

No. 728,563.

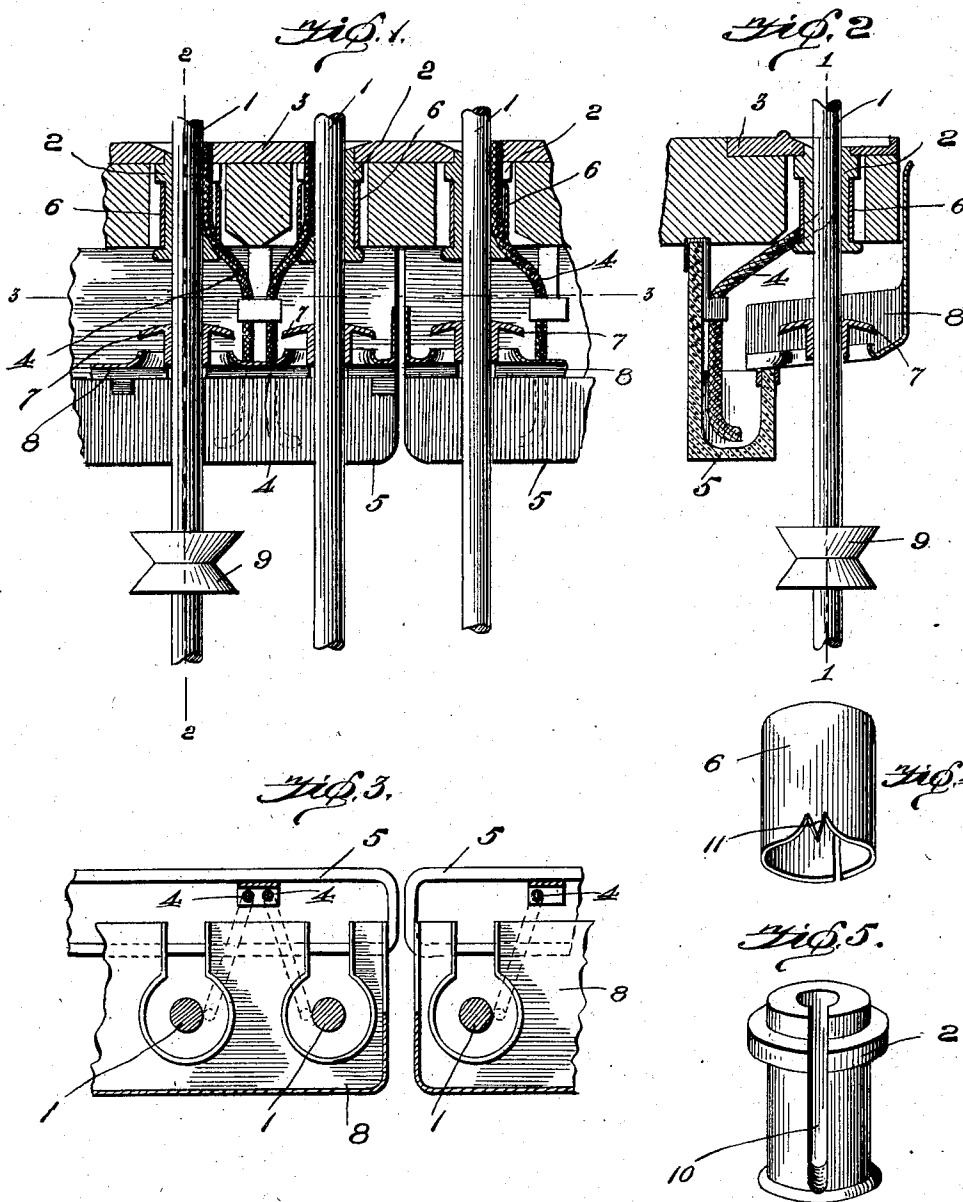
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J. L. GEIS.

AUTOMATIC FILTERING LUBRICATOR FOR THE BUSHINGS  
OF SPINNING SPINDLES.

APPLICATION FILED SEPT. 27, 1902.

NO MODEL.



Witnesses

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# UNITED STATES PATENT OFFICE.

JEAN LOUIS GEIS, OF PARIS, FRANCE.

AUTOMATIC FILTERING-LUBRICATOR FOR THE BUSHINGS OF SPINNING-SPINDLES.

SPECIFICATION forming part of Letters Patent No. 728,563, dated May 19, 1903.

Application filed September 27, 1902. Serial No. 125,135. (No model.)

*To all whom it may concern:*

Be it known that I, JEAN LOUIS GEIS, a citizen of the French Republic, residing at Paris, France, have invented a certain new and useful Improved Automatic Filtering-Lubricator for the Bushings of Spinning-Spindles, of which the following is a specification.

Spinning-spindles turning at a speed of from three thousand to ten thousand revolutions per minute require for their lubrication a very fluid and lubricative oil, which by reason of its fluidity easily escapes, runs along the length of the spindle or to where it is projected by centrifugal force, greasing adjacent objects, and drops onto the ground. The result is a considerable loss of oil and of time for frequent cleansings. The novel automatic filtering-lubricator forming the object of the present application absolutely remedies these inconveniences, the feeding-wick of which it is composed being arranged so that it does not consume oil during the periods of stoppage of the machine.

The advantages of my invention are economy of oil and of the time required for attendance, cleanliness of the machine, better lubrication, reduction of wear, and ease of adaptation to existing machines.

The novel automatic filtering-lubricator is represented in the annexed drawings, of which—

Figure 1 is a vertical longitudinal section on line 1 1, Fig. 2. Fig. 2 is a transverse vertical section on line 2 2, Fig. 1. Fig. 3 is a plan of the cover and of the reservoir on line 3 3, Fig. 1. Fig. 4 is a perspective view of the collar on a larger scale. Fig. 5 is a perspective view of the bushing on the same scale as Fig. 4.

In the figures, 1 represents the self-acting spindle; 2, the bushing; 3, the bed-plate, and 4 a cotton wick impregnated with oil. This wick is fed by capillary attraction from the reservoir 5 and is put in contact with the spindle by means of a groove 10, formed in the side of the bushing.

5 is the oil-reservoir, of glass or of any suitable metal.

6 is a collar in the form of a split cylinder of resilient material, sprung into place on the bushing, so that it envelops the wick and the bushing. It is furnished with a claw 11, which serves to fix the wick in the groove.

7 is a flanged boss fixed on the spindle, by means of which the oil which descends onto the flange is projected by the rotary motion in all directions onto the sides of the reservoir 5 and of the cover 8 and from there finally descends into the bottom of the reservoir 5, whence it remounts again by the wick 4.

8 is the cover, which, with the reservoir, incloses the spindle. Said cover comprises a plate inclined toward the reservoir 5 and provided with flanges along its ends and outer side and around the openings through which the spindle passes.

9 is the grooved pulley on the spindle 1, by means of which it is rotated.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an automatic filtering-lubricating device for spindles, the combination with a bushing having a slot along its length, of a filtering-wick disposed in said slot, a split cylinder of resilient material sprung over the bushing and slot and having one edge engaging with said wick, and an oil-reservoir into which said wick dips.

2. In an automatic filtering lubricating device for spindles, the combination with a bushing having a slot along its length, of a filtering-wick disposed in said slot, means for clamping said wick in place, and a glass oil-reservoir supported at one side of the spindle and receiving the end of said wick.

3. In an automatic filtering lubricating device for spindles, the combination with a bushing having a slot along its side of a filtering-wick disposed in said slot, means for clamping said wick in place, a transparent oil-reservoir supported at one side of the spindle, a flanged collar on the spindle, and an inclined plate surrounding said spindle below the collar and terminating at the oil-reservoir.

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

JEAN LOUIS GEIS.

Witnesses:

ROBERT KÄLÖLIG,  
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