M. Hemminway
Adjustable Reel.

No. 30,064. Patented Sept. 18, 1860.

Fig 2.

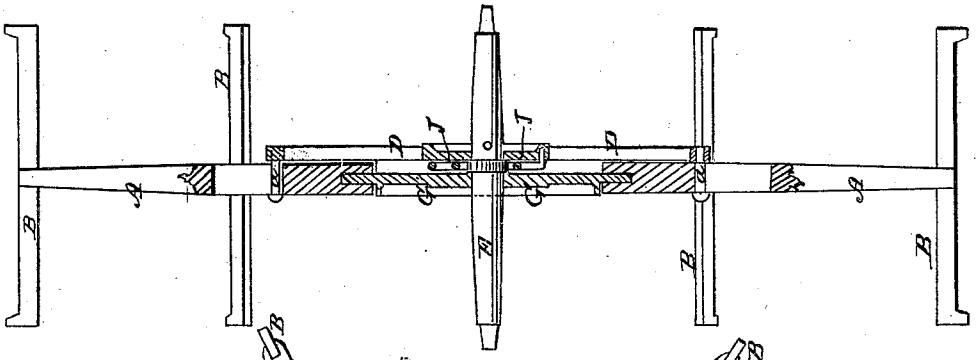
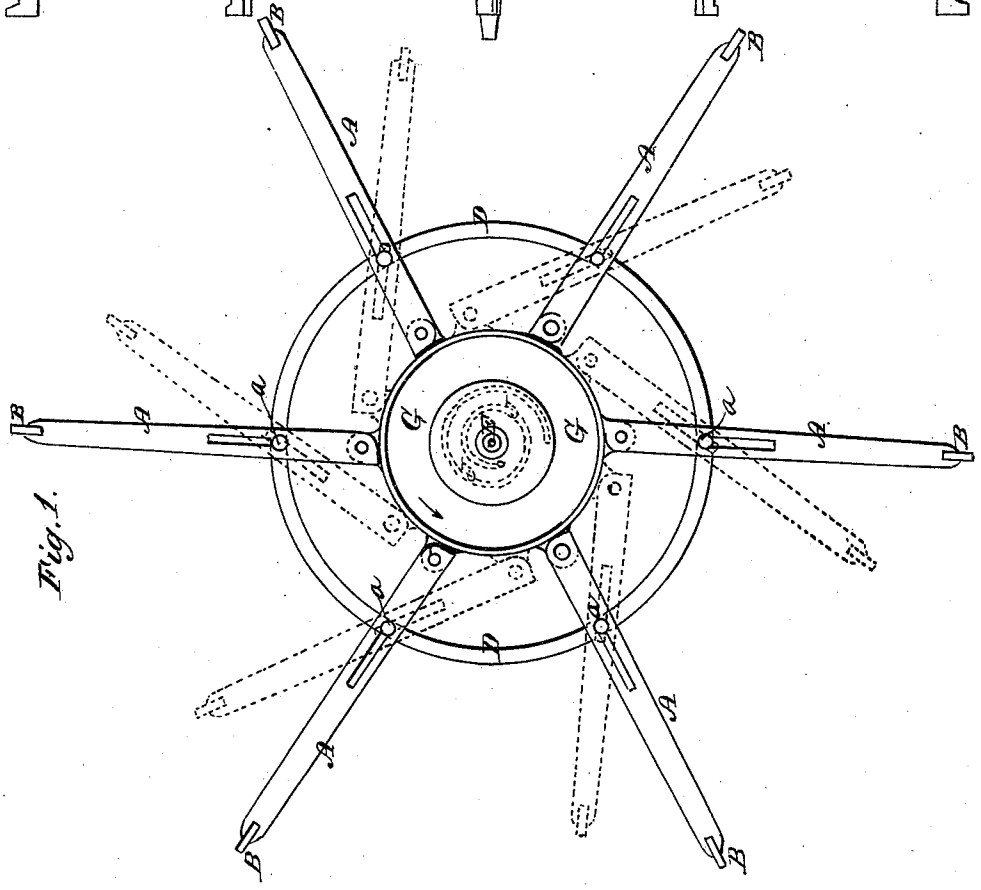


Fig. 1.



Witnesses.
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M. HEMINWAY, OF WATERTOWN, CONNECTICUT.

SWIFT.

Specification of Letters Patent No. 30,064, dated September 18, 1860.

To all whom it may concern:

Be it known that I, M. HEMINWAY, of Watertown, in the county of Litchfield and State of Connecticut, have invented a new and Improved Swift for Winding the Skeins in Silk-Throwing Mills; and I 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 represents a side view of my adjustable swift showing the arms thereof in two extreme opposite positions. Fig. 2 is a diametrical section taken through Fig. 1. Similar letters of reference indicate corresponding parts in both figures.

To enable those skilled in the art to fully understand my invention I will proceed to describe its construction and operation.

In the drawings the swift or reel is merely represented as it will be perfectly understood that this is to be placed in a frame carrying the bobbins and arranged in the usual manner.

A, A, A are the arms or spokes of the reel, that usually number six, which arms carry transverse pieces B, B, on their ends, on which the skeins of silk are placed. Each arm near the opposite end to that carrying the piece B, is slotted, as shown in Fig. 1, the slot extending in a line with the length of the piece, by which slots and pins *a*, projecting from a wheel D, the spokes or arms are attached to this wheel. The end of each spoke A, is jointed to a hub or wheel G, that is keyed to the shaft E; and between this hub G, and the wheel D, is interposed a coiled spring J, which is attached to both wheel and hub in such a manner that it will force the arms out in a (nearly) radial position with the axis of the shaft E, as represented in black lines Figs. 1 and 2.

Now from this description it will be observed that all the arms may be contracted simultaneously, and that skeins of silk of any length may, by this means, be put upon the reel, and kept under constant tension, while the silk is being wound upon the bobbins in consequence of the action of the spring upon the arms or spokes forcing the arms out from the axis of the shaft. The cross-pieces B, B, on the ends of the arms, serve a much better purpose than cords that are used in reels of the present construction, for the pieces will keep the skeins of silk open, and in a better state for being "thrown" off from the reel. The arms, when contracted to their fullest extent are in a tangential position with the hub to which they are each jointed.

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

The arrangement of the slotted arms A, and wheel D, with the hub G, and spring J as and for the purposes herein set forth and described.

M. HEMINWAY.

Witnesses:
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