

(No Model.)

E. L. FOSTER.

RIBBON HOLDER FOR TYPE WRITING MACHINES.

No. 554,590.

Patented Feb. 11, 1896.

Fig. 1.

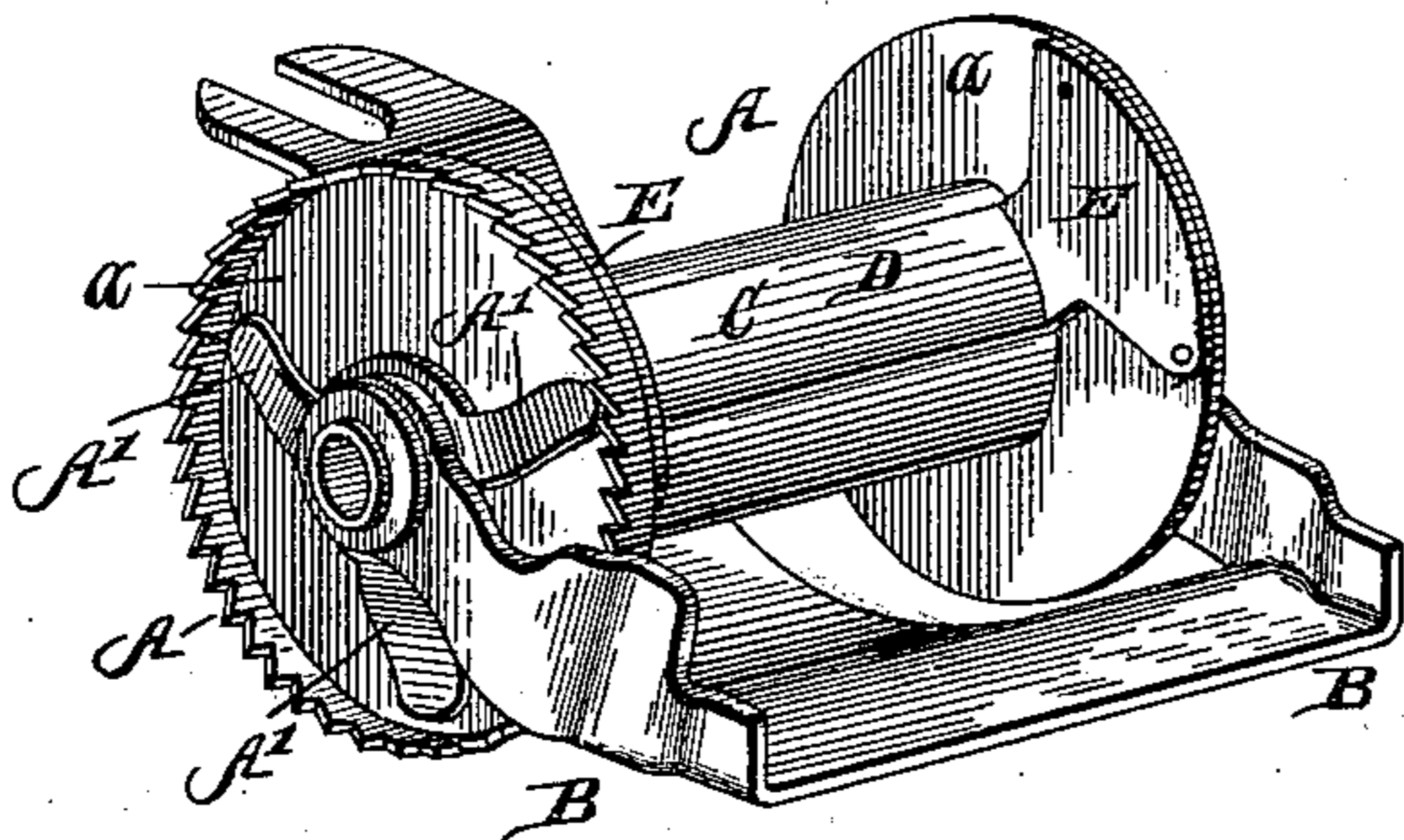


Fig. 2.

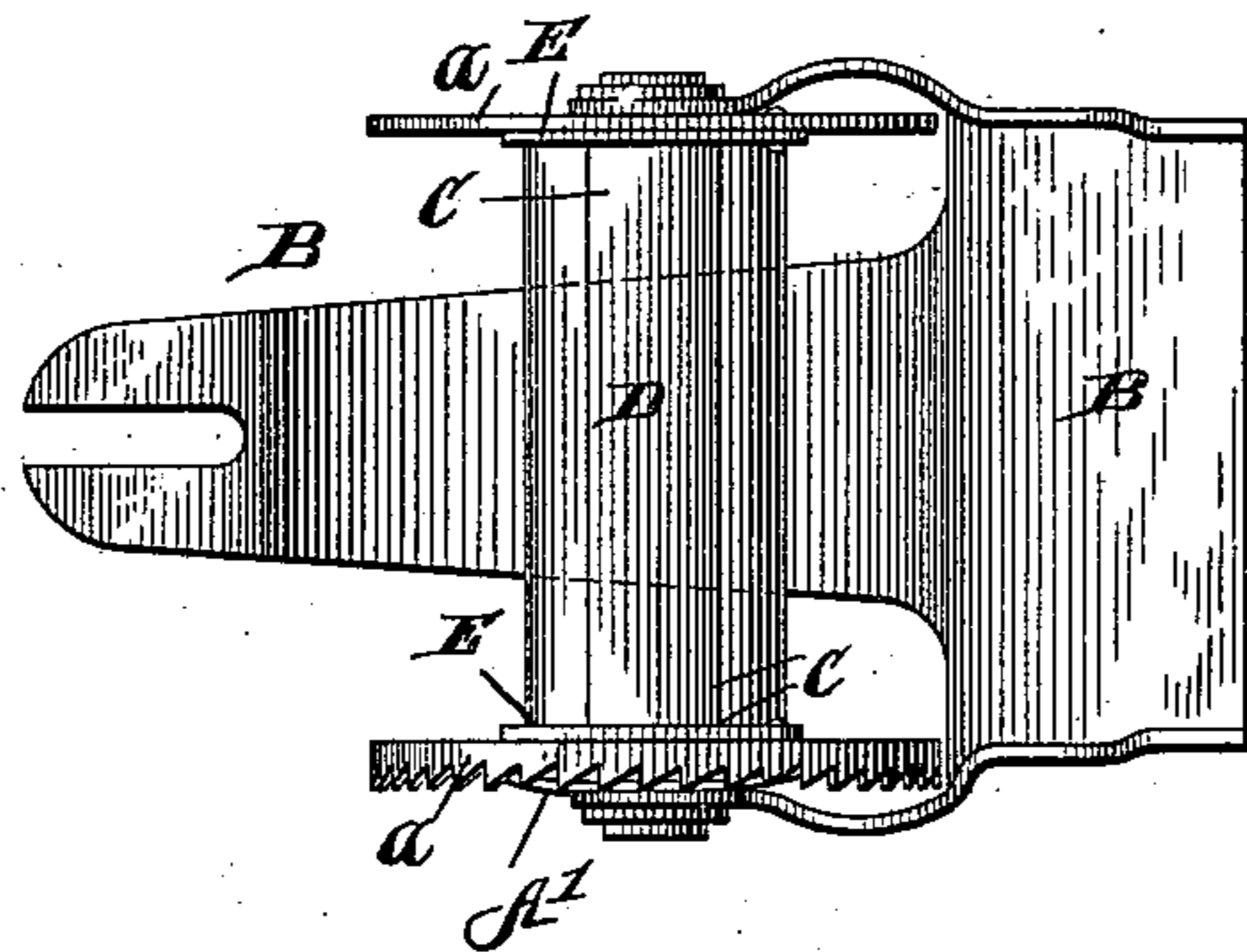
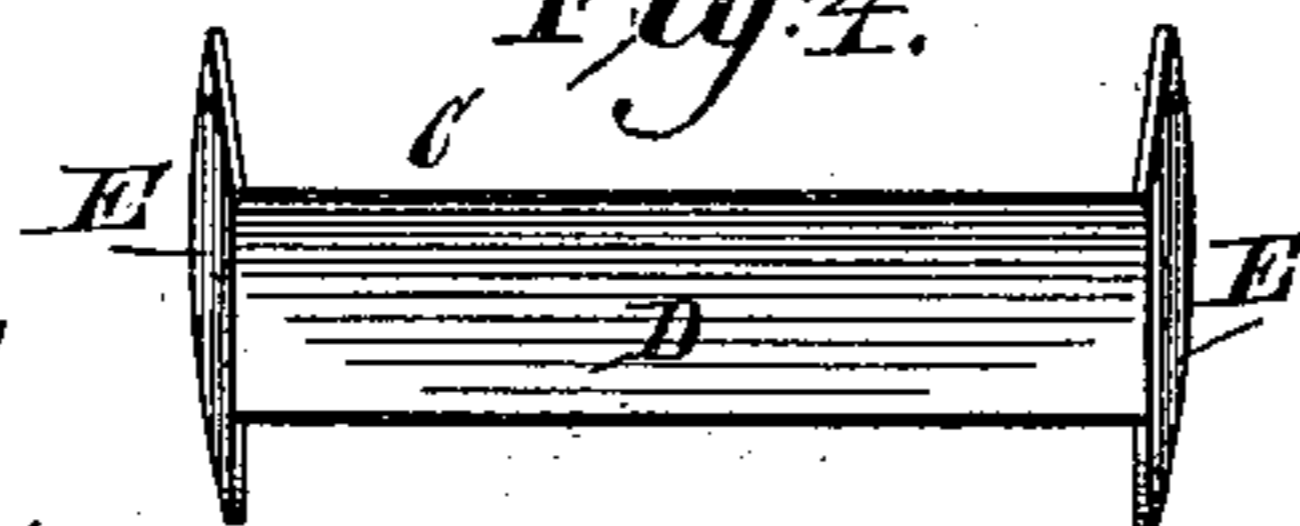


Fig. 3.



Fig. 4.



WITNESSES:

H. J. Dieterich
P. B. Surpin,

INVENTOR

Edwin L. Foster,

BY *Munn & Co.*

ATTORNEYS

UNITED STATES PATENT OFFICE.

EDWIN L. FOSTER, OF INDEPENDENCE, KANSAS.

RIBBON-HOLDER FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 554,590, dated February 11, 1896.

Application filed April 19, 1895. Serial No. 546,329. (No model.)

To all whom it may concern:

Be it known that I, EDWIN L. FOSTER, of Independence, in the county of Montgomery and State of Kansas, have invented a new and useful Improvement in Type-Writer Ribbon-Holders, of which the following is a specification.

My invention is an improvement in ribbon-holders for type-writing machines, and has for its object to provide simple, economical and efficient means for readily clamping the ribbon to the spool by the holder, so that such ribbon can be quickly and easily attached to and removed from the spool.

To this end the invention consists of the novel construction and combination of parts, as will be hereinafter more fully described, and pointed out in the claims.

In the drawings, Figure 1 represents in perspective my improved holder as attached to the spool. Fig. 2 is a plan view thereof. Fig. 3 is an edge view, and Fig. 4 is a face view, of the holder.

The spool A and its bracket B may be of any suitable construction, and the bracket may be constructed in any suitable manner to facilitate its application to and connection with any of the well-known types of machines, or such bracket may be especially constructed to suit any machine for which the particular line of holders being made may be intended. The spool also may be of such length and diameter as to adapt it for use with the particular type of machine with which it is to be used. This spool A has the heads *a* and may be held from turning too freely by means of the armed spring A fitting on the spool-journal and bearing between one of the heads *a* and the bracket. The ratchet-teeth upon the spool are for engagement by the pawl by which said spool is turned, and form no part of my improvement.

It should be understood that my ribbon-holder is applicable to all ribbon-using type-writing machines and, in some machines, at least, (viz., Smith-Premier,) enables and permits such change in the ribbon-fastening as to get a double use of the ribbon and results in a consequent saving and increased value of the ribbon.

The clamp C is formed bail-like, with the cross-bar D and the side arms E. The cross-

bar is preferably curved transversely corresponding to the curvature of the spool and so it will conform to the shape of such spool and bind the ribbon tightly against it when pressed into clamping position. At its ends the cross-bar has the side arms E, which are riveted or pinned to the head *a* of the spool and flare outwardly from such rivet or pin, so that when turned outward to free the ribbon or to permit its insertion the said arms will spread outward beyond the plane of the inner faces of the heads *a*. Thus the arms normally flare outward, so that when the clamp is forced into clamping position its arms will be compressed and operate by lateral pressure so as to bind between the heads of the spool and so act to lock the clamp in the position it is adjusted to in securing the ribbon, and the tension thus obtained is in practice so great as to preclude the accidental detachment of the ribbon.

The locking effect is heightened or increased by the special construction of the clamp in which the cross-bar is connected with the arms about midway the ends of the same, permitting the arms to be riveted or pinned near the outer edge of the heads, and these arms while they flare outwardly from their rivets or pins toward their other end are also flared in the direction from the cross-bar outward. While either flaring formation may give good results, it is preferred to employ the flare in both directions, because thereby a greater pressure and better binding effect is produced. While it is preferred to secure the binding effect by flaring the clamp-arms, as shown, it should be understood that I do not desire to be limited in the broad features of my invention thereto, as the clamp may be caused to bind between the heads of the spool by contracting the latter at that point, or in other ways without departing from the broad features of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A ribbon-holder comprising the spool and the bail-like clamp riveted or pinned between the heads of the spool and having its cross-bar arranged to secure the ribbon substantially as and for the purposes set forth.

2. A ribbon-holder comprising the spool, and

the bail-like clamp having the cross-bar and the end arms riveted or pinned to the heads of the spool and arranged to bind by pressure between the same substantially as set forth.

5 3. A ribbon-holder comprising the spool, and the clamp having the cross-bar and the end arms, such arms being riveted or pinned to the spool-heads and flared outwardly whereby to bind when the clamp is pressed into position between the heads of the spool substantially as set forth.

10 4. A ribbon-holder comprising the spool, and the clamp having side arms riveted or pinned at one end to the heads and flared thence outward toward their other end, and the cross-bar connecting said arms substantially as set forth.

15 5. In a ribbon-holder the combination with the spool of the clamp having side arms, connected by a cross-bar uniting with said arms midway their end, the said arms being riveted or pinned at one end to the heads and flaring outwardly from said end toward the opposite end, and also flaring in a direction

radially outward from the cross-bar, substantially as and for the purposes set forth. 25

6. The improved ribbon-holder herein described comprising the spool, the support therefor, and the clamp having arms riveted or pinned near one end to the spool-heads and flared outwardly substantially as described, and the cross-bar uniting with said arms at a point between their ends, such cross-bar being curved transversely, corresponding to the curvature of the spool-body, all substantially as and for the purposes set forth. 30 35

7. A ribbon-holder that may be attached to any of the various styles of spools adapted for the different makes of type-writers, having a bail-like clamp movably connected with and adapted to bind frictionally by lateral pressure between the heads of the spool substantially as set forth. 40

EDWIN L. FOSTER.

Witnesses:

RODNEY G. CLARKE,
CHRISTOPHER J. MULVANE.