

JAMES S. BROWN.

Improvement in Fliers for Spinning.

No. 114,524.

Patented May 9, 1871.

Fig. 1.

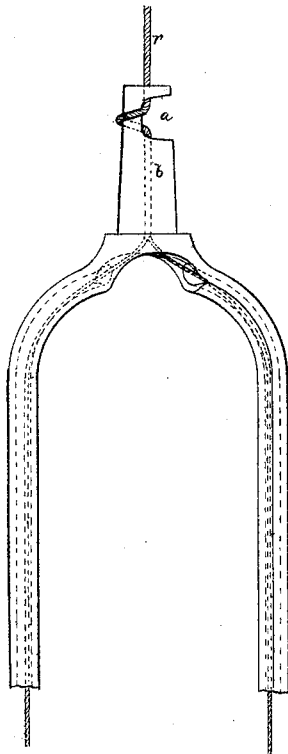


Fig. 3.

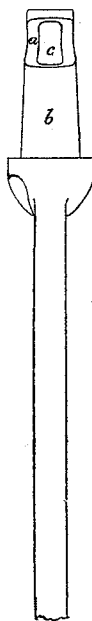
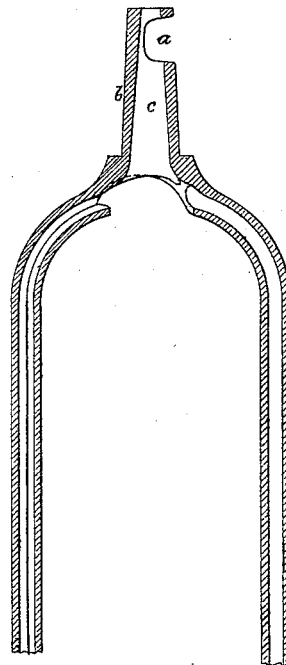


Fig. 2.



Witnesses  
*S. N. Piper*  
*L. N. Hollen*

James S. Brown  
by his attorney  
*N. M. Brady*

# United States Patent Office.

JAMES SALISBURY BROWN, OF PAWTUCKET, RHODE ISLAND.

Letters Patent No. 114,524, dated May 9, 1871.

## IMPROVEMENT IN FLIERS FOR SPINNING.

The Schedule referred to in these Letters Patent and making part of the same.

*To all persons to whom these presents may come :*

Be it known that I, JAMES SALISBURY BROWN, of Pawtucket, of the county of Providence and State of Rhode Island, have invented a new and useful Improvement in the Fliers of Machines for Making Roving; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 denotes a side elevation;

Figure 2, a vertical section; and

Figure 3, an edge view of a flier provided with my improvement.

In carrying out my invention I form the flier-neck with a notch made laterally into it from one side, near the upper end of such neck, or in that part which usually extends above the neck-bearing or bolster, such notch being made to open into the bore of the neck, the whole being substantially as represented in the drawing, in which the notch is shown at *a* as formed in the neck *b* so as to open into the bore *c* of the said neck.

The purpose of the notch is to enable the roving, after its introduction into the upper part of the neck, to be seized by an operative and drawn laterally out of the neck and carried one or more times about or around the neck at the notch and afterward returned into the neck, the roving passing thence down the neck in the usual manner.

In the drawing—

The roving is exhibited at *r*. By being carried about the neck of the flier friction is gained in the roving to facilitate the process of twisting it.

Other advantages also ensue from my improvement.

I claim as my invention—

The roving-flier, having its neck *b* provided with the notch *a*, in the manner and for the purpose as set forth.

JAMES SALISBURY BROWN.

Witnesses:

R. H. EDDY,

J. R. SNOW.