

No. 707,874.

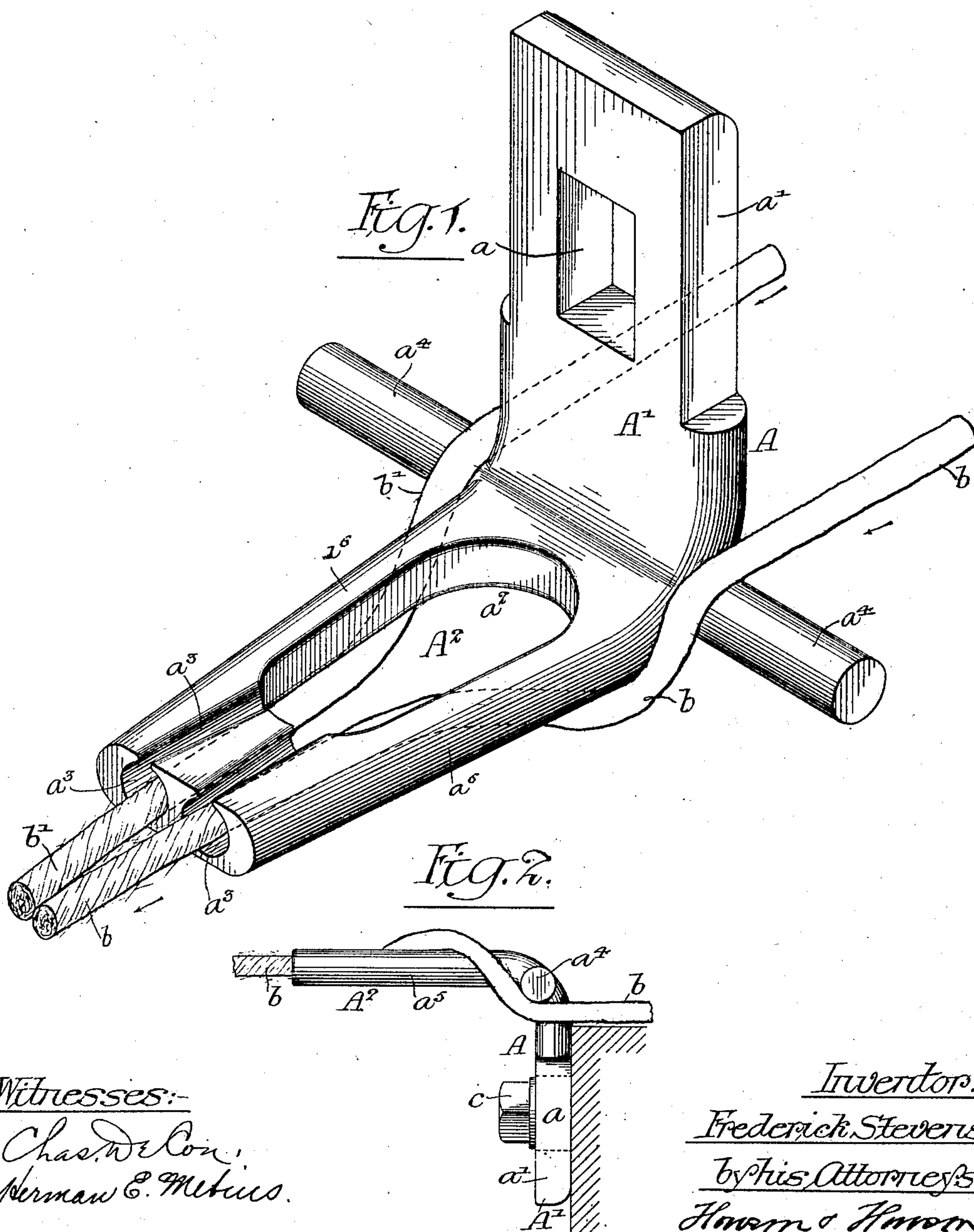
Patented Aug. 26, 1902.

F. STEVENS.

ROVING GUIDE.

(Application filed Jan. 14, 1902.)

(No Model.)



UNITED STATES PATENT OFFICE.

FREDERICK STEVENS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
THOMAS WOLSTENHOLME, SONS & COMPANY, OF PHILADELPHIA, PENN-
SYLVANIA, A FIRM COMPOSED OF THOMAS WOLSTENHOLME, ALBERT
WOLSTENHOLME, AND ROBERT WOLSTENHOLME.

ROVING-GUIDE.

SPECIFICATION forming part of Letters Patent No. 707,874, dated August 26, 1902.

Application filed January 14, 1902. Serial No. 89,745. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK STEVENS, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain
5 Improvements in Roving-Guides for Textile Machinery, of which the following is a specification.

My invention relates to certain improvements in guides for directing woolen rovings
10 as these latter pass from rubbing-rolls to the mechanism for winding them upon bobbins.

The object of my invention is to provide a device which shall keep two rovings separate
15 from each other while guiding them close together upon a bobbin, at the same time giving them a false twist, by this means preventing what is known as "robbing." This object I attain as hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is an inverted perspective view of my improved guide, showing two strands or
25 rovings passing therethrough on their way to the bobbins; and Fig. 2 is a side view of the same.

It is customary in the art to provide a single conical or funnel shaped guide to direct
30 a pair of rovings as they pass to the winding mechanism. The rovings both enter the tapering cavity in the guide and are more or less pressed together and condensed by the time they reach the end of the same and emerge therefrom. Such pressing together causes the fibers of wool of each strand to inter-
35 twine, to a greater or less extent, with those of the other, so that when the double strand is unwound from a bobbin one of its constituent strands almost invariably draws some fibers from the other. This action is known
40 as "robbing" and results in strands which are of varying diameter, lessening in value any finished article made from such strands. By my invention I am enabled in a great measure, if not altogether, to overcome this
45 objectionable action, and in applying the same I prefer to construct my device in the form shown in the drawings.

A is the L-shaped body of the guide, one
50 portion A' being secured to a support. In the present instance this portion A' has an

opening a for the passage of a securing-bolt c , Fig. 2. If desired, the sides of this plate may be made plain, as shown at a' , so that the portion A' may enter a rectangular recess in the supporting-frame, by means of which
55 greater rigidity of the guide is secured. The body portion A² of the L-shaped guide is made with an opening a^2 , from the forward end of which extend two parallel and preferably cylindrical guide-passages a^3 , open on the under
60 side.

Projecting from each side of the guide A, in the line of junction of the two portions thereof, are bars a^4 , preferably circular in section and formed integral with the guide-
65 piece proper in the present instance.

As shown in the drawings, the edges of the sides of the opening a^2 are rounded, as are also the outside edges of the guide adjacent to said opening.
70

In operation one of the rovings is passed under the bar a^4 , then upwardly over the side a^5 of the horizontal plate and into the opening a^2 , finally entering the adjacent guide-
75 passage a^3 . The second roving b' is similarly passed under the second projecting bar a^4 , over the side a^6 of the plate, and into the second passage a^3 .

It will be seen that as the rovings are pulled through this guide they are given a half-turn, 80 this being known as a "false twist." As will be understood by those skilled in the art, the fibers or rovings as they come from the rubbing-machine are not twisted, and it will be noted that by thus giving the roving
85 a half-twist as it passes through the guide the tendency of the fibers to separate is to some extent overcome. Again, it is to be noted that by passing the two strands out of the guide through separate passages and not
90 pressing them together the tendency of the fibers of one strand to interlock with those of the other is to a great extent avoided. This condition, taken in connection with the false twist given the strand, most effectually pre-
95 vents the robbing, which has heretofore given considerable trouble.

I claim as my invention—

1. A guide for woolen rovings comprising
100 a body portion having an opening provided

with a passage or passages extending therefrom, with means other than said passages for imparting a false twist to strands of material passing through the same, substantially as described.

2. A guide for woolen rovings comprising a body portion having an opening and a plurality of substantially straight passages extending from said opening, with means other than said passages for imparting a false twist to strands of material passing through the same, substantially as described.

3. A guide for woolen rovings comprising a body portion having an opening and a plurality of passages extending from said opening, with projections on the body portion whereby a false twist is given to strands of material prior to their entrance into said passages, substantially as described.

4. A guide for woolen rovings comprising two portions joined together, one portion having through it an opening, and a plurality of passages extending from the side walls of said opening through the body of the guide to the outer edge thereof, means other than said passages for imparting a false twist to strands of material passing through the same, the second portion of said guide being constructed to be engaged by a securing device, substantially as described.

5. A guide for woolen rovings comprising two portions joined together, one portion hav-

ing through it an opening and a plurality of passages extending from said opening, the other portion having an opening for the passage of a securing device, and projections formed integral with the guide and extending in a plane substantially parallel to one of the portions thereof, substantially as described.

6. A guide for woolen rovings comprising two portions joined together along one edge, an opening through one of the portions, two passages extending from one side of said opening to the end of the guide and two substantially cylindrical bars projecting at right angles to the said passages, the other portion of the guide having means for attaching it to a support, substantially as described.

7. A guide for woolen rovings comprising a body portion having an opening provided with a passage or passages extending therefrom and a projecting portion whereby a false twist is imparted to strands of material passing through the same, substantially as described.

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

FREDERICK STEVENS.

Witnesses:

MARGARET A. O'ROURKE,
J. FRED DIETERICH.