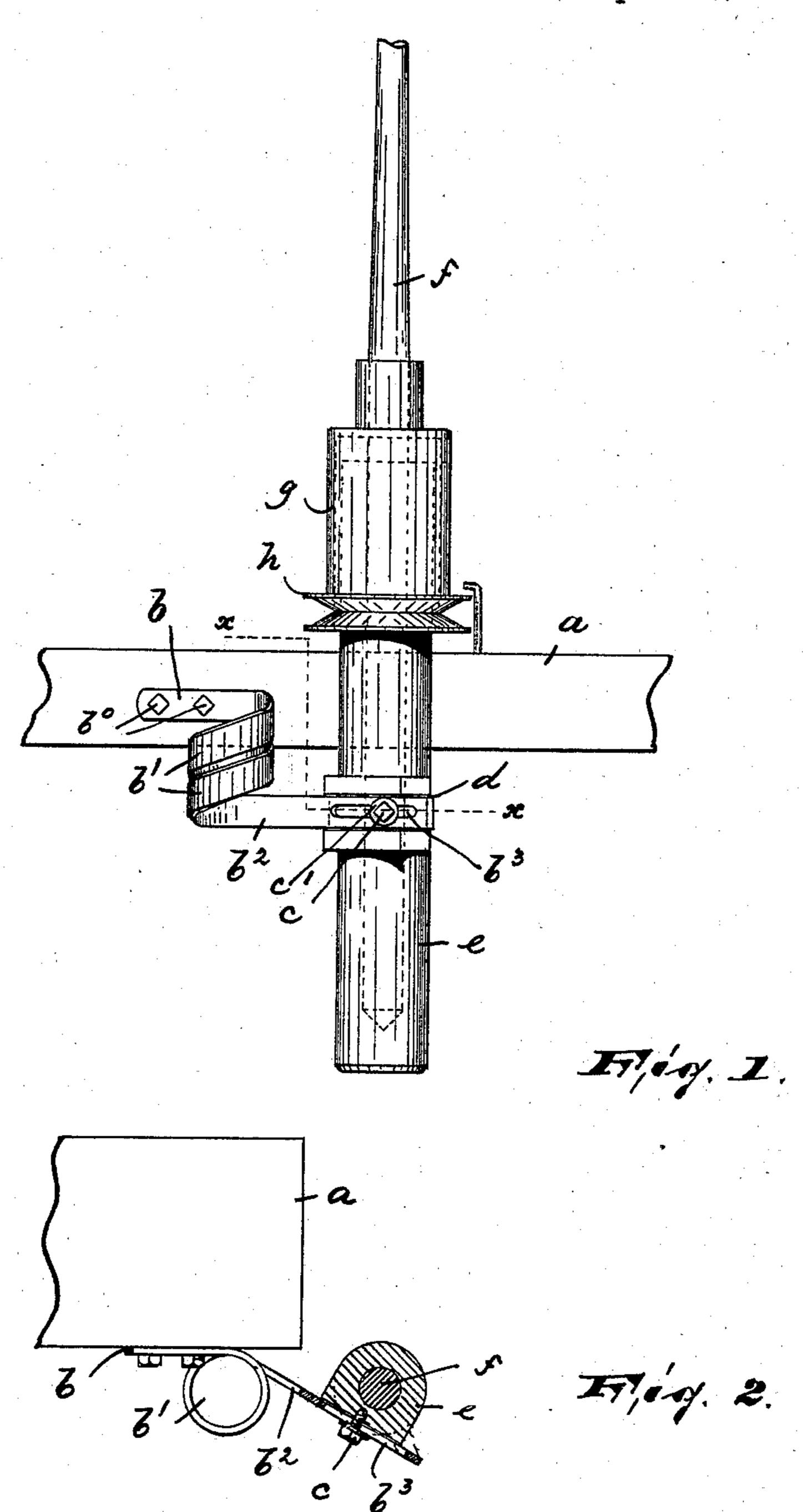
(No Model.)

A. SCHEID. SPINDLE.

No. 580,723.

Patented Apr. 13, 1897.



Im Bel. Suncan M. Robertson.

Adam Scheid

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## United States Patent Office.

ADAM SCHEID, OF HARRISON, NEW JERSEY, ASSIGNOR TO THE DRAPER COMPANY, OF PORTLAND, MAINE.

## SPINDLE.

SPECIFICATION forming part of Letters Patent No. 580,723, dated April 13, 1897.

Application filed December 22, 1896. Serial No. 616,649. (No model.)

To all whom it may concern:

Be it known that I, ADAM SCHEID, a citizen of the United States, residing in Harrison, county of Hudson, and State of New Jersey, 5 have invented certain new and useful Improvements in Spindles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable other skilled in the art to which it apro pertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a 15 support for spinning-spindles whereby said spindles are given a yielding motion and whereby the tightness of the driving belt or bands can easily be regulated by means of the said spindle-supports without interfering

20 with the operation of the spindles.

The invention consists in the improved spindle-support and in the combination and arrangement of the various parts thereof, substantially as will be hereinafter more fully de-25 scribed, and finally embodied in the clauses of the claim.

In the accompanying drawings, Figure 1 is a front elevation of my improved spindle-support, and Fig. 2 a sectional view on the line

30 x x of Fig. 1.

In said drawings,  $\alpha$  represents the spindlerail, to the front of which is secured, by means of the set-screws  $b^0$   $b^0$ , one end b of the flat coiled spring b', the other end  $b^2$  of which pro-35 jects from said coil at an acute angle to the rail and is provided with a horizontally-arranged elongated slot  $b^3$ . The end  $b^2$  is adapted to be secured in the groove or recess d, arranged horizontally in the tube e, the latter 40 containing step and bolster bearing for the spindle f, having the sleeve g and whirl h, whereby motion is imparted to the said spindle. A set-screw c, resting with its head on

the washer c', penetrates the elongated slot  $b^3$ and thus adjustably secures the said tube e 45 to the projecting end  $b^2$  of the spring-coil b'.

From the foregoing it can be seen that yielding movement is imparted to the spindle and its supporting-tube by means of the coiled spring b', and that the tightness of the belt or 50 band can easily be regulated by sliding the tube from or to the rail upon the projecting end  $b^2$ , which latter, as heretofore stated, is arranged at an acute angle to the rail, as shown in Fig. 2.

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

Patent, is—

1. The combination with the spindle-rail, of a coiled-spring plate secured with one end 60 to said rail and having its other end arranged horizontally but at an acute angle to the said rail, a tube arranged on and supported by the free end of said coiled-spring plate and horizontally adjustable thereon, and a whirl- 65 driven spindle in said tube, all said parts, substantially as described.

2. The combination with the spindle-rail, of a coiled-spring plate secured with one end to said rail and having its other end arranged 70 horizontally but at an acute angle to the said rail, and provided with an elongated slot, a tube provided with a recess, said recess adapted to be engaged by the slotted end of the coiled-spring plate, a set-screw penetrating 75 said elongated slot and secured in the tube, and a whirl-driven spindle in the tube, all said parts, substantially as and for the purposes described.

In testimony that I claim the foregoing I 80 have hereunto set my hand this 17th day of

December, 1896.

ADAM SCHEID.

Witnesses:

ALFRED GARTNER, DUNCAN M. ROBERTSON.