

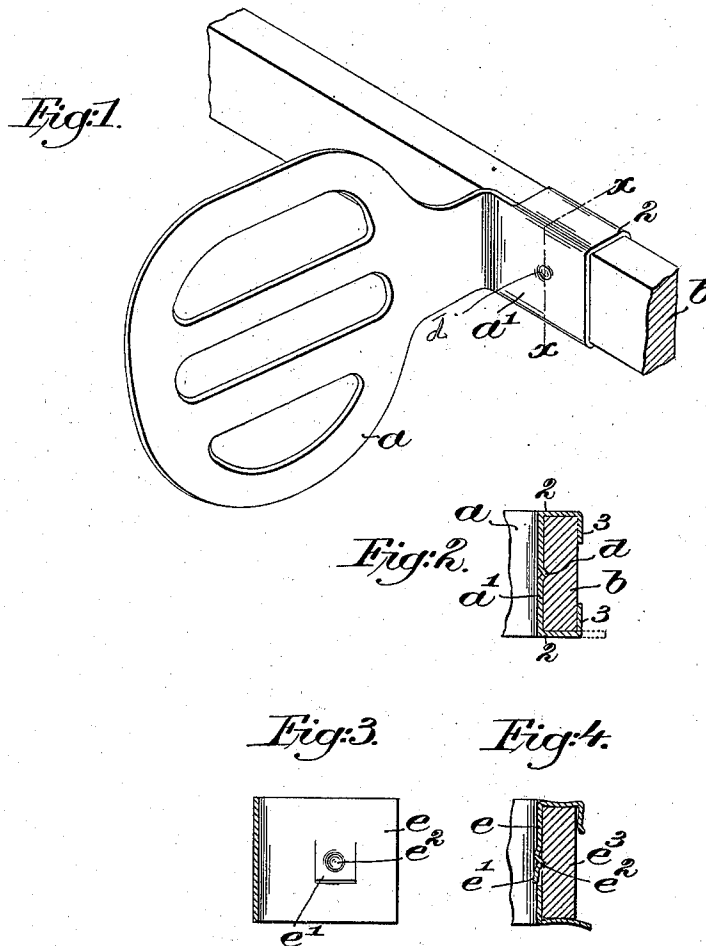
(No Model.)

G. O. & G. A. DRAPER.

SEPARATOR FOR SPINNING AND TWISTING MACHINES.

No. 535,323.

Patented Mar. 5, 1895.



Witnesses.

Frederick S. Grumbel.

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UNITED STATES PATENT OFFICE.

GEORGE O. DRAPER AND GEORGE A. DRAPER, OF HOPEDALE, MASSACHUSETTS, ASSIGNORS TO GEORGE DRAPER & SONS, OF SAME PLACE.

SEPARATOR FOR SPINNING AND TWISTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 535,323, dated March 5, 1895.

Application filed July 16, 1894. Serial No. 517,634. (No model.)

To all whom it may concern:

Be it known that we, GEORGE O. DRAPER and GEORGE A. DRAPER, of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Separators for Spinning and Twisting Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

The separators used in spinning and twisting frames are commonly provided with flanged feet having screw holes, the feet being shaped to fit a rod or rods, screws being extended through holes in the feet into holes in a block fitted to the opposite side of the rod or rods.

We have aimed to cheapen and simplify the matter of applying the separators to their carrying bars, and in doing this we have produced a separator having a clasp-like foot adapted to embrace one side and two edges of the carrying bar and with a detaining device comprising a projection on the inner side of the foot, to bear upon the bar and prevent longitudinal movement of the foot.

Figure 1 in perspective shows a carrying-bar with a separator thereon embodying one form of our invention; Fig. 2, a partial section in the line *x* Fig. 1, and Figs. 3 and 4 show a modification.

The separator *a* herein shown is composed of sheet metal and its foot *a'* is integral therewith, the foot being formed by bending a portion of the metal of proper shape to one side.

b represents a carrier-bar.

A sheet metal separator with a sheet metal foot to embrace a carrier-bar makes the best and cheapest separator known to us.

The carrier-bar may be supported in any way that carrier-bars for separators are now or commonly supported in ring spinning frames.

The metal of the foot *a'* is shaped or bent to leave arms 2, 2, and lips 3, 3, the arms crossing the upper and lower edges of the bar,

while the lips contact with the bar back from its front in such manner as to prevent the foot from being pulled off the bar from the front thereof in any usage to which the separator will be put. The foot may be slipped onto the bar at its end, or see Fig. 2, when one of the lips 3 is yet unbent, as shown by dotted lines, and thereafter the lip may be bent to engage the back of the bar.

The separator when put on the bar usually has to be secured firmly in place, and to do this we have provided the foot with a detaining device.

In Fig. 1 we have shown the detaining device as a teat *d* struck in from the foot and into the metal of the bar *b*. The teat may be made by a punch or die.

In Fig. 3 we have shown the foot *e* as cut to leave a spring lip *e'* which may be provided at its rear side with a teat *e²* to bear frictionally on or engage firmly the bar *e³*.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A separator having a metallic foot provided with arms to cross the upper and lower edges of a carrier-bar, and having lips to embrace the rear portion of the bar, and a projection on and integral with the inner side of the foot, to engage the bar when the foot is in place, substantially as described.

2. A separator having a metallic foot provided with arms to cross the upper and lower edges of a carrier-bar having lips to embrace the rear portion of the bar, and a spring lip on said foot provided at its inner side with a projection to bear upon the bar, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

GEORGE O. DRAPER.
GEO. A. DRAPER.

Witnesses:

FRANK J. DUTCHER,
WM. W. KNIGHT.