOKLYN, NEW YORK.

REEL FOR TAPE-MEASURES.

SPECIFICATION forming part of Letters Patent No. 569,792, dated October 20, 1896.

Application filed November 16, 1895. Serial No. 569,174. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. LYON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Reels, of which the following is a full, clear, and exact description.

This invention relates especially to that class of reels which are used for steel or metal tape-measures, the object being to provide a reel which is cheap to construct, efficient in operation, and which provides for the drying of the tape after it is wound up in case it is wet before being housed.

The reel consists of two main parts, which together form the sides, the hub, and the rotating drum.

The arrangement will be described in detail with reference to the accompanying drawings, in which—

Figures 1 and 2 show the two sides of the reel, and Fig. 3 is a diametrical section of the same.

The two main parts of the reel referred to are represented in the drawings by A and B. They are placed in parallel planes, are circular in shape, and located a sufficient distance apart to form a chamber between them for the accommodation of the tape. The part A has a depression or offset cylindrical portion *a*, projecting toward the part B and occupying the entire middle portion between the parts. This formation constitutes an enlarged axle or drum upon which the outer part B rotates. B is provided with an enlarged central opening, surrounded by a concentric flange *b*, having an internal diameter fitting the external rim or surface of the axle or drum, and adapted to run upon it with sufficient friction to maintain the parts stationary when no force is exerted upon them. The part A is provided with a flange *a'* around its outer edge, which incloses the edge of the part B and covers the tape-chamber. This flange has a slit in it for the passage of the tape. The inner end of the tape is made fast to the flange *b* of the part B. The tape is represented by C.

The part A is provided with a double handle consisting of two pivoted bails a^2 and a^3, which, when not in use, may be folded down against the side piece, and when in use may be swung outward to parallel positions in order that they may be grasped in the hands. Each handle has a bend in it that acts as a stop to hold it at right angles to the side of the reel. The part B carries a pivoted crank b^2, having a crank-handle b^3. This crank is used to rotate part B while holding the part A stationary by its handles, and thus the tape may be wound up. When not in use the crank is swung toward the center to the position shown in dotted lines, in which position the crank-handle enters one of the holes *d* in the plate D. These holes coincide with other holes *d'*, formed in the face of the offset *a*. Spring-lips a^4 are formed adjacent to the holes *d'* to engage the handle of the crank and hold it in place. When the handle is thus folded in, it forms a lock to prevent unwinding of the tape. The plate D before referred to is slightly greater in diameter than the opening in the center of the part B, and it is secured concentrically to the face of the offset portion *a* by means of screws d^2, and overlaps the edges of the opening in the plate B, thus holding the part B in place.

In order to allow the tape to dry after it has been housed, the sides of the two parts A and B are made in skeleton work, as shown, thus permitting of a circulation of air.

The winding-crank being located off the center is more conveniently handled in winding up the tape, because the circle described by it is larger.

It will be observed that the main parts of this reel may be struck up from sheet metal, and the assembling of the parts is a very simple operation, making the reel cheap to manufacture.

The sides of the reel form the tape-housing also, but only one side of this housing remains stationary while the tape is being reeled up. Therefore the friction upon the rotating body of tape is materially reduced.

Having thus described my invention, I claim—

1. In a reel, the combination of a side piece provided with an integrally-formed axle or drum at its center, one end of the same being closed, and a second side piece having a central opening fitting over the axle or drum and surrounded by a flange adapted to turn on said drum, and a plate secured to the closed

side of the drum and with its edges overlapping the edges of the opening in the second side piece for the purpose set forth.

2. A reel having two side pieces one of which carries an axle upon which a hub on the other turns, the end of the tape being attached to the latter, and means for locking the parts to prevent relative rotation, substantially as described.

3. A reel having two side pieces one of which carries an axle upon which a hub on the other turns, the former provided with a handle and the latter provided with a crank whereby one may be held stationary while the other is rotated, the crank serving as a lock to prevent relative rotation of the parts.

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

JAMES W. LYON.

Witnesses:
WM. A. ROSENBAUM,
FRANK S. OBER.