

No. 694,884.

Patented Mar. 4, 1902.

J. J. McOSKER.
FLIER.

(Application filed Apr. 30, 1901.)

(No Model.)

Fig. 1.

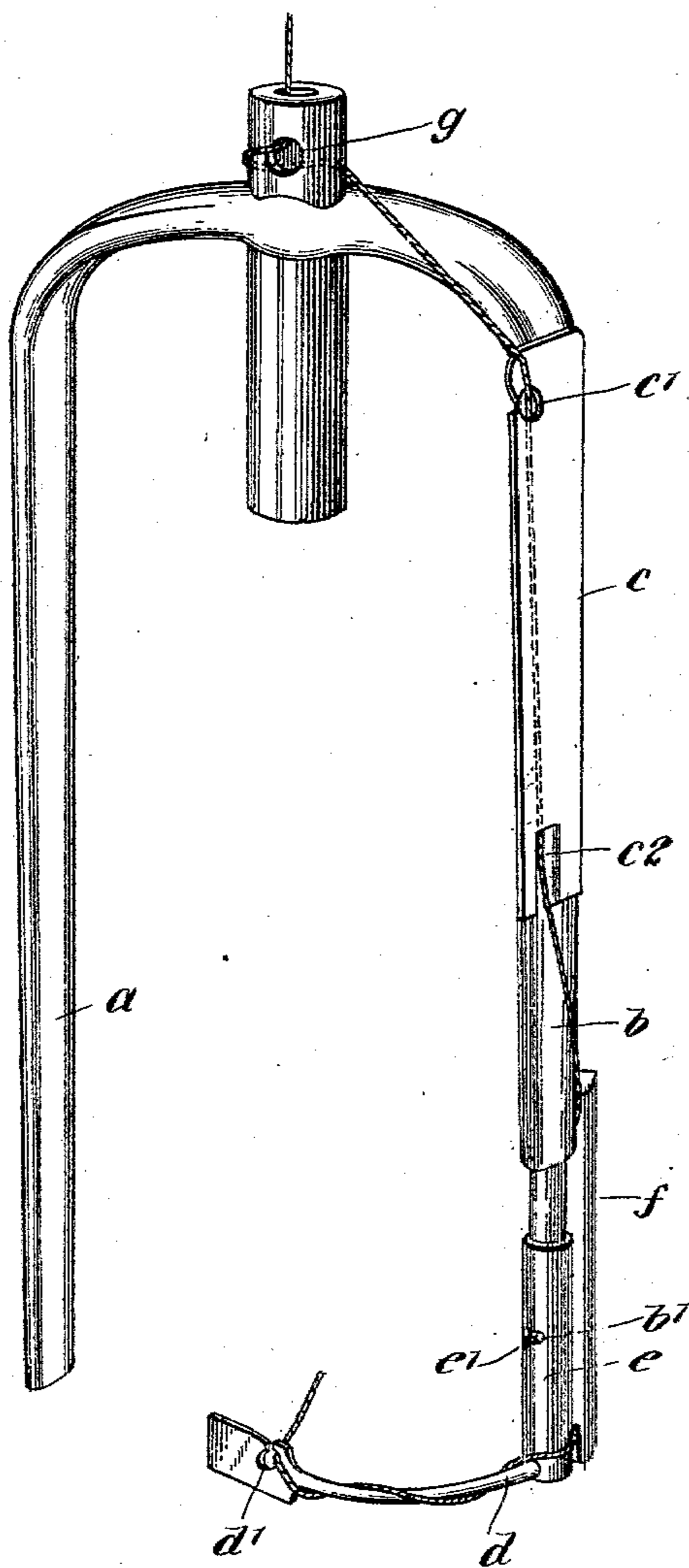
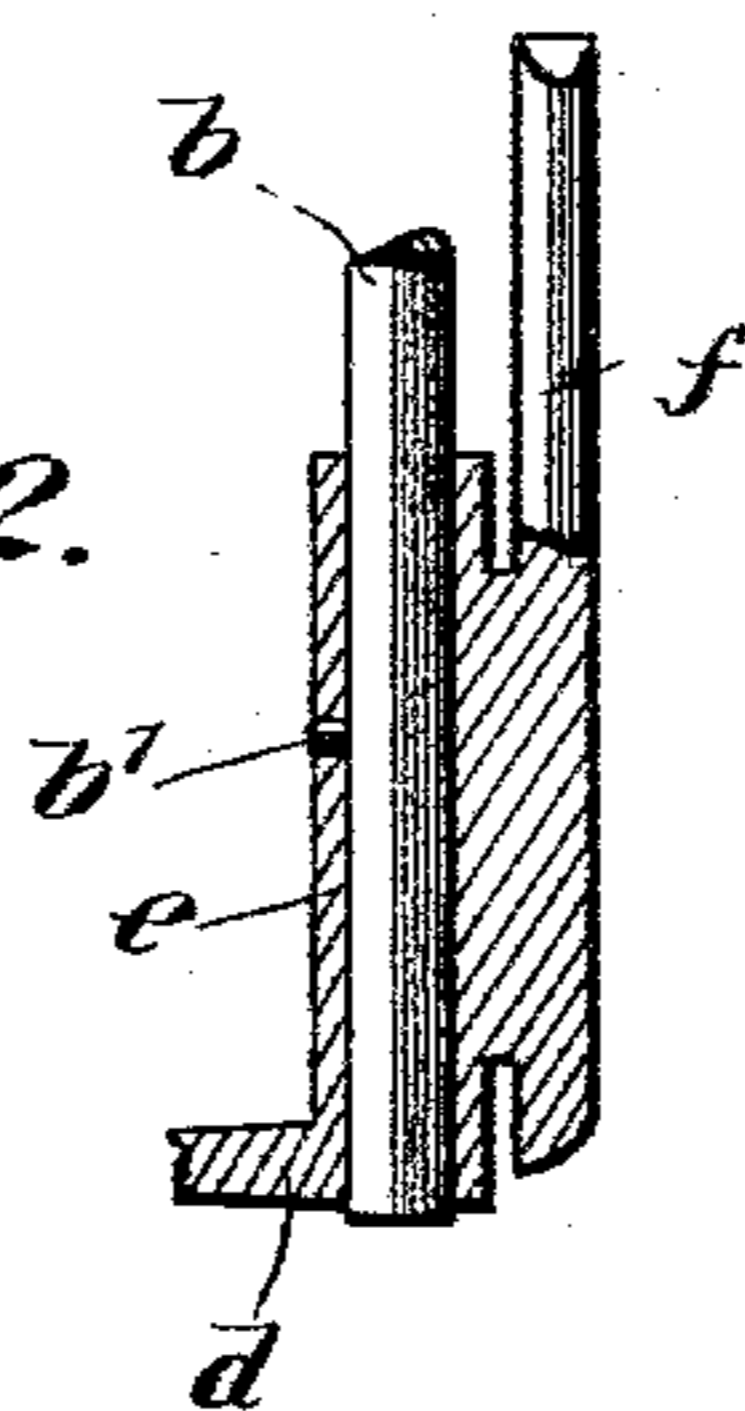


Fig. 2.



WITNESSES:

A. H. Applegate

J. B. Owens

INVENTOR

John J. McOsker

BY

Mumford
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN J. McOSKER, OF WOONSOCKET, RHODE ISLAND.

FLIER.

SPECIFICATION forming part of Letters Patent No. 694,884, dated March 4, 1902.

Application filed April 30, 1901. Serial No. 58,111. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. McOSKER, a citizen of the United States, and a resident of Woonsocket, in the county of Providence and State of Rhode Island, have invented a new and Improved Flier, of which the following is a full, clear, and exact description.

This invention relates to certain novel features of construction by which a flier may be constructed to work effectively and rapidly and at the same time be produced at less cost than those at present employed.

This specification is a specific description of one form of the invention, while the claims are definitions of the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a perspective view of the invention, and Fig. 2 is a detail view showing the manner of mounting the presser-foot sleeve.

a and *b* represent the arms of the flier, which are mounted to rotate in the usual manner. The arm *b* carries the yarn, and it is provided at its upper portion with a plate *c*, fastened at one edge to the arm and provided at its upper end with an eye *c'* and at its lower end with a notch or slot *c''*, opening at its lower extremity. The yarn or thread is led through the guide *g* and then turned around the same and passed along the upper end of the arm *b* to and through the eye *c'* in the plate *c* and thence along the inner side of said plate through the notch *c''* in its bottom.

d indicates the presser-finger, which has the usual eye *d'* in its outer end, through which the thread is led. This finger *d* is carried on a sleeve *e*, which is held on the reduced lower end of the arm *b* by a pin *b'*, which works in a slot *e'* in the sleeve *e*. This allows the sleeve to rock slightly on the arm; but it holds the sleeve from longitudinal movement. Carried by the sleeve *e* is a tension-bar *f*, which has its end portions separated from the sleeve and is joined to the sleeve at a point intermediate the ends. The yarn is led from the slot or notch *c''* of the plate *c* downward partly around the arm *b* and between said arm and the upper end of the tension-bar *f*. It is then passed down alongside of this bar and between the lower end of the tension-bar and the lower end of the sleeve *e*, after which

it is wound around the presser-finger and led through the eye *d'* in the usual manner.

The flier thus arranged is much easier and cheaper to construct than those heretofore used and may be driven at a high speed, so as to wind the yarn rapidly and perfectly.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A flier, having an arm, a plate secured thereto and provided with an eye at its upper end and a notch or slot at its lower end, a presser-finger sleeve mounted on the arm, and a tension-bar carried by said sleeve and engaging the yarn at its end portions.

2. A flier having an arm, a plate fastened at one edge thereto and having an eye at its upper end, and a notch at its lower end for guiding the yarn, and a presser-finger arranged on the arm and having the thread lead thereto from the plate.

3. A flier having an arm, a presser-finger carried thereby, means carried on the exterior of the arm for guiding the thread, and a tension-bar from which the thread passes to the presser-finger.

4. A flier having an arm, a presser-finger sleeve mounted thereon, and a tension-bar held by the sleeve and having its end portions separated therefrom, for the purpose specified.

5. A flier having an arm, a presser-finger, a sleeve carrying the presser-finger and mounted to have a limited rocking movement on the arm, and a tension-bar carried by the sleeve and having its end portions separated therefrom, for the purpose specified.

6. A flier having a solid arm, a plate secured to said arm and having means at its ends for guiding the yarn, a presser-finger sleeve mounted on the arm and having a slot therein, a pin held by the arm and fitting in the slot to limit the rocking movement of the sleeve, a presser-finger carried by said sleeve, and a tension-bar connected between its ends to the sleeve.

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

JOHN J. McOSKER.

Witnesses:

FELIX O'NEILL,
JAMES HASTINGS.