

No. 785,738.

PATENTED MAR. 28, 1905.

H. KELLY.
SPINNING SPINDLE.
APPLICATION FILED OCT. 29, 1904.

Fig. 1.

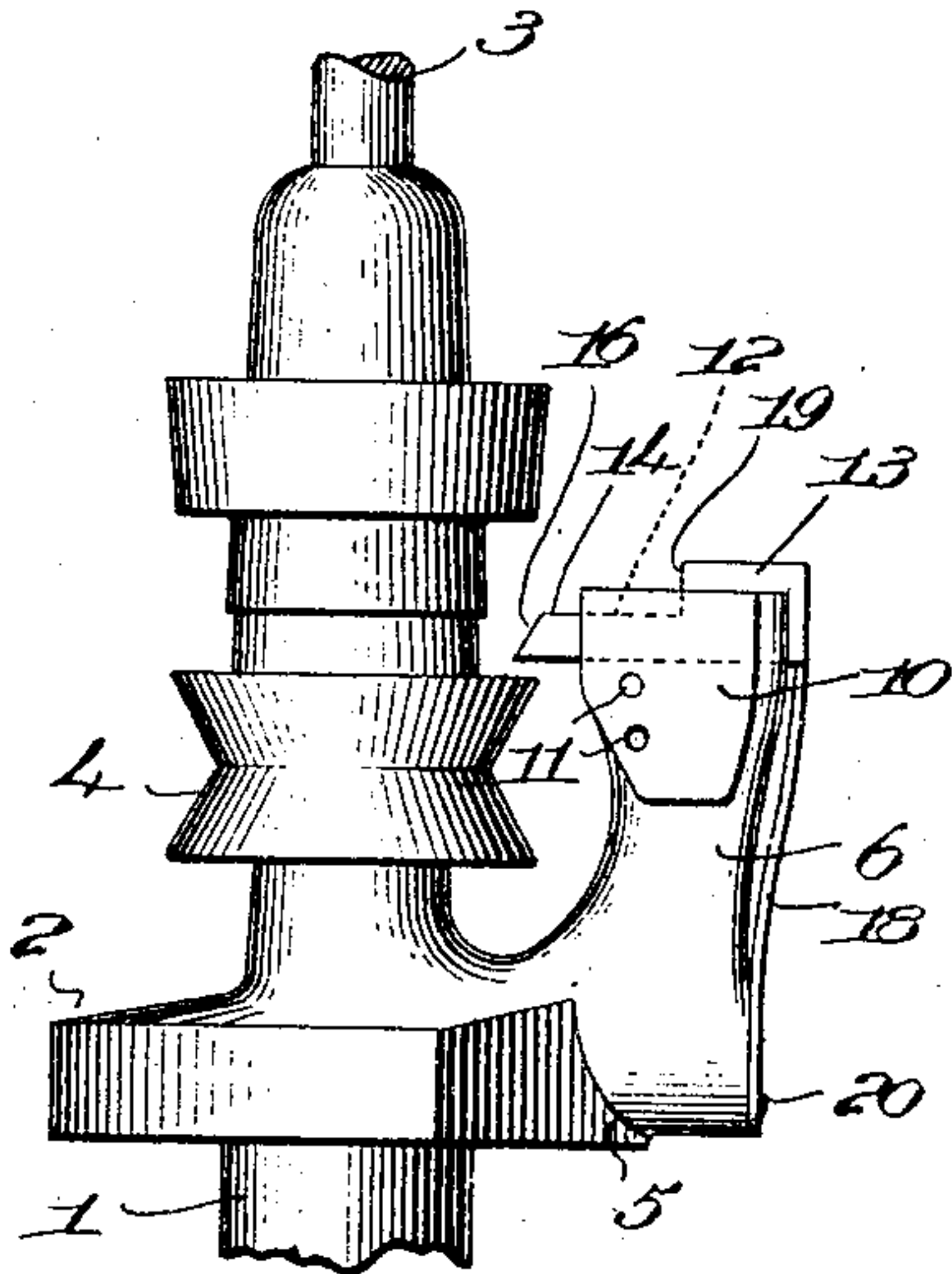


Fig. 2.

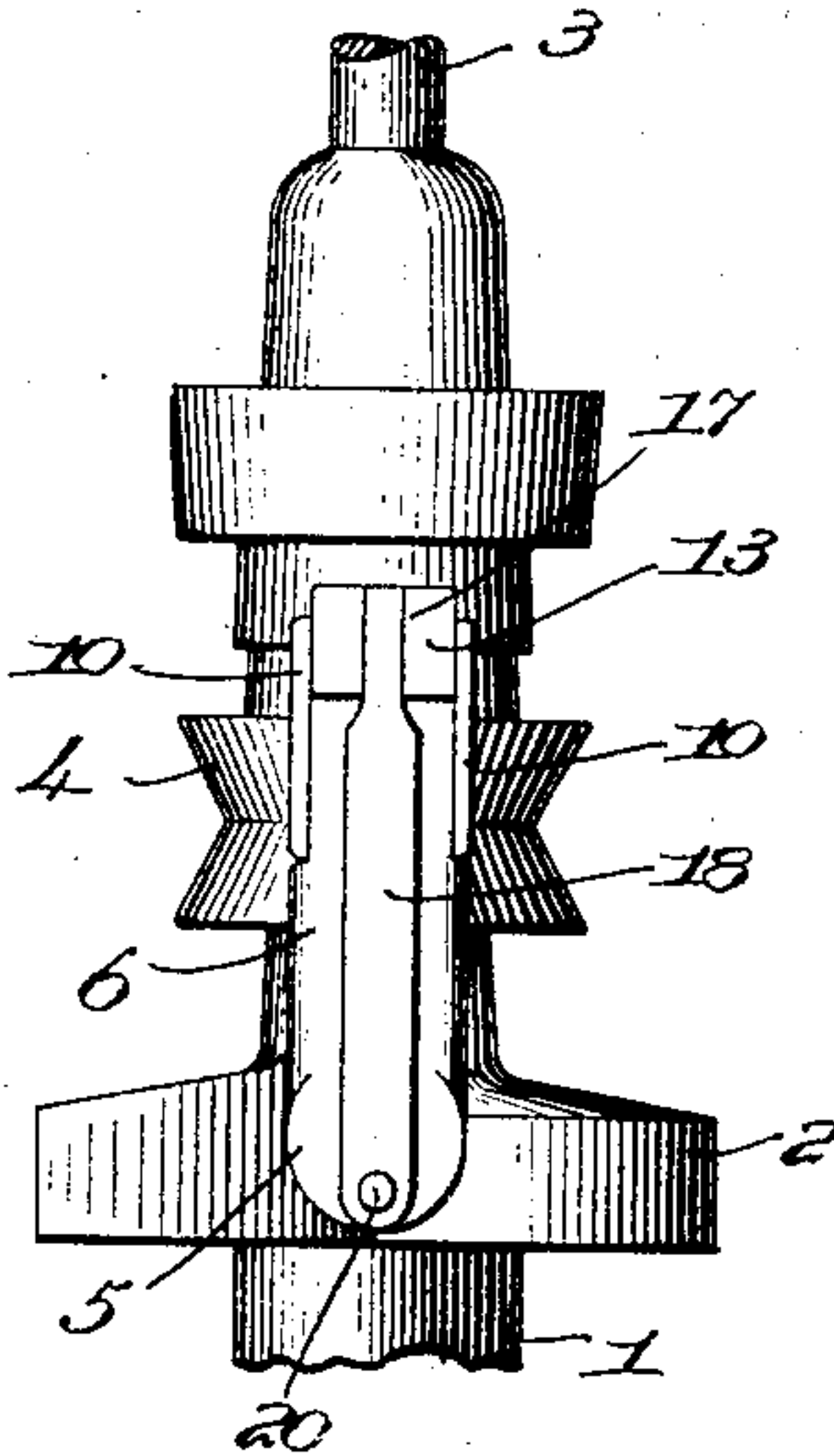


Fig. 5.

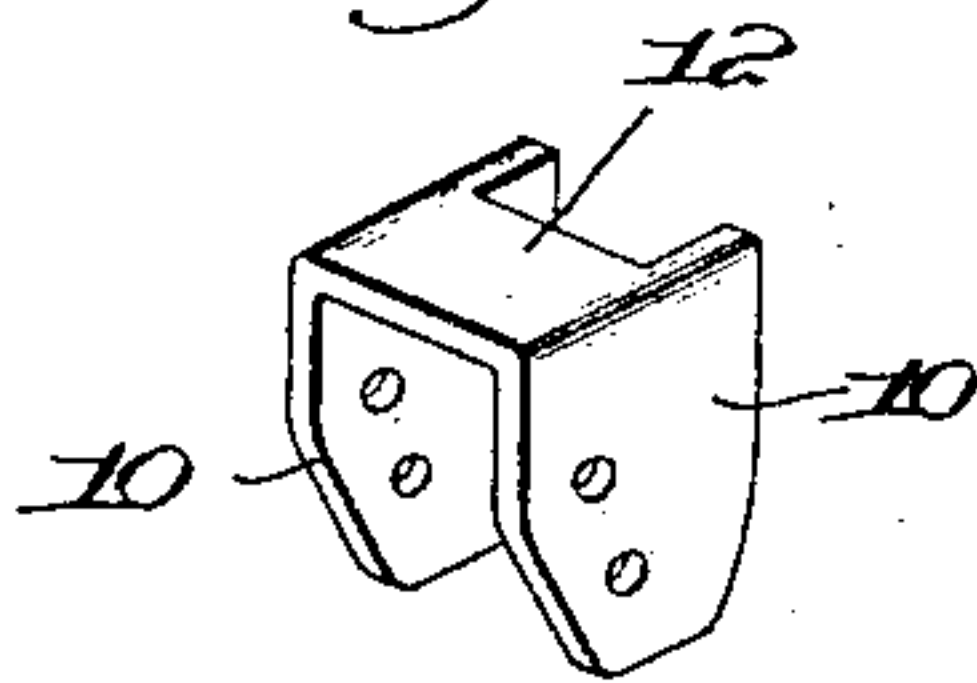
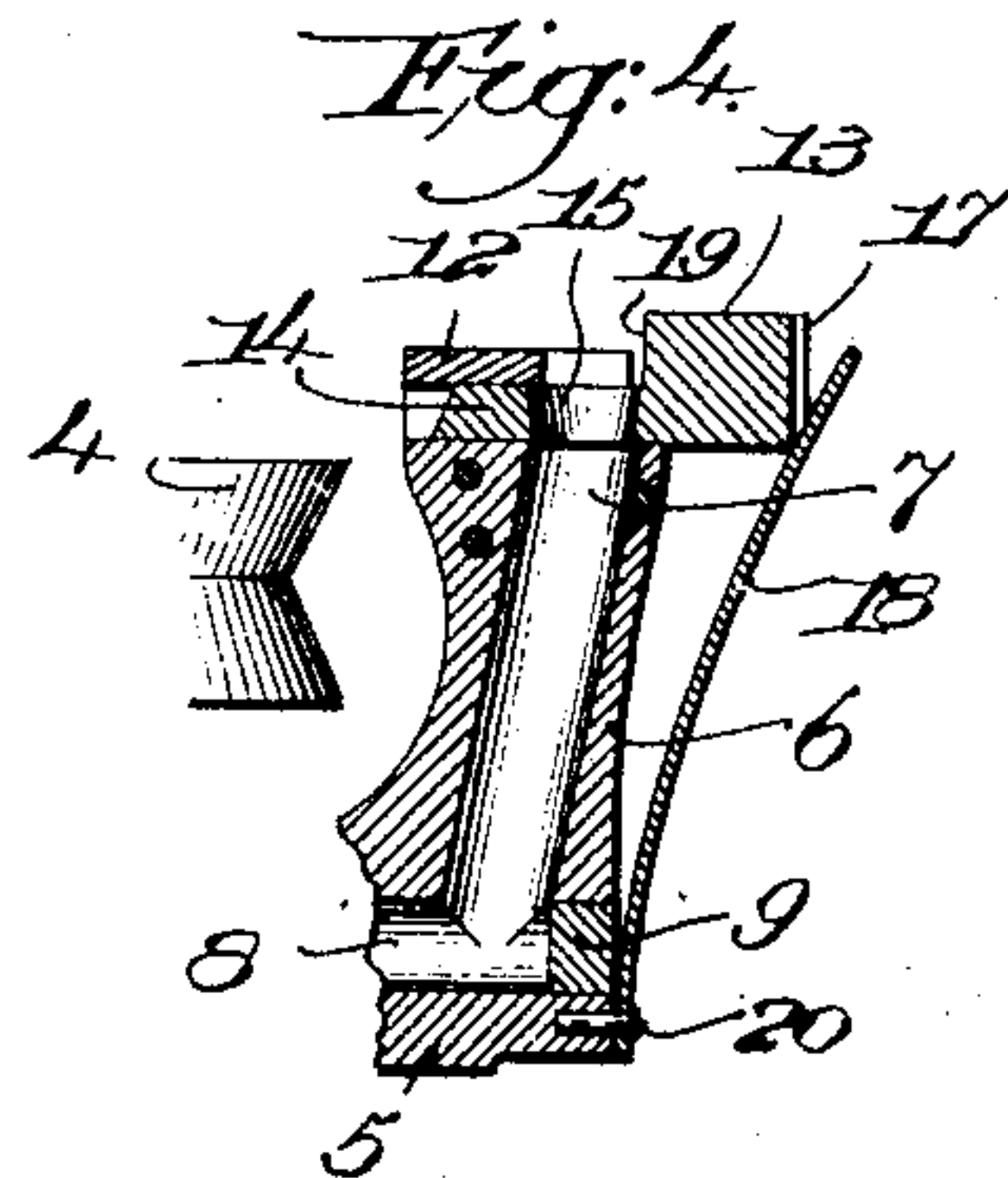
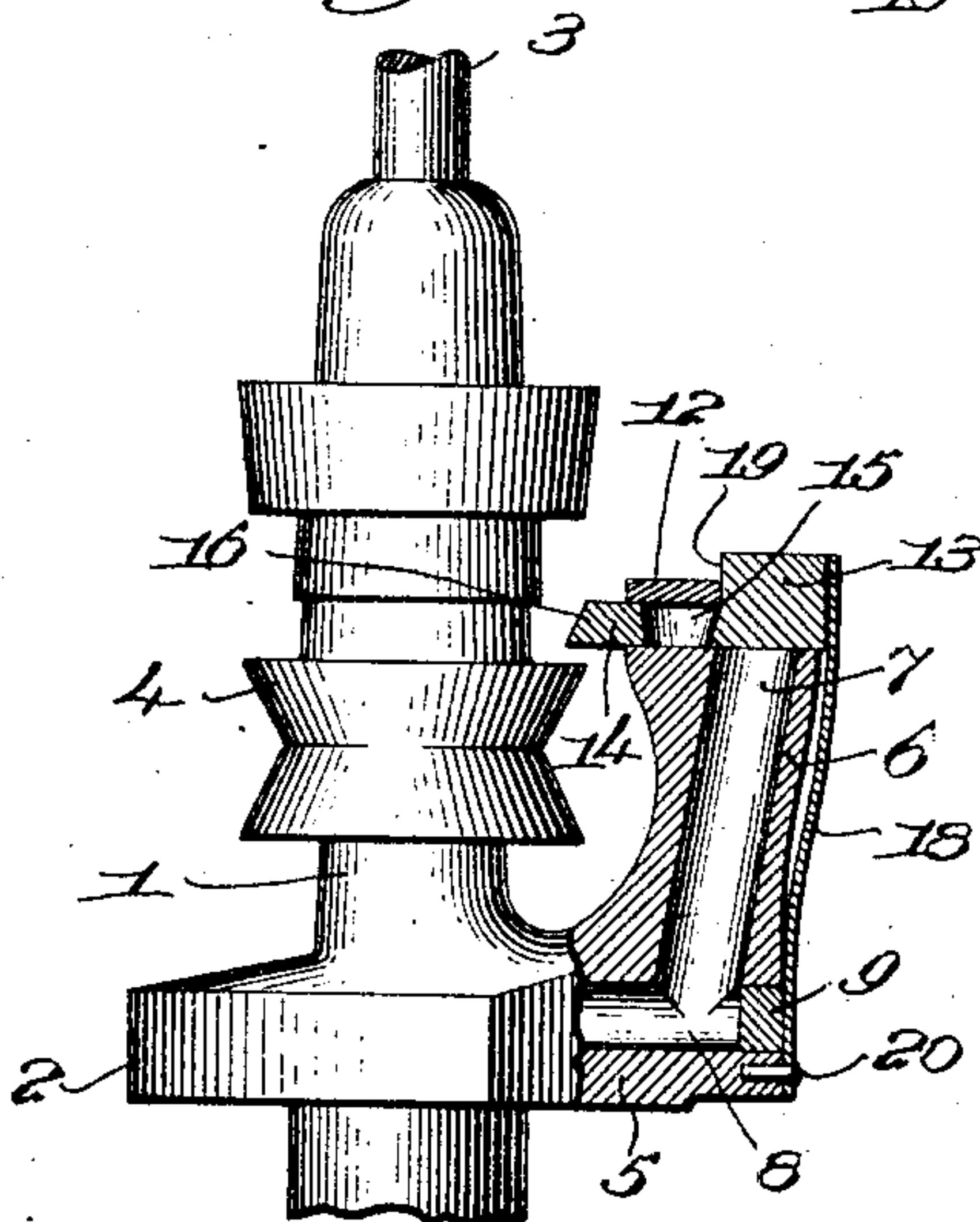


Fig. 3.



Witnesses,
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UNITED STATES PATENT OFFICE.

HAROLD KELLY, OF BIDDEFORD, MAINE, ASSIGNOR TO SAWYER SPINDLE COMPANY, A CORPORATION OF MAINE.

SPINNING-SPINDLE.

SPECIFICATION forming part of Letters Patent No. 785,738, dated March 28, 1905.

Application filed October 29, 1904. Serial No. 230,447.

To all whom it may concern:

Be it known that I, HAROLD KELLY, a citizen of the United States, and a resident of Biddeford, county of York, State of Maine, have invented an Improvement in Spinning-Spindles, of which the following description, in connection with the accompanying drawings, is a specification, like numerals on the drawings representing like parts.

This invention has for its object the production of a novel and efficient combined-oil and doffer guard for spinning-spindles or the like whereby the oil-inlet is provided with a simple, strong, and durable effective closure and the spindle-whirl with a downhold to prevent lifting when doffing.

The supporting-case for the spindle is usually provided with an integral upturned oil-snout having an inlet-opening in its upper end or head, and a cap is pivotally mounted thereon to form a closure for the inlet-opening, the cap having a finger or lug at its inner end to project over the edge of the spindle-whirl and prevent lifting thereof when doffing. Such structures are often subjected to relatively hard usage, and very often the ears on which the cap is mounted will be broken off, making the entire supporting-case worthless.

Various constructions have been devised to increase the strength of the parts, particularly at the head of the oil-snout, and in my present invention I have devised a very strong, durable, and simple construction and arrangement, the whirl-downhold being made as a part of the closure for the oil-inlet.

Should the closure be broken, it can be instantly removed and a new one substituted, the strengthening of the head by the guiding and retaining device practically obviating much chance of breakage.

One practical embodiment of my invention is herein illustrated in connection with a well-known form of spindle-bearing, and the novel features of my invention will be fully described in the subjoined specification, and particularly pointed out in the following claims.

Figure 1 is a side elevation of a portion of a sleeve-whirl spindle and its supporting-case with one embodiment of my invention applied

thereto. Fig. 2 is a detail of the parts shown in Fig. 1 viewed from the right hand. Fig. 3 is a partial side elevation and vertical section on the line 3 3, Fig. 2, the closure and downhold being shown in normal position. Fig. 4 is a sectional detail on the line 3 3, Fig. 2, but showing the closure in position to uncover the inlet-opening and retract the whirl-downhold; and Fig. 5 is a perspective view of the retaining and guiding device detached.

The supporting-case 1, having an enlarged base 2 to rest upon the spindle-rail, the spindle 3, having an attached sleeve-whirl 4, and the oil reservoir and snout comprising a radial portion 5 and an upturned portion 6, formed integral with the casting constituting the supporting-case and base, may be and are all substantially of well-known construction.

In Figs. 3 and 4 the upright inlet-opening 7 in the upright part 6 of the snout communicates at its lower end with the duct 8, Fig. 3, drilled into the radial part 5 and communicating with the interior of the case, a plug 9 closing the outer end of the duct.

In accordance with my present invention the opposite sides of the upper end or head of the oil-snout are preferably flattened and upturned. Broad wings 10 of a guiding and retaining device are secured thereto, as by rivets 11, and connected by a bridge 12, narrower than the upper ends of the wings and crossing the head between the inner end thereof and the inlet-opening 7.

When oil is to be introduced to the reservoir or snout, the closure is pushed outward into the position shown in Fig. 4, the aperture 15 registering with the inlet-opening, and the nozzle of an oil-can can then be inserted. The spring 18 snaps the closure back into normal position when the nozzle is withdrawn.

Should the attendant wish to remove the spindle from the case, he pushes back the closure, using the body 13 as a finger-piece, thereby retracting the inner end or downhold of the closure, as in Fig. 4, and lifts out the spindle.

The retaining device 10 12 is preferably made of a piece of flat steel or wrought-iron stamped out into proper shape and then bent, as shown in Fig. 5. This makes the head of

the oil-snout very strong and capable of withstanding much hard usage without breakage.

Should the inner end or downhold of the closure break, a new closure can be quickly
5 inserted, the spring being swung to one side on its attaching-pin 20.

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

10 1. In a spinning-spindle, a supporting-case having an upturned oil-snout provided with an inlet-opening in its head, a retaining device secured rigidly to the sides of and crossing the head, a flat, apertured closure later-
15 ally slidable on the head between the sides and under the top of said retaining device and having a whirl-downhold at its inner end, and a spring to normally maintain said closure with its aperture out of alinement with the inlet-
20 opening and the downhold in operative position.

2. In a spinning-spindle, a supporting-case having an upturned oil-snout provided with an inlet-opening, a flat closure mounted to
25 slide on the top of the head and having an aperture to register with the inlet-opening, the inner end of said closure forming a downhold for the whirl, a transverse shoulder on said closure, means to guide and retain the

latter on the head, comprising depending rings 30 and a connecting-bridge crossing the closure in front of the shoulder, and a spring to cooperate with the closure and normally maintain the shoulder against the bridge of the
35 guiding and retaining means, the inlet-opening being at such time covered by the closure and the downhold yieldingly maintained in operative position.

3. In a spinning-spindle, a supporting-case having an upturned oil-snout provided with 40 an inlet-opening in its head, a retaining device secured thereto and comprising depending wings and a connecting-bridge crossing the top of the head, a sliding closure having an aperture and reduced in thickness to ex- 45 tend beneath the bridge and project beyond it to form a whirl-downhold, and a spring to act upon the closure and maintain it in position to shut the inlet-opening and project the
50 downhold.

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

HAROLD KELLY.

Witnesses:

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H. G. HUTCHINSON.