

UNITED STATES PATENT OFFICE.

HARRY BIBBY REYNOLDS, OF STOCKPORT, ENGLAND

SPINNING AND DOUBLING FRAME.

No. 868,009.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed July 19, 1906. Serial No. 326,803.

To all whom it may concern:

Be it known that I, HARRY BIBBY REYNOLDS, a subject of the King of Great Britain, residing at Stockport, in the county of Chester, England, have invented new and useful Improvements in and Connected with Ring-Spinning and Ring and Flier Doubling Frames, of which the following is a specification:—

This invention relates to improvements in and connected with ring spinning and ring and flier doubling frames and has for its object to provide improved means for preventing in such machines two or four fold or lashed ends. I attain this object by the means illustrated in the accompanying drawing, which shows a vertical section of the upper portion of a ring doubling frame with my improvements applied.

In carrying out my invention I employ in connection with the thread *a* of each spindle bobbin, a flexible member *b* one end of which is attached to any convenient part at the back or thereabouts of the delivery rollers *c*, while the other end extends to the front and having at its free end a hook *d*, open eye, loop or the like & rests upon the thread.

When a thread breaks, the said member losing support at its free end, drops, or swings back and in falling upon the roller beam *e* draws with it the broken thread below the rollers, as shown in dotted lines, causing the thread to wrap round the delivery rollers and thereby prevent it from lashing onto the adjacent thread and making two or four fold as the case may be. The said

member may be made of any suitable material, say of gut, cord, wire in chain form, or of a combination of materials.

To facilitate the attachment of the said member at the back or thereabouts of the delivery rollers, in the present instance, a hook *f* is secured into the cap bar *g* onto which it is placed; or its back end may have a ring adapted to engage in a hole formed in the cap bar, as will be readily understood without illustration. Again the hook at the free or front end may be "S" shaped so as to be reversible.

I claim

1. As an attachment for ring-spinning and ring and flier doubling frames, a flexible member having means to support one end of it upon the yarn or thread, and the other from a point near the rear of the delivery rollers and above the roller beam, whereby when the thread breaks the unsupported end of said member falls and draws the broken end below the rollers.

2. As an attachment for ring-spinning and ring and flier doubling frames, a flexible member having means to support one end of it upon the thread or yarn and the other from a point in the rear of the delivery rollers and above the roller beam, and being adapted to fall upon the latter, when the thread breaks, and hold the said broken thread from lashing upon adjacent threads.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HARRY BIBBY REYNOLDS.

Witnesses:

ALFRED BOSSHARDT,
STANLEY E. BRAMALL.