

(No Model.)

H. A. OWEN.
SPINDLE SUPPORT.

No. 528,020.

Patented Oct. 23, 1894.

Fig. 1.

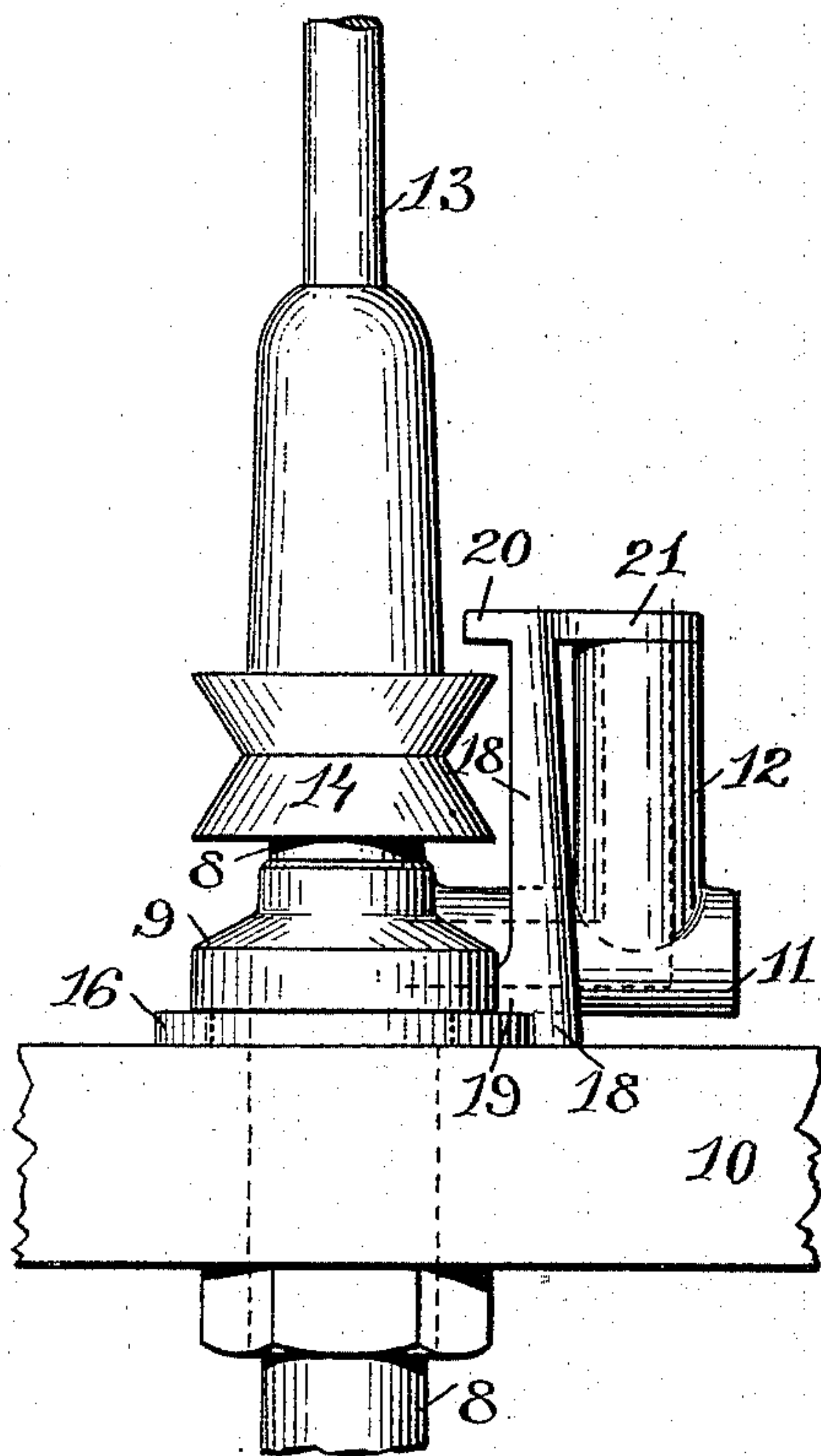


Fig. 3.

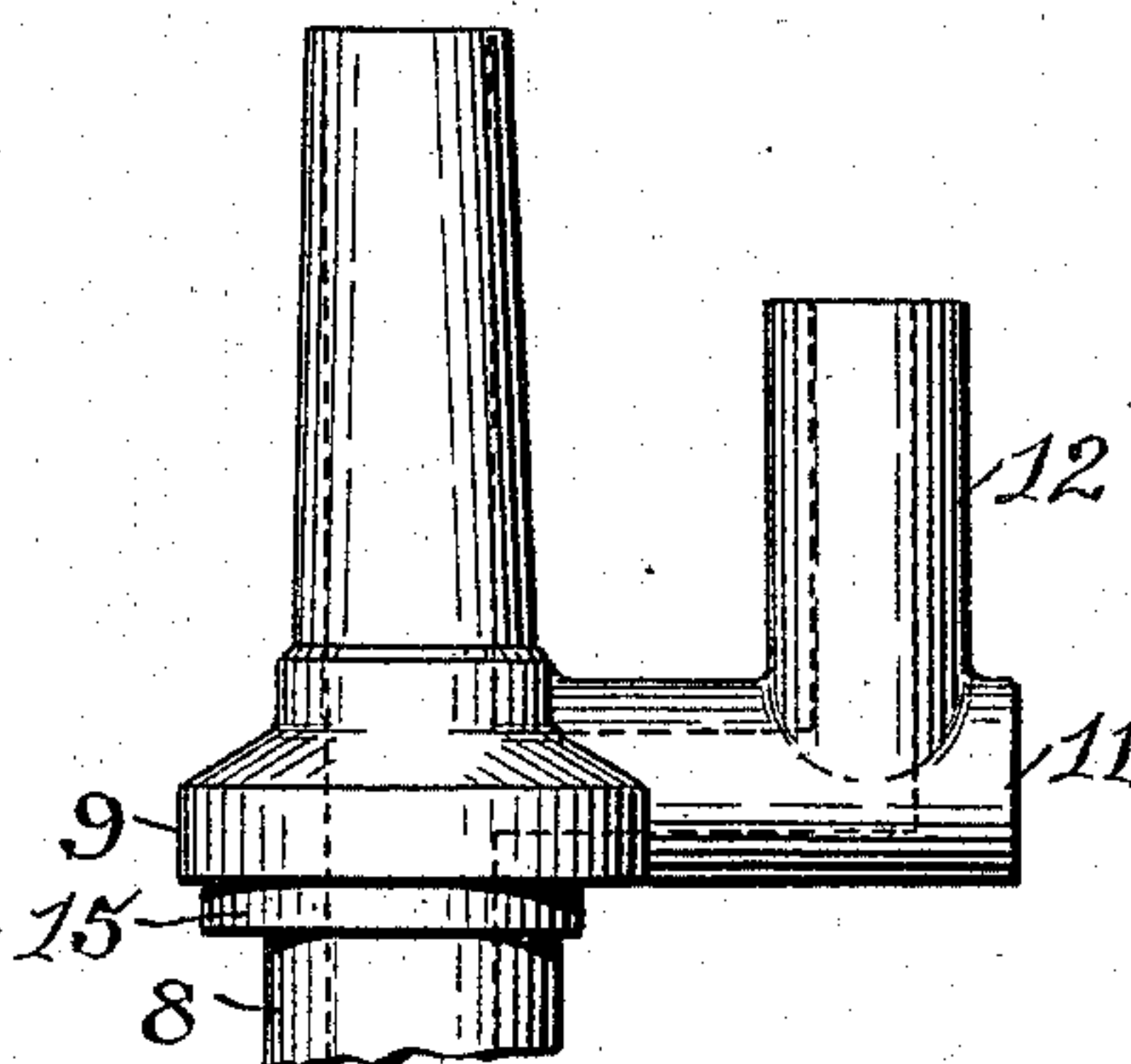


Fig. 4.

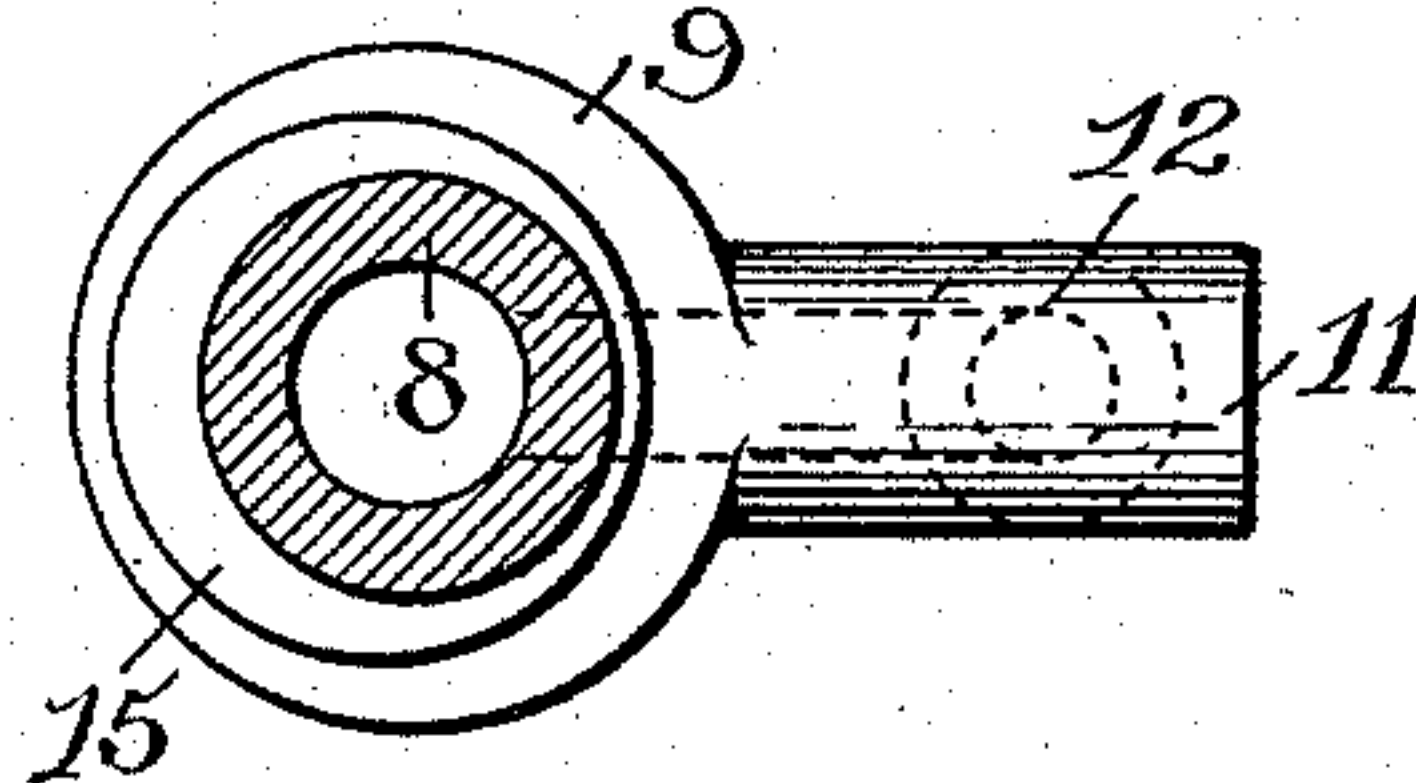


Fig. 2.

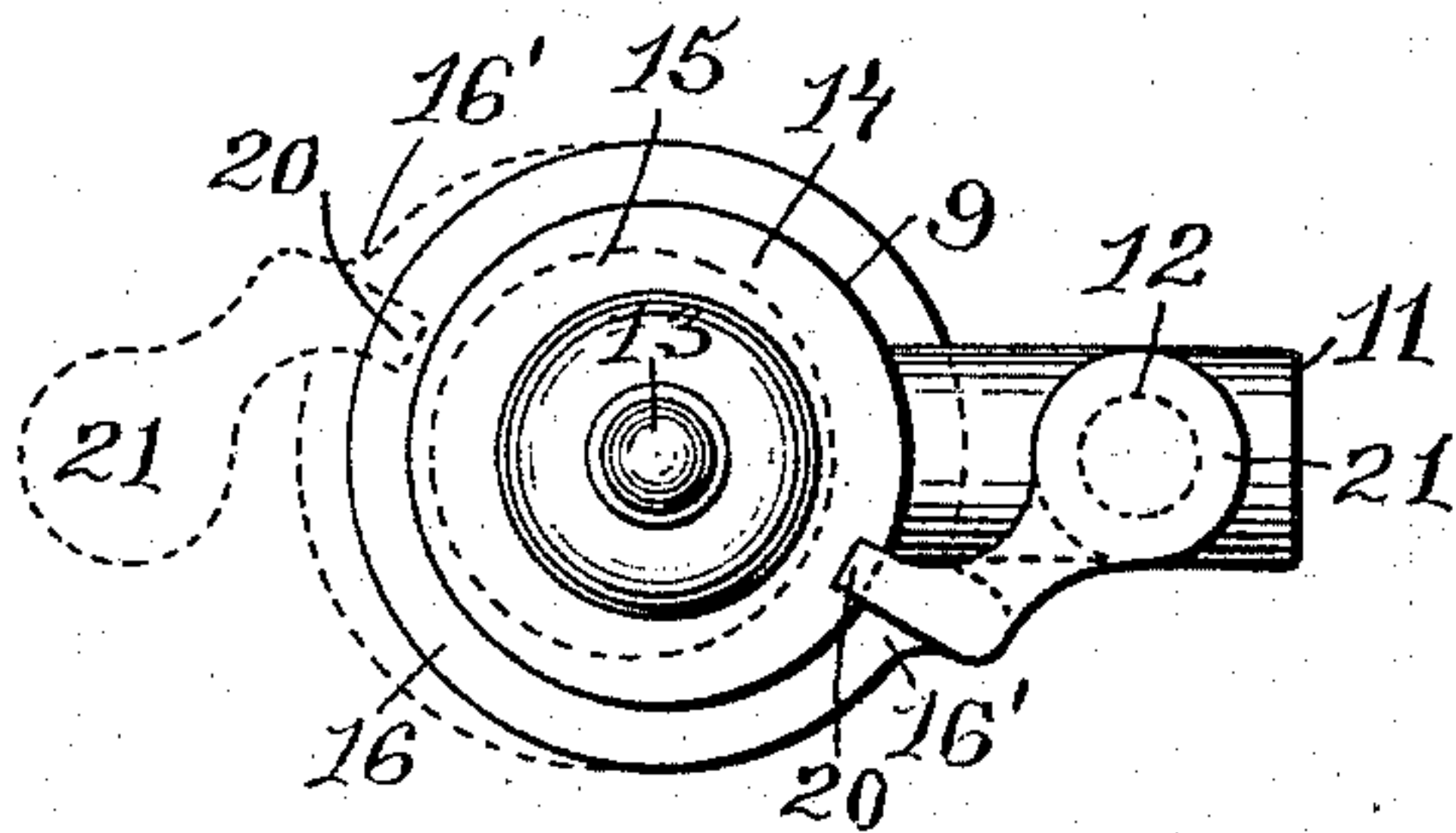
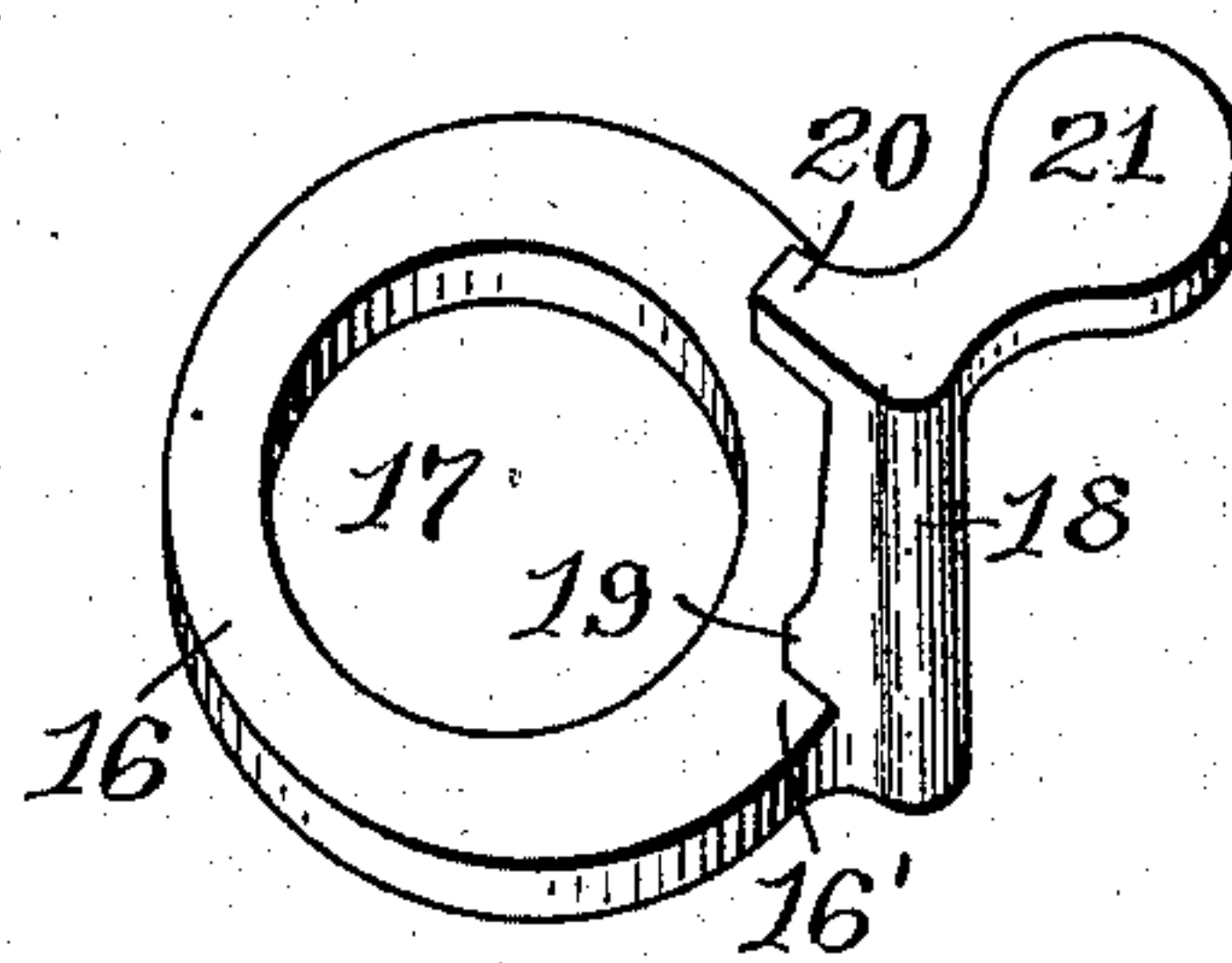


Fig. 5.



WITNESSES:

Henry J. Miller
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INVENTOR:

Henry A. Owen,
by Joseph A. Miller & Co.,
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UNITED STATES PATENT OFFICE.

HENRY A. OWEN, OF WHITINSVILLE, MASSACHUSETTS, ASSIGNOR TO THE
WHITIN MACHINE WORKS, OF SAME PLACE.

SPINDLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 528,020, dated October 23, 1894.

Application filed May 10, 1894. Serial No. 510,717. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. OWEN, of Whitinsville, in the county of Worcester and State of Massachusetts, have invented certain
5 new and useful Improvements in Spindle-Supports; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this
10 specification.

This invention relates to improvements in supports for spindles in which the spindle bolster is furnished with a laterally-extending oil-reservoir having a hollow post or well
15 at its outer end by means of which oil is introduced into the oil-reservoir and a column of oil above the reservoir may be secured.

The object of the invention is to provide the spindle support with a combined doffer-guard and oil-well cover which will be simple in construction and operation and more durable than those heretofore constructed.

The invention consists in the combination with a laterally-movable post, of a doffer-guard and oil-well cover mounted at the upper end thereof.

The invention also consists in the peculiar construction of the bolster-case and the combination therewith of the novel means for supporting and operating the post on which the doffer-guard and oil-well cover is mounted.

The invention likewise consists in such other novel features of construction and combination of parts as may hereinafter be more
35 fully described and pointed out in the claims.

Figure 1 represents an elevation of parts of the spindle and the bolster secured in the bolster-rail showing the improved doffer-guard and oil-well cover. Fig. 2 represents a
40 plan view of the spindle, the bolster, and the doffer-guard and oil-well cover. Fig. 3 represents an elevation of the bolster-tube and oil-well. Fig. 4 represents a bottom view of the same. Fig. 5 represents a perspective
45 view of the support for the doffer-guard and oil-well cover removed from the bolster.

Similar numbers of reference designate corresponding parts throughout.

In the drawings 8 indicates the bolster-tube
50 of the ordinary construction having the flange or collar 9 which has heretofore rested

on the bolster-rail 10. From this flange extends the oil-reservoir 11 connected with the interior of the bolster-tube and having at its outer end the hollow post or well 12 through
55 which oil is introduced into the oil-well and by which a column of oil may be maintained above the reservoir. In the bolster-tube is journaled, in any suitable manner, a spindle 13 having the whirl 14 by means of which the
60 spindle is driven.

In my construction I raise the bolster-tube and its flange 9 sufficiently above the bolster-rail to allow the placing of the eccentric-cam
15 between the bolster-rail and the flange. 65 This cam may be made in part with the bolster-tube, or be secured thereto or to the rail, being so arranged that its point of farthest throw from the center of the bolster is diametrically opposite to the location of the oil-
70 reservoir, its point of shortest throw being adjacent to the oil-well. Surrounding this cam 15 is a cam-ring 16 having its bore 17 located off the center. On the widest portion
75 16' of the wall thereof I mount the post 18 having at its lower portion a shoulder 19 which in the normal position bears on the edge of the flange 9, and at the upper end of the post, formed in part therewith or rigidly
80 secured thereto, I locate the inwardly-extending doffer-guard 20 and the oil-well cover 21, these being supported by the post at a height slightly above the upper end of the oil-well 12 and above the spindle whirl.

When the spindle is running in its normal
85 condition the doffer-guard and oil-well cover are located as represented in solid lines, the cover closing the oil-well and the doffer-guard extending over the spindle whirl and preventing its undue lifting in doffing or otherwise. 90
When it becomes necessary to add a supply of oil to that in the reservoir, the post 18 is moved laterally a short distance by rotating the ring 16 to uncover the oil-well without opening the passage for the whirl, the oil is
95 introduced and the parts replaced. When it is desired to remove the spindle from the bolster, the ring 16 is rotated until the post 18 is brought to the position indicated in dotted
100 lines in Fig. 2, when the eccentric-cam 15 in conjunction with the cam-ring 16 will have caused the post 18 to move sufficiently away

from the center of the bolster to open a free passage for the spindle whirl.

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

1. In a spindle support, the combination with a bolster-tube furnished with a laterally-extending oil-reservoir having an upwardly-extending oil-well, of a post extending in a
10 plane parallel to the axis of the bolster, a support on which the post is secured, mounted eccentrically to the said bolster-tube and embracing it, and an oil-well cover carried on the upper end of said post.

15 2. In a spindle-support, the combination with a bolster-tube having a lateral oil-reservoir furnished with an upwardly-extending oil-well, of an eccentric cam surrounding the bolster-tube, a ring rotatable on said cam, and
20 a vertical post rigidly secured to said ring

and having a doffer-guard and oil-well cover at its upper end.

3. The combination with a bolster-tube 8 having the flange 9, the oil-reservoir 11 and the oil-well 12, and the cam 15 surrounding
25 the bolster-tube, of the ring 16 rotatable on said cam, and the post 18 mounted on the ring and having the doffer-guard 20 and the oil-well cover 21 at its upper end, as described.

4. In a spindle-support, the combination 30 with a bolster-tube, and a spindle vertically journaled therein and having a whirl, of a movable base having a post mounted thereon, a device for guarding the base eccentrically to the axis of the spindle, and a doffer-guard
35 rigidly mounted on the upper end of the post.

HENRY A. OWEN.

Witnesses:

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CYRUS A. TAFT.