R. SIMON.

Reels.

No. 141,084. Patented July 22, 1873.

Fig. 1.

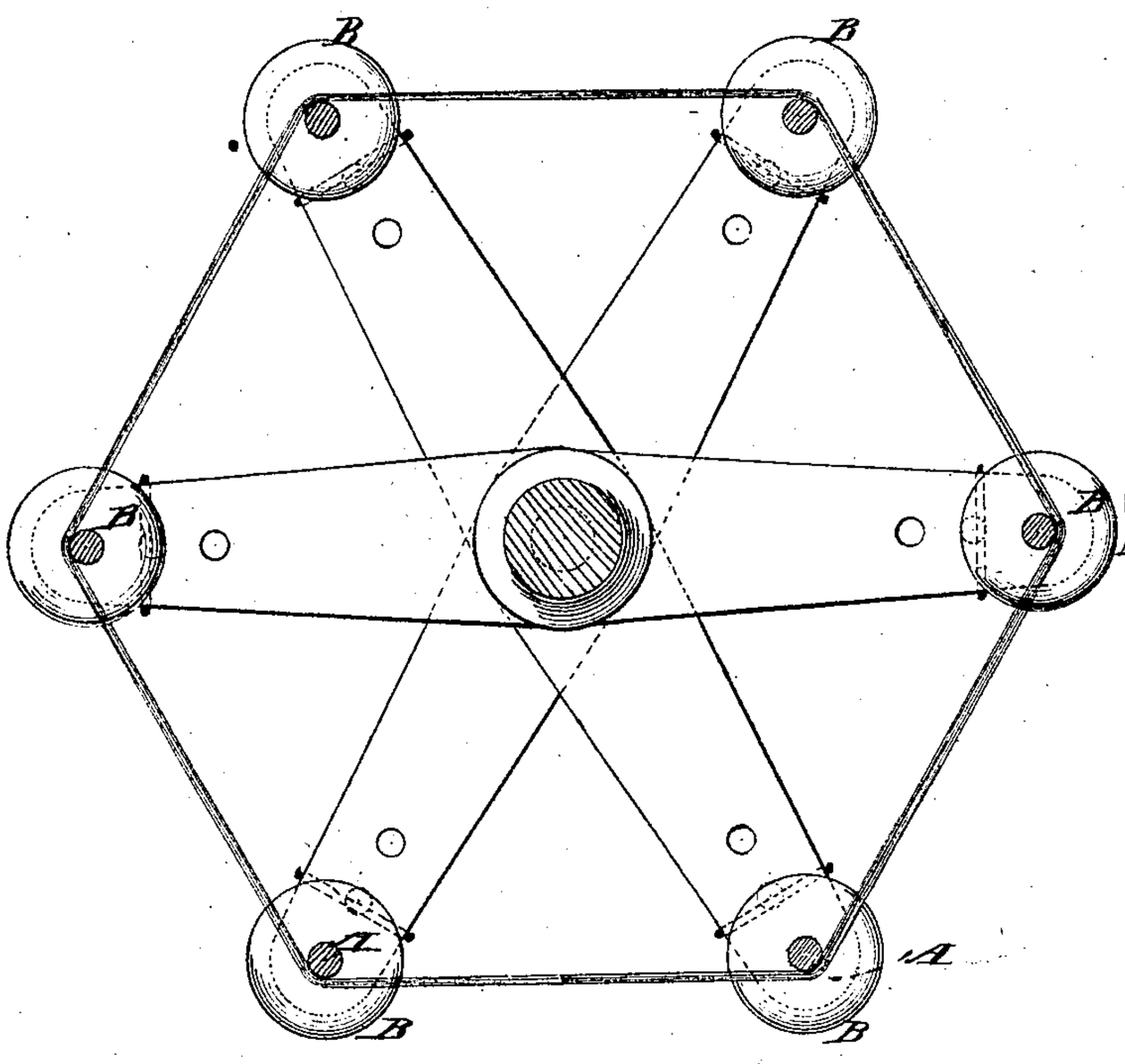
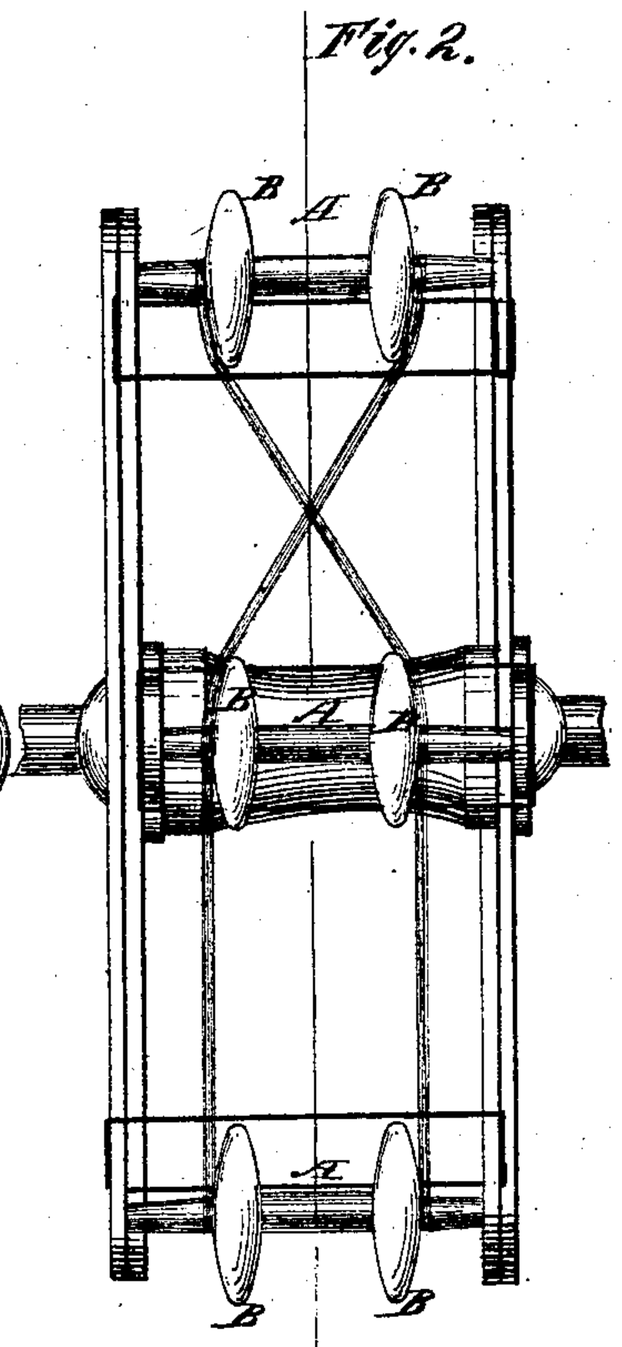


Fig. 2.



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UNITED STATES PATENT OFFICE.

ROBERT SIMON, OF PATERSON, NEW JERSEY.

IMPROVEMENT IN REELS.

Specification forming part of Letters Patent No. **141,084**, dated July 22, 1873; application filed March 8, 1873.

To all whom it may concern:

Be it known that I, ROBERT SIMON, of Paterson, in the county of Passaic and State of New Jersey, have invented a new and useful Improvement in Skeining Raw Silk, of which the following is a specification:

I propose to cross the threads of "greges," thrown, raw, and soft silks, say, three times in each turn of the reel in forming the skein, to prevent the threads from mixing and knotting together as they now do, and thus save much loss of time and waste of material in unwinding by breaking, snarling, &c. For so crossing the threads I propose to have a wide reel, with, say, six arms, each carrying two disks as wide apart as the threads need to be separated, and shift the threads across from one set of disks to the other by a transverse guide at every alternate space between the arms, making an odd number of crossings to each revolution of the reel, so that each crossing will be opposed to the next preceding one, thus insuring the laying of the threads so that they are kept in their proper relation to each other, one above another, in such manner that the thread being wound off the reel is always on top at the crossing, and can be readily picked up at that point when broken by taking the top one.

Figure 1 is a sectional elevation of a reel arranged for crossing the threads in skeining silk according to my invention, and Fig. 2 is a front elevation.

Similar letters of reference indicate corresponding parts.

A represents the arms of the reel, B the disks on them, for dividing the skein in two parts, and separating them so that the threads may be crossed alternately by a traverse-guide. There are six of these arms; but as the threads only need to be crossed three times to each round, the traverse will be caused to shift only three times to each revolution and rest until two arms pass it; then shift before the next one passes, and by making an odd number of movements cross the threads the opposite way each time, and lay them one above another in regular order. The threads are laid outside of the disks for the two divisions of the skein to be kept separate by them.

Skeins of raw silk and other kinds for which this improvement is intended, when not crossed in this way, are exceedingly troublesome to unwind, and cause great waste of time and material on account of the mixing, intertwisting, and breaking of the threads, which have to be carefully separated and mended by the attendant; but with my improvement no such difficulty will be had.

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

A reel whose arms A are provided with dividing-disks, as described, for separating the two parts of the skein, so that the silk or thread wound on such reel may be crossed in opposite directions in the spaces between alternate pairs of arms, in order that at such crossing each separate strand will be above its predecessor, as and for the purpose set forth.

ROBERT SIMON.

Witnesses:
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