(No Model.) 2 Sheets—Sheet 1.

J. H. OSBORN.

THREAD SEPARATOR AND TRAVELER CLEANER.

No. 326,236. Patented Sept. 15, 1885.

FIG. 1.

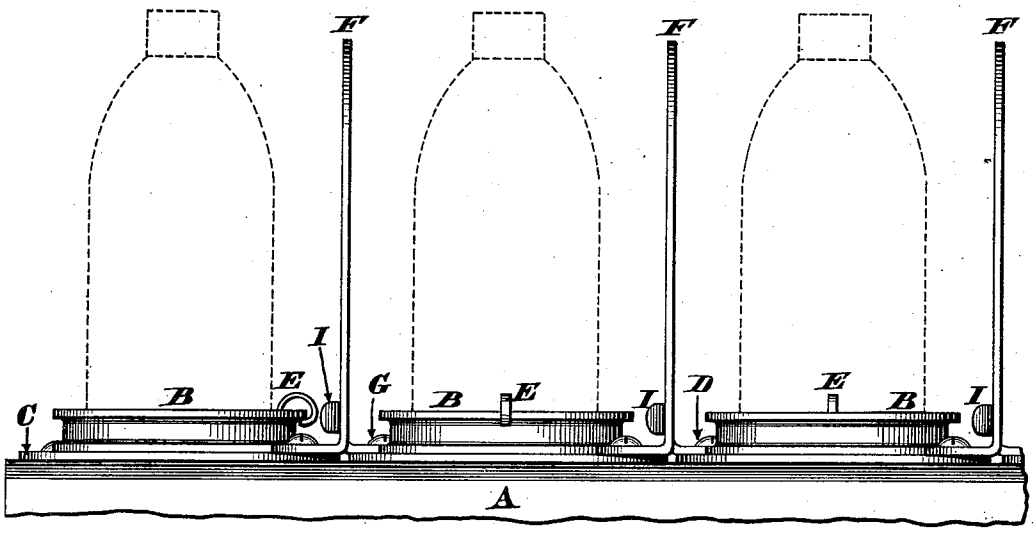


FIG. 2.

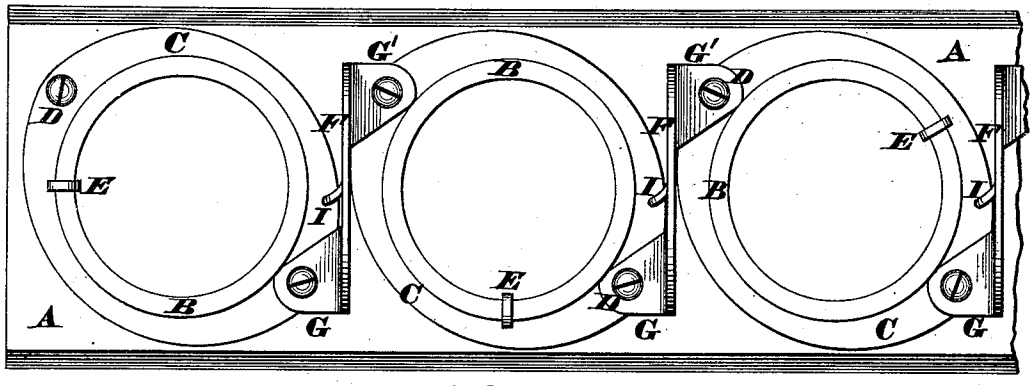
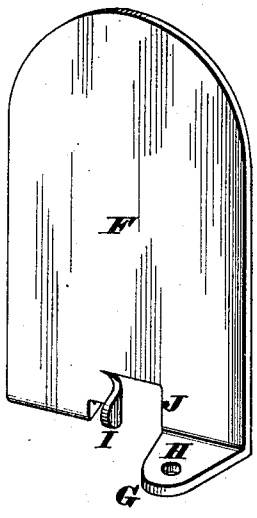


FIG. 3.



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Edward Sherringer

Inventor.
John H. Osborn
by James K. Layman
Atty.

N. PETERS, Photo-Lithographer, Washington, D. C.

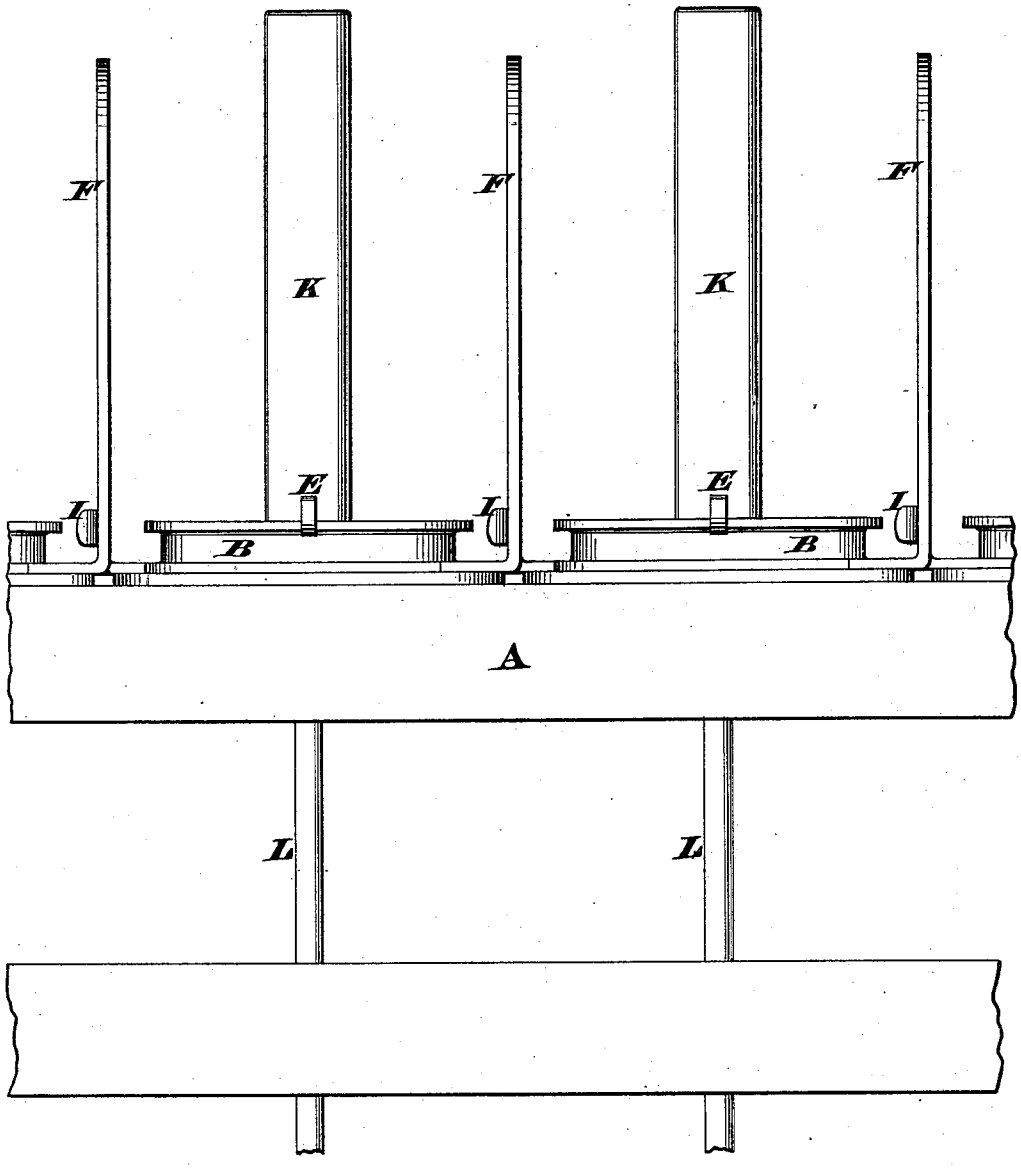
(No Model.) 2 Sheets—Sheet 2.

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FIG. 4.



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UNITED STATES PATENT OFFICE.

JOHN H. OSBORN, OF EVANSVILLE, INDIANA.

THREAD-SEPARATOR AND TRAVELER-CLEANER.

SPECIFICATION forming part of Letters Patent No. 326,236, dated September 15, 1885.

Application filed March 9, 1885. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. OSBORN, a citizen of the United States, residing at Evansville, in the county of Vanderburg and State of Indiana, have invented certain new and useful Improvements in Thread-Separators and Traveler-Cleaners, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to combine in a single plate a device that will perform the twofold purpose of a separator and a traveler-cleaner, said device being adapted for use with what are commonly known as "ring-spinning frames." A vertical plate is mounted on the ring-frame between each pair of bobbins, and every plate is provided with a short laterally-projecting tongue, which is, practically, in the same plane as the traveler. By this arrangement the plate serves as a separator, guard, or fender, that prevents any possible "whipping together" of the threads on adjacent bobbins, while the tongue acts as a cleaner or stripper for the traveler, as hereinafter more fully described.

Another feature of my improvements consists in making this cleaning-tongue integral with the plate or separator, thereby obviating the use of solder or rivets and affording a very cheap and compact structure, as hereinafter more fully described.

My invention further consists in providing the base of the separator-plate with a pair of oppositely-projecting feet, said feet being perforated to receive the same screws that fasten the spinning-rings to the ring-frame, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a front elevation of a portion of a ring-frame provided with three of my combined separators and traveler-cleaners, the spindles being omitted and the position of the bobbins indicated by dotted lines. Fig. 2 is a plan of the same, the bobbins being omitted. Fig. 3 is a perspective view of one of the plates detached from the ring-frame. Fig. 4 is an enlarged front elevation of a portion of a ring-rail provided with a pair of bobbins and spindles and three thread-separators.

A represents a portion of a ring-frame, upon which is mounted any approved form of rings or annular races B, said rings being retained in place by the customary holders C and screws D.

E are the travelers, adapted to run around the peripheries of the rings in the usual manner.

Located midway between each pair of rings B are plates F, preferably of sheet metal, and of any suitable height and width. Each of said plates is furnished with oppositely-projecting feet G G', which feet are sufficiently long to rest upon the holders C of any two adjacent rings. Furthermore, these feet are perforated at H, as seen in Fig. 3, to admit the screws D, previously alluded to. By this construction the fitting together of the parts is facilitated, and at the same time each part is maintained in its proper position. Projecting laterally from these plates, and about in the same plane as the travelers E, are curved tongues I. These tongues are arranged so as to cause their free ends to approach quite near said travelers, but without coming in actual contact therewith. Said tongues may be separate strips of metal and be attached to the plates F, either by means of rivets or solder, or otherwise, but I prefer to make them integral with said plates.

This can be readily accomplished by slotting the base of said plates, as seen at J in Fig. 3, and then bending said tongues until they assume the desired curvature at their free ends. K K in Fig. 4 represent a pair of ordinary bobbins mounted upon spindles L L, of any suitable construction. When these plates are mounted on the ring-frame A, they serve as guards or fenders that separate each bobbin from its neighbors, and thereby prevent any whipping together or other interference or entangling of the threads on the various bobbins, the position of the latter being indicated by the dotted lines in Fig. 1. It will also be noticed that the tongues I act as strippers or cleaners that prevent the cotton gathering on the travelers E, and thereby impairing the efficiency of the spinning machinery. Consequently said plates perform the twofold duty of bobbin-separators and traveler-cleaners.

I claim as my invention—

1. The combination, with the ring-rail, spindles, rings, and travelers, of a thread-separator consisting of a plate interposed between

two adjacent spindles, said plate being furnished with a laterally-projecting tongue that constitutes the traveler-cleaner, substantially as herein described.

2. The combination, with the ring-rail, spindles, rings, and travelers, of a thread-separator consisting of a plate interposed between two adjacent spindles, said plate being furnished with a laterally-projecting integral tongue that constitutes the traveler-cleaner, substantially as herein described.

3. The combination, with the ring-rail, spindles, rings, and travelers, of a thread-separator consisting of a plate interposed between two adjacent spindles, said plate being furnished with a laterally-projecting tongue that constitutes the traveler-cleaner, and having a pair of oppositely-projecting feet, wherewith said plate is secured to the ring-frame, substantially as herein described.

4. The combination, with the ring-rail, spindles, rings, and travelers, of a thread-separator consisting of a plate interposed between two adjacent spindles, said plate being furnished with a laterally-projecting tongue that constitutes the traveler-cleaner, and having a pair of oppositely-projecting feet, wherewith said plate is secured to the ring-frame by the same devices that retain two adjacent ring-holders in place, substantially as herein described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN H. OSBORN.

Witnesses:
WATKINS F. NISBET,
WILLIAM H. PATRICK.