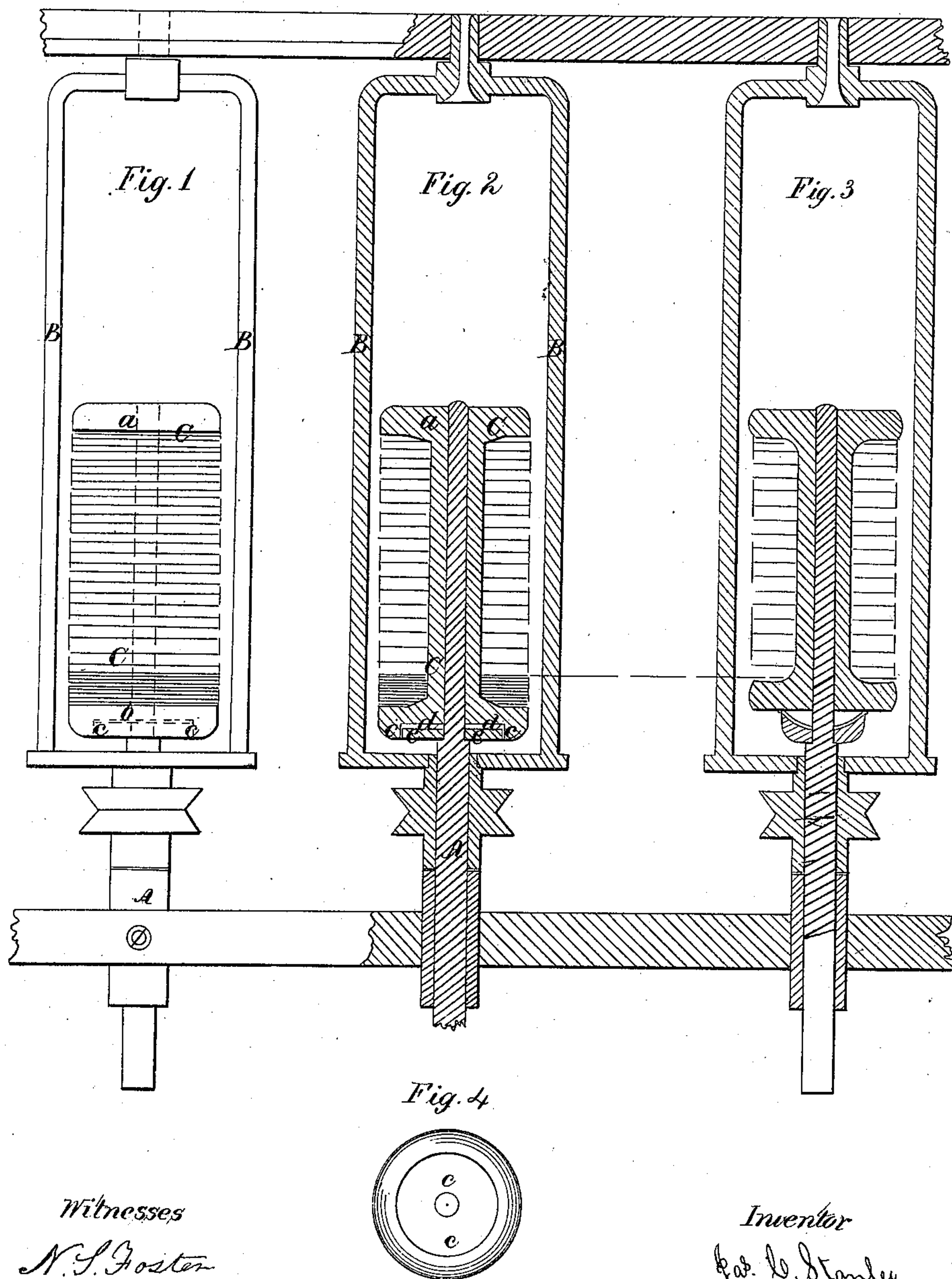


J. C. Stanley.
Spinning Bobbin.

N^o 36,177.

Patented Aug. 12, 1862.



Witnesses
N. S. Foster
Oliver Pearl

Inventor
Jas. C. Stanley

UNITED STATES PATENT OFFICE.

JAMES C. STANLEY, OF LAWRENCE, MASSACHUSETTS.

IMPROVEMENT IN THE BOBBINS OF THROSTLE SPINNING-MACHINES.

Specification forming part of Letters Patent No. 36,177, dated August 12, 1862.

To all whom it may concern:

Be it known that I, JAMES C. STANLEY, of Lawrence, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in the Throstle Spinning-Machine; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 denotes a side elevation, and Fig. 2 a vertical and longitudinal section, of a throstle, flier, spindle, and bobbin provided with my improvement. Fig. 3 is a longitudinal section of a throstle, flier, spindle, and bobbin of the ordinary kind in use. Fig. 4 is an end view of the lower head of a bobbin as recessed in accordance with my invention, the nature of which consists in an improved arrangement of the friction-washer, or the same and its supporting-disk, relatively to the bobbin-head, which is supported on such washer.

In the drawings, A denotes the spindle, B the flier, and C the bottom, of a throstle spinning-machine, the said spindle being what is technically termed a "dead-spindle."

In carrying out my invention the lower one of the two heads *a b* of the bobbin is to be constructed or provided with a cylindrical chamber or recess, *c*, which should extend upward from the lower surface of the head and be concentric with the spindle-passage of the bobbin. The said chamber or recess *c* should have a diameter equal to if not a little larger than that of the washer *d*, on which the head is to be supported, such being in order that the said washer, or the same and its sustaining-disk *e*, may extend up into the recess and be protected by it circumferentially, as well as on the upper surface of the washer. This arrangement of the washer or the washer and its disk is represented in Fig. 2, wherein the said washer and disk are exhibited as fastened to the spindle and encompassed by the chamber of the lower head of the bobbin. During the rotation of the flier the flat surfaces of the chamber *c* and the washer will operate to produce friction on the washer, and as such flat surfaces are protected by the curved sides of the chamber the draft on the yarn will be steadier, the protection being such as to prevent the accumulation of dirt, fibers, or extraneous matters between the rubbing-surfaces of the washer and chamber.

Highly important advantages result from

the said improvement, as it has been found that by means of it there results from it when in use a great gain in the amount of yarn wound upon the bobbin. Generally speaking, this increase has been not far from twenty per cent. This also effects a corresponding gain in various subsequent operations, particularly in the warping, dressing, and weaving of the yarn, for with respect to these latter processes the more yarn that can be wound on the bobbin the less will be the knots to be tied and the less will be the waste occasioned thereby. Besides these advantages, the washer and its disk or button are better protected from dirt or dust than they are when the washer bears against the lowermost surface of the bobbin-head, and is entirely outside of such head.

The reason for the gain in the amount of yarn laid on the bobbin will be apparent on comparison of the two bobbins represented in Figs. 2 and 3, which are calculated for one size of spindle and flier—viz., that represented. The distance between the heads *a b* of the bobbin of Fig. 2 exceeds that between the heads of the bobbin of Fig. 3 by the depth of the chamber or recess *c*, and consequently the length of the cylinder of yarn capable of being wound on the bobbin of Fig. 2 must be greater than that which can be laid on the other bobbin. For this reason, and also that my improvement produces a steadier draft on the yarn than can be attained when the washer is wholly outside of the bobbin, the amount of yarn which can be wound on the bobbin will be largely increased comparatively to the result which follows from the use of the washer wholly without the bobbin-head.

I am well aware of the invention as described and claimed in the United States Patent No. 7,080, and granted to Oliver Pearl on the 29th day of January, 1850; but as such differs entirely from my invention I lay no claim to any part thereof; but

I claim—

My improved arrangement of the friction-washer *d*, or the same and its disk *e*, relatively to the bobbin-head *f*—viz., so as to extend up into and be capable of operating therewith, substantially in the manner and for the purpose as described.

JAS. C. STANLEY.

Witnesses:

N. S. FOSTER,
OLIVER PEARL.