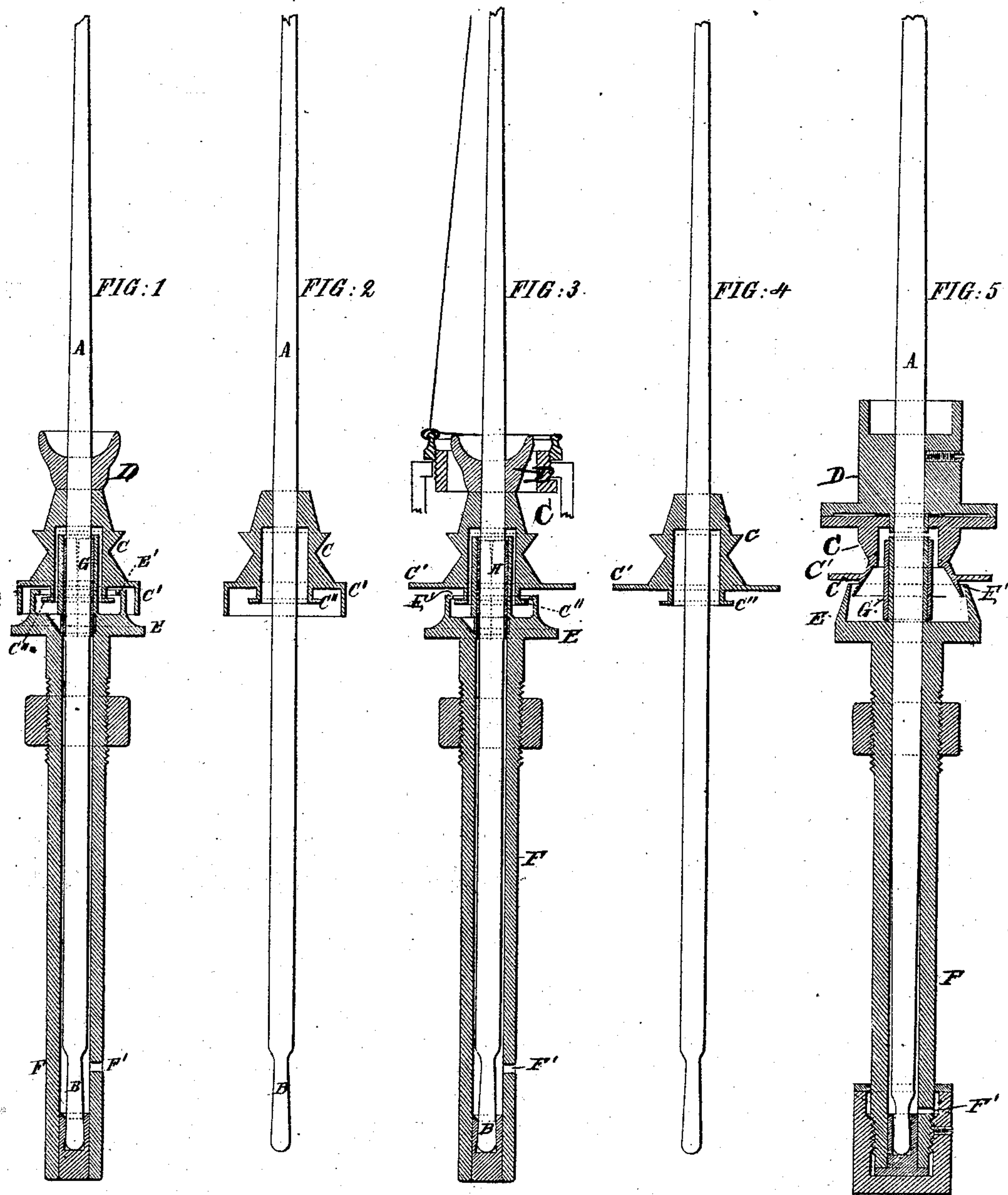


(No Model.)

J. B. ROLLAND.
RING SPINNING FRAME.

No. 305,237.

Patented Sept. 16, 1884.



Witnesses:
1: *Wm. M. Cooper*
2: *Albert Moreau*

Inventor:
Jean-Baptiste Rolland

UNITED STATES PATENT OFFICE.

JEAN B. ROLLAND, OF PARIS, FRANCE, ASSIGNOR TO JEAN JACQUES
BOURCART, OF ZURICH, SWITZERLAND.

RING-SPINNING FRAME.

SPECIFICATION forming part of Letters Patent No. 305,237, dated September 16, 1884.

Application filed April 12, 1882. (No model.) Patented in England April 1, 1882, No. 1,602.

To all whom it may concern:

Be it known that I, JEAN BAPTISTE ROLLAND, a citizen of France, residing at Paris, France, have invented certain new and useful Improvements in Ring-Spinning Frames, of which the following is a description.

This invention relates to parts adjoining the spindle in a ring-spinning frame, and it has for its object to facilitate the stopping of the spindle when it is desired to join or piece broken threads and to effect the thorough lubrication of the spindle.

The invention consists in the construction and combination of parts hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a central vertical section of a thread-drawing cup, a wharve, and the oil-reservoir, and a portion of a spindle shown in elevation. Fig. 2 is a detached section thereof. Figs. 3, 4, and 5 are modifications of the same.

A represents the spindle inclosed for about half its height in the oil-reservoir F, which has an overflow-opening, F'. The lower portion, B, of the spindle is in the form of a truncated cone which allows the ready passage of oil around it, and its lower end is spherical to enable it to bear with the least possible friction. At the upper end of the reservoir F is a receptacle, E, to permit the ready filling of reservoir with oil. In the bottom of the reservoir E is a sloping cavity which allows the feeding of the oil to the collar G, the latter having a capillary slit opening into the aforesaid cavity to take up the oil and permit it to work into the cavity between the collar and the spindle bushing. The mouth of the receptacle E is contracted or reduced in size either by means of an inwardly-projecting flange, E', at its upper edge, as shown in Figs. 1 and 3, or by converging its walls toward the top, as shown in Fig. 5, for the purpose of retaining the oil, as more fully hereinafter described.

C is the wharve fitted upon the spindle A just above the top of the receptacle E, and having at its outer lower edge a rim or flange, C', projecting beyond the diameter of the top of the receptacle to adapt it to be grasped by

the operator's hand or to be pressed by a brake in stopping it. This flange C' may be given greater breadth by extending it downward as a rim (shown in Figs. 1 and 2,) or it may be a simple flange, as in Figs. 3, 4, and 5. The wharve is provided with a concentric annular sleeve, C'', extending downward from the plane of the flange C' into the oil-receptacle E. This sleeve may be a cylinder enlarged at its lower end by an outwardly-extending flange, as shown in Figs. 1, 2, 3, and 4, or it may be a conical frustum flaring at its lower end, as shown in Fig. 5. The greatest diameter of this sleeve is at its lower end below the level of the mouth E' of the receptacle E, so that any oil which may work outward from the interior of the wharve will be thrown by centrifugal force from the circumference of the sleeve at said greatest diameter below the upper edge of the receptacle, and thus be prevented from working up the outside of the wharve to soil the flange C' or to be thrown about the room thereby.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a spindle, A, having the wharve C, provided with the flange C', and the concentric annular downward-projecting sleeve C'', whose greatest diameter is at its lower end, of the receptacle E, having its mouth of less diameter than the interior of the receptacle immediately below the mouth, the latter being located above the level of the greatest diameter of the sleeve C'', as and for purpose specified.

2. The combination, with the spindle A, having the wharve C, provided with the flange C', and the concentric annular downward-projecting cylindrical sleeve C'', provided with an outward-extending flange at its lower end, of the reservoir F, provided with the receptacle E, having its mouth E' provided with an inward-projecting flange above the level of the flange on the sleeve C'', substantially as and for the purpose specified.

JEAN BAPTISTE ROLLAND.

Witnesses:

ROBT. M. HOOPER,
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