No. 684,901.

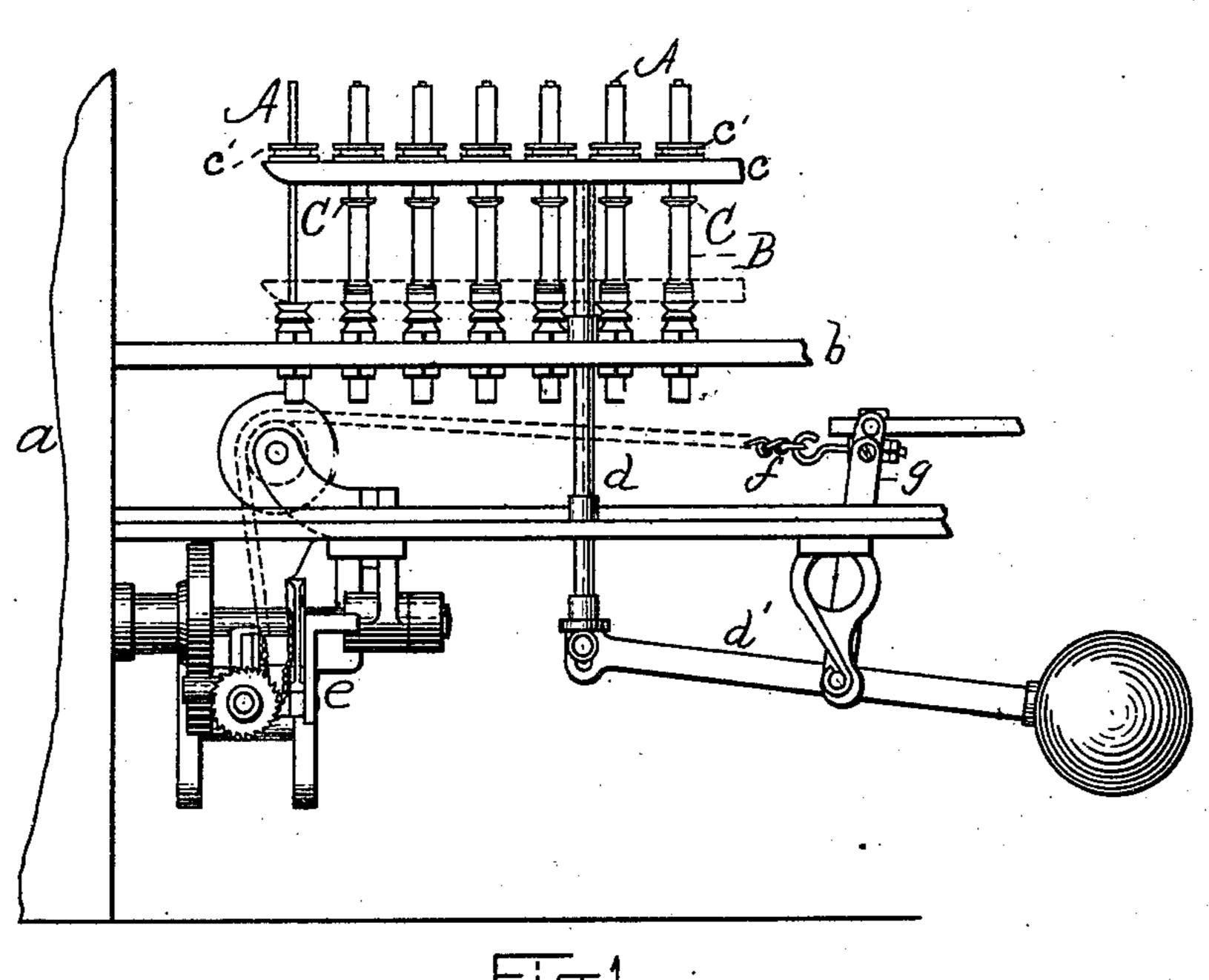
Patented Oct. 22, 1901.

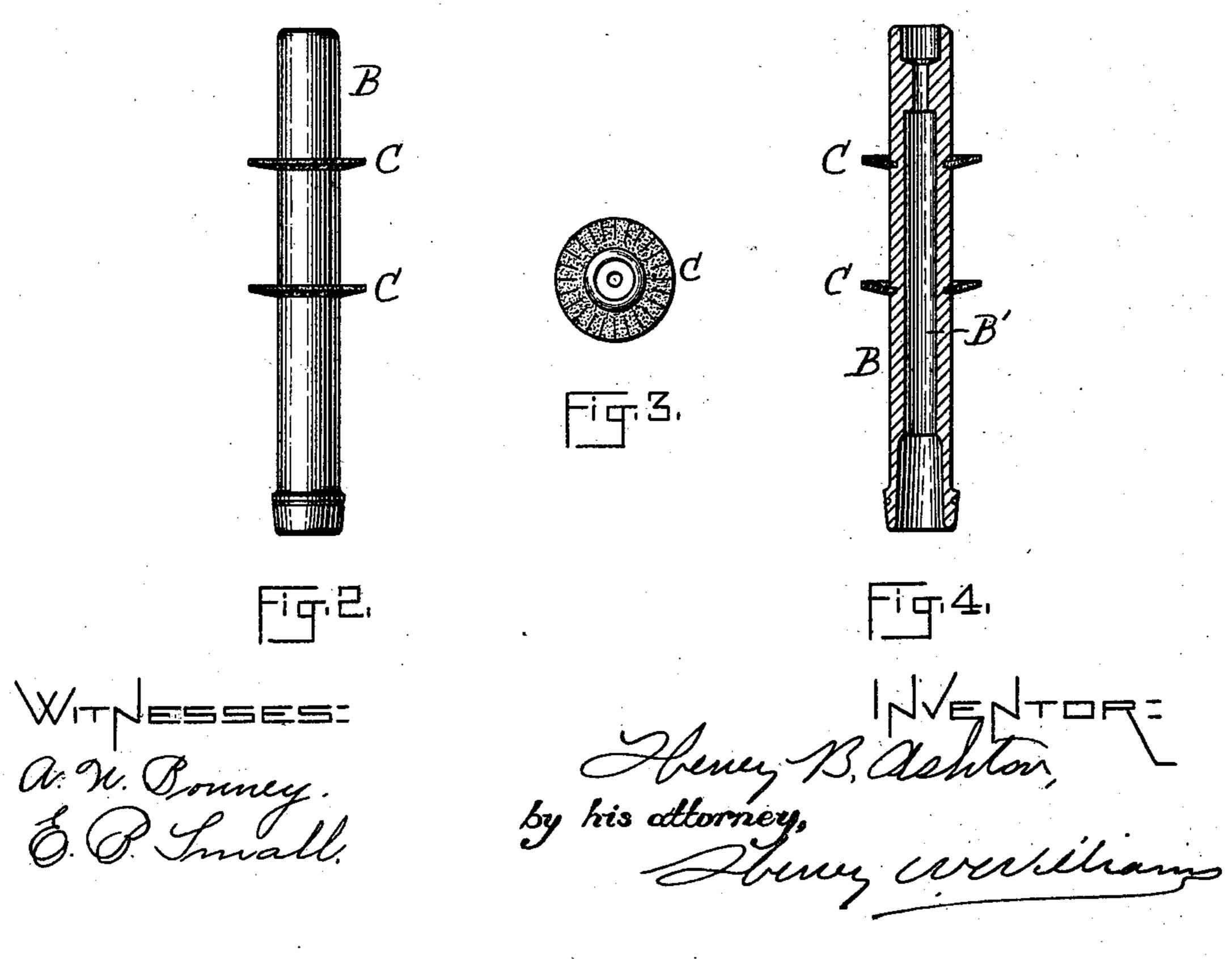
## H. B. ASHTON.

## ATTACHMENT FOR SPINNING FRAMES.

(Application filed May 31, 1900.)

(No Model.)





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## United States Patent Office.

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## ATTACHMENT FOR SPINNING-FRAMES.

SPECIFICATION forming part of Letters Patent No. 684,901, dated October 22, 1901.

Application filed May 31, 1900. Serial No. 18,498. (No model.)

To all whom it may concern:

Be it known that I, Henry B. Ashton, a citizen of the United States, residing in Medford, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Attachments for Spinning-Frames, of which the following is a specification.

This invention has for its object to provide an attachment for spinning-frames whereby the rings may be quickly and thoroughly cleaned while in position by the operation of the frame, it being a well-known fact that in ring-spinning frames the inside flanges of the rings are apt to become gummed and clogged by dirt, so as to require frequent cleaning.

The attachment embodying my invention comprises a body, preferably a bobbin, provided with laterally and outwardly extending flexible projections adapted to engage the interior portions of a ring when the attachment is placed upon the spindle and by such engagement brushing and cleansing the interior surface of the ring when the spindle is rotated.

In the accompanying drawings, in which similar letters of reference indicate corresponding parts, Figure 1 is a front elevation of a portion of a spinning-frame with a ring-cleaning attachment embodying my invention in position. Fig. 2 is an enlarged side elevation of the attachment. Fig. 3 is a plan view of the same. Fig. 4 is a longitudinal vertical section of the same.

35 a represents a portion of the frame, b the spindle-rail, A the spindles mounted on the rail and driven in the ordinary manner, c the vertically-reciprocating ring-rail provided with the rings c', d a lifter-rod, d' a lifter-40 arm, and e a winding mechanism actuating the lifter-arm through a chain f and rocker-arm g, all constructed and operated in the usual manner.

B is a body portion, preferably an ordinarily-constructed bobbin, bored longitudinally at B' to engage frictionally with the spindle-blade. This body portion is provided with laterally and outwardly extending flexible cleaning projections adapted to come in to contact with the interior portions of the ring when the attachment is in use. In the drawings the projections are two in number, each

consisting of a ring C, of flat felt or other flexible material, said ring being radially slitted, as shown in Fig. 3, whereby each annular 55 projection consists of a plurality of small projections, so that there are two series or sets of lateral projections, each series or set being in the form of a ring. I do not, however, confine myself to the number of rings or pro- 60 jections shown nor to the material of which they are constructed, as any desired number may be applied or any material used which is sufficiently flexible; neither do I confine myself to the exact arrangement or construc- 65 tion of the projections. The ring-shaped projections illustrated in the drawings are secured to the body portion by means of suitable annular grooves, as shown in Fig. 4, and the projections are arranged to incline up- 70 wardly. This upward inclination is, however, not necessary, but is perhaps preferable. The length of the projections is of course such as to come in contact with the interior surface and flanged portion of the ring 75 when the attachment is placed on the spindle, as shown in Fig. 1, and the frame being started up the rotation of the spindles and traverse of the ring-rail act to clean the rings. As many of the spindles may be provided 80 with attachments as desired.

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

1. A spindle-rail; a series of rotatable spin- 85 dles mounted thereon; a traversing ring-rail provided with rings; and ring-cleaners detachably mounted on the spindles and provided with laterally-extending flexible projections to engage and clean the rings as the 90 ring-rail is traversed.

2. An attachment for ring-spinning frames, comprising a body having a central bore to receive the spindle-blade; and flexible cleaning projections arranged upon and extend- 95 ing laterally from the body, for the purpose of cleaning the interior of a ring when the attachment is applied to its coöperating spindle.

3. An attachment for ring-spinning frames, comprising a bobbin centrally bored to receive a spindle-blade, and provided with an outwardly and laterally extending ring C of substantially flat flexible material, mounted thereon for the purpose of cleaning the inte-

rior of a ring when applied to its coöperating spindle.

4. An attachment for ring-spinning frames, comprising a bobbin centrally bored to rescive a spindle-blade, and provided with a laterally-extending ring C mounted thereon, made of flexible material and radially slitted

from its periphery, for the purpose of cleaning the interior of a ring when applied to its cooperating spindle.

HENRY B. ASHTON.

Witnesses:

HENRY W. WILLIAMS, A. W. BONNEY.