

No. 863,723.

PATENTED AUG. 20, 1907.

F. R. KENT.
THREAD HOLDER.
APPLICATION FILED DEC. 16, 1906.

Fig. 1.

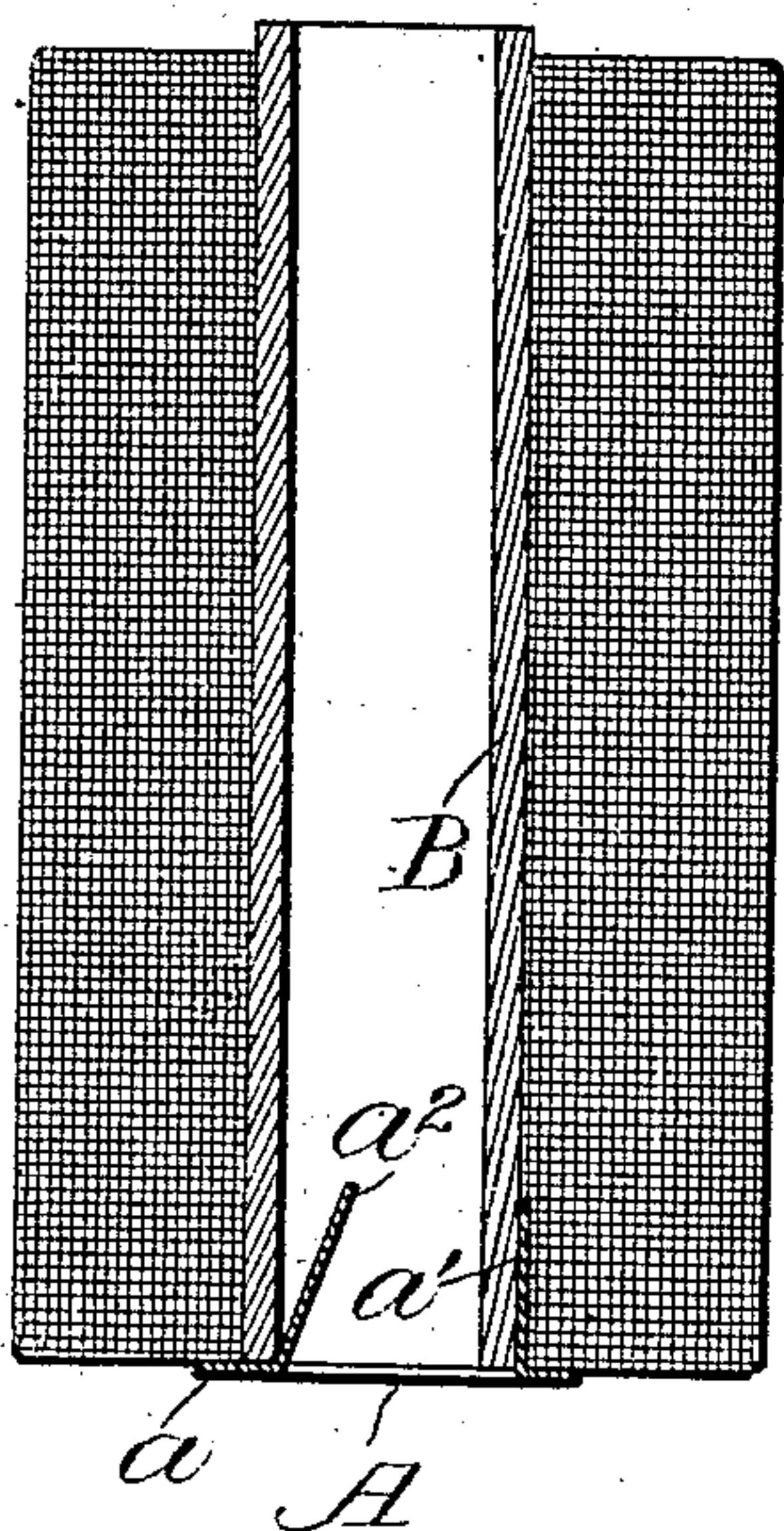


Fig. 2.

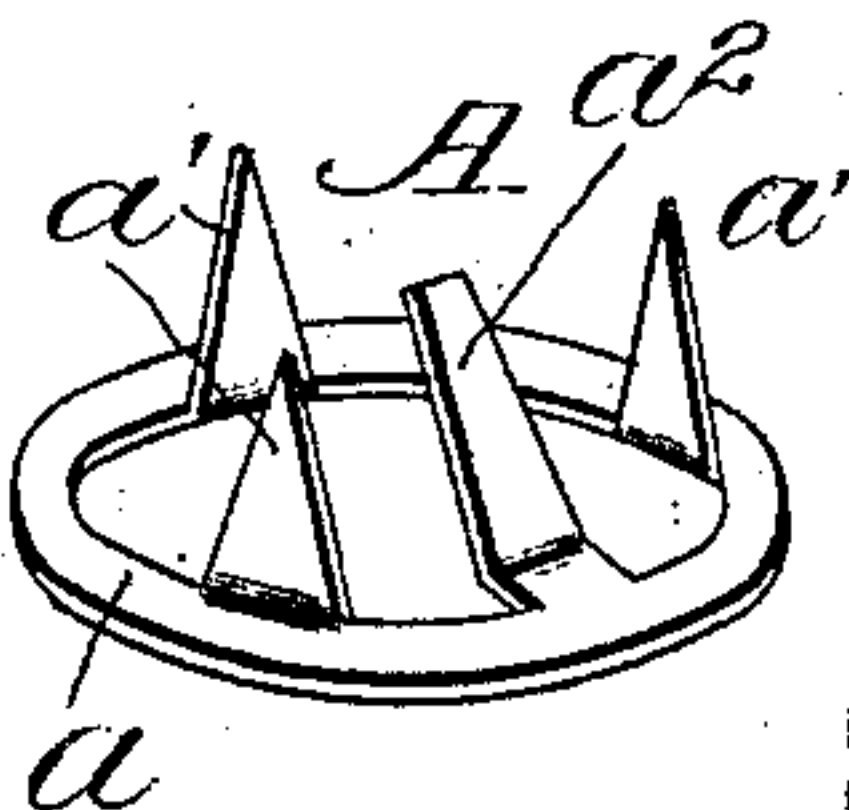


Fig. 4.

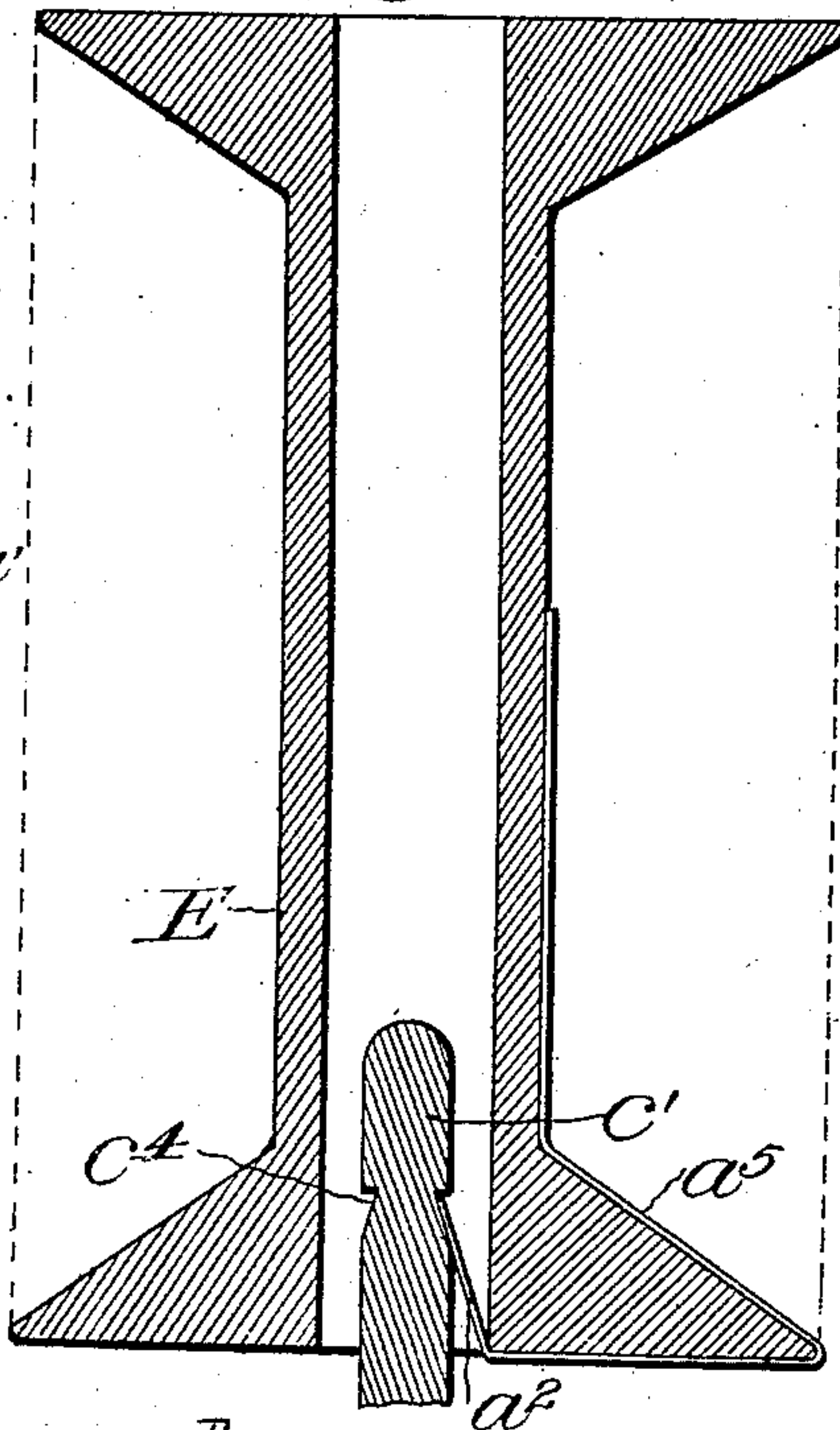
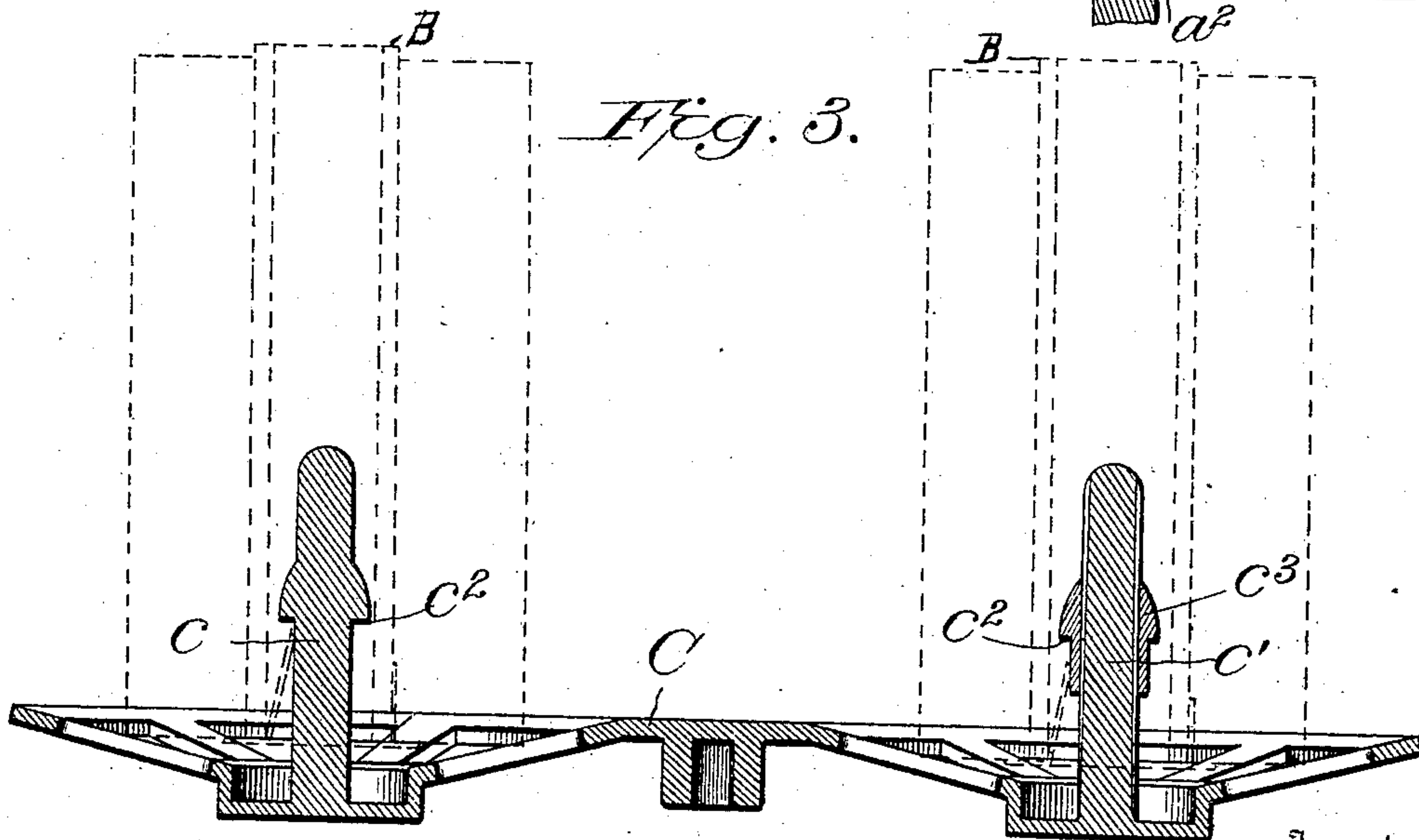


Fig. 3.



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THREAD-HOLDER.

No. 863,723.

Specification of Letters Patent.

Patented Aug. 20, 1907.

Application filed December 15, 1906. Serial No. 347,983.

To all whom it may concern:

Be it known that I, FREDERICK R. KENT, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Thread-Holders, of which the following is a specification.

My invention relates to a thread holder provided with means for locking it to its supporting post.

The object of my invention is to provide a thread holder with means for locking it to its support to prevent its unauthorized removal until all of the thread has been used and the locking means thereby released.

A further object is to provide the device with means whereby an authorized person may remove the thread holder in case it is necessary to do so before the thread has been used up.

These objects I accomplish by the construction shown in the accompanying drawings in which:—

Figure 1 is a section through a thread holder having the thread thereon and provided with one of my improved locking devices; Fig. 2 is a perspective of one of the locking devices; Fig. 3 is a perspective of a double thread-stand adapted for use with thread holders having my improved locking devices; Fig. 4 is a sectional view of a modification.

In factories using large quantities of thread the same is furnished wound upon large tubes containing six thousand yards or upon spools containing as much as twelve thousand yards and it happens that employees carry off such thread to the loss of the employer and my construction seeks to prevent such unauthorized removal of the thread. To provide thereagainst, I form the locking device A which comprises an annulus *a* adapted to fit around the lower end of the thread holder B which in practice is a paper tube, and this annulus is formed with upwardly projecting spurs *a'* which are forced upwardly between the outer face of the thread holder and the tightly wound mass of thread thereon. The annulus *a* is further formed with an inclined locking tongue *a²* which projects up into the interior of the thread holding tube. It will be seen therefore, that while the locking device will be firmly held in place so long as the thread is unused it will be released from the holder when the thread has been used up. My invention therefore, comprises a locking device held in place by the thread or other material wound on a holder and released when the thread is unwound or used up. This device coöperates with a spool stand C, which is of the usual construction except that its post *c*, or *c'*, is provided with a shoulder *c²* or equivalent device with which or under which the spring tongue *a²* will snap when the thread holder is pushed down on said post. The left hand shoulder *c²* is simply an enlargement cast on the post *c* but the right hand shoulder is formed of a wooden or breakable sleeve *c³*. Where

there is no necessity or occasion to ever remove the thread from the post except as it is used by the machine in sewing the left hand form of shoulder *c²* will be employed but where the thread has to be removed for any purpose other than in sewing the right hand form of shoulder *c³* will be employed. By inserting a chisel in the upper end of the thread holder the wooden or breakable shoulder may be severed or broken and so the thread may be removed. These wooden or breakable shoulders may be forced down on the post *c* very tightly so that they will withstand any effort to pull them off with the thread holders.

The locking device may be applied with slight change to other forms of thread holders such as spools, cones and the like as well as to the form shown in the drawing and may be employed for locking tubes on which material other than thread is wound.

The post *c'* shown in the drawing is tapered and fluted to receive ordinary spools instead of tubes and the wooden sleeve *c³* renders such post capable of receiving tubular paper thread holders. To adapt the post *c'* therefore, to spools having my improved locking device it will only be necessary to file or form a notch *c⁴* to constitute a shoulder for the locking tongue.

The locking device could be applied to a spool E as shown in Fig. 4 where the locking tongue *a²* has an attaching shank or prong *a⁵* extending across the end of the spool and up under the thread so as to be released when the thread is exhausted from the spool. But other ways may be provided for applying the locking device to spools tubes etc., without departing from the spirit of my invention.

What I claim is:—

1. A holder for wound material having a locking device projecting into its bore retaining means for the locking device held in place by the material and released when the material is unwound.
2. A holder for wound material having a locking tongue projecting into its bore and provided with retaining means lying between the outer side of the holder and the wound material.
3. A holder for wound material having a locking device comprising an annulus having spurs lying between the outer side of the holder and the wound material and a tongue projecting into the bore of the holder.
4. A paper tube having a thread wound thereon provided with a locking device having spurs forced between the thread and tube and a locking tongue projecting into the end of the tube.
5. A locking device for holders of wound material comprising an annulus having spurs to lie between the material and holder and a locking tongue to enter the bore of the holder.
6. The combination with a post having a shoulder, of a holder for wound material adapted to fit over said post and provided with a locking device adapted to snap into engagement with said shoulder and held in place by the wound material.
7. The combination with a post having a shoulder, of

- a tubular holder for wound material adapted to fit over said post and provided with a locking device comprising an annulus having attaching prongs held between the outer side of the holder and the wound material and a
- 5 locking tongue entering the end of the holder to snap into engagement with said shoulder.
8. The combination with a post having a breakable shoulder, in combination with a holder for wound material provided with a locking device adapted to engage
- 10 said shoulder.

9. A thread stand having a post provided with a shouldered breakable sleeve adapted for engagement by a locking device on a spool or holder.

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

FREDERICK R. KENT.

Witnesses:

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