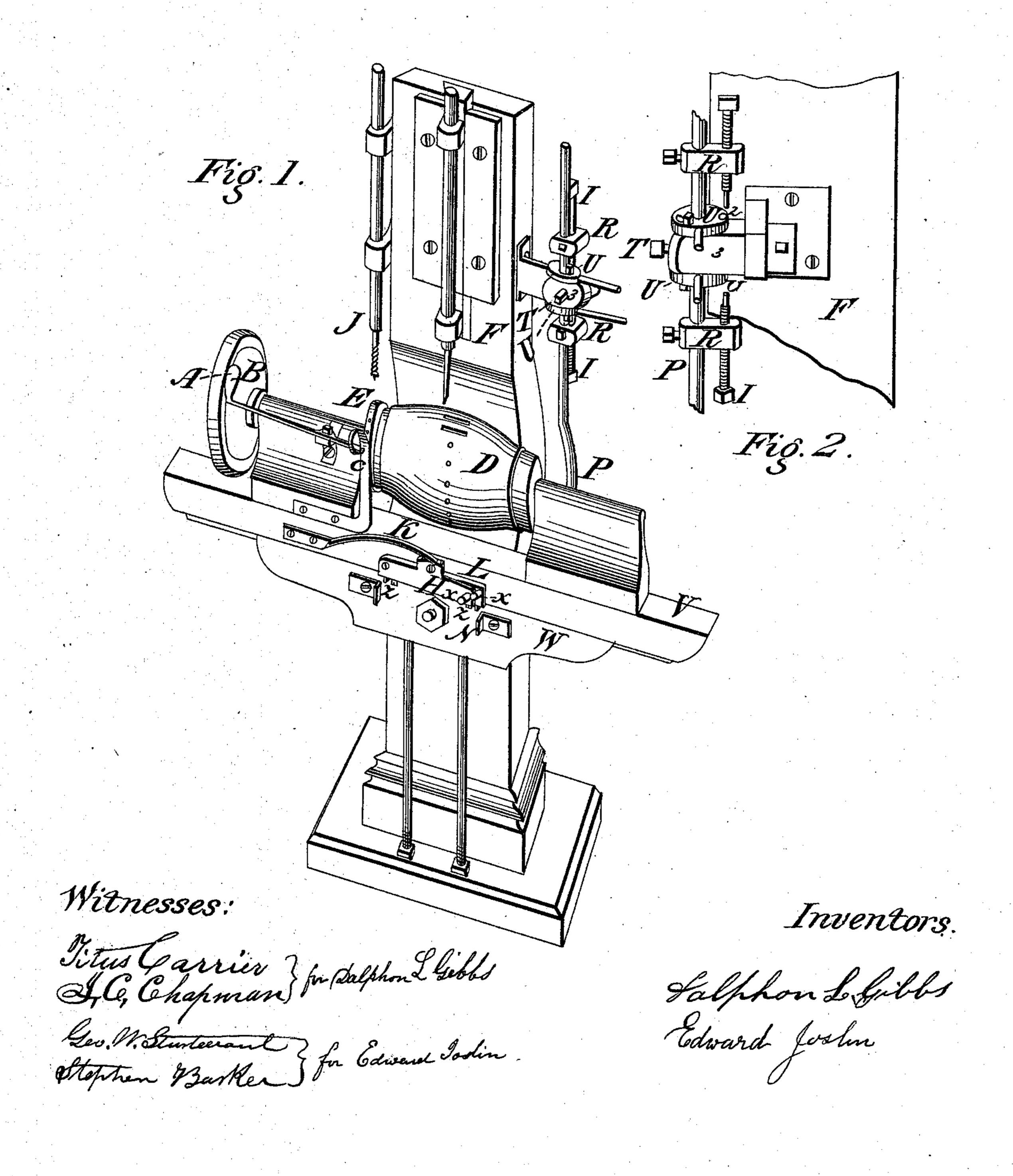
## Joslin & Gibbs, Mortising Machine. N<sup>9</sup>35,420. Patented May 27, 1862.



## United States Patent Office.

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## IMPROVEMENT IN HUB-MORTISING MACHINES.

Specification forming part of Letters Patent No. 35,420, dated May 27, 1862.

To all whom it may concern:

Be it known that we, Dalphon L. Gibbs, of Norwich, in the county of New London and State of Connecticut, and Edward Joslin, of Keene, in the county of Cheshire and State of New Hampshire, have invented a new and useful Improvement in Power Hub-Mortising, by which the greatest rapidity and accuracy in boring and mortising hubs of any size are attained; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, furnishing part of this specification, in which—

Figure 1 is a vertical perspective view of the lower section of the machine on which our improvements are attached. Fig. 2 is a perspective view of the swivel-stand, through which the rod passes from the movable rest

and gages the angles of the mortises.

Similar letters of reference indicate corre-

sponding parts of both figures.

The nature of our invention consists in providing a convenient thumb-lever by which the index-pin is drawn from the dial-ring by a touch of the thumb when the hand is placed on the wheel to turn the hub; also, in the sliding piece that raises the spring out of notches in tilting bar that regulates the length of mortise, and the swivel stand with its set-screws, movable collars, and connecting bar to the bed, by which it is tilted to the required angles for the mortise.

To enable others skilled in the art to make and use our invention, we will proceed to de-

scribe its construction and operation.

The hub D is secured in the machine by a screw-chuck at one end, which is secured to dial-ring E, and a pin on spring C enters the hole of dial-ring and holds the hub firm in its place while a mortise is being cut. To turn the hub for another mortise, the operator places his hand on wheel B, with his thumb resting on thumb-piece A, and with a slight pressure spring C is forced back and draws the pin from dial-ring E, when the hub is turned until the pin enters the next hole on ring E, as before.

To regulate the length of mortise, the operator tightens his grasp on pins X X with his

left hand which raises the plate H and lifts the point of spring K out of notch on tilting-bar L, when it is tilted down either way, allowing the end of spring K to rest in another groove to hold it in the position desired. When sliding rest V is moved on bed W, the end of tilting-bar L or stops Z Z would come in contact with stops N N.

To bore the hub, the tilting-bar L is left as represented in drawings, which allows it to pass over the stops N N until the center of

hub D is under bit J.

The desired angles for the mortise are obtained by adjusting the movable collars R R on connecting bar P, that connects with bed W and passes through swivel head 3. When the bed W is tilted either way, set screws I I stop against stop-plates U U, or by a turn of stop-plates U U set-screws I I pass through holes 2 in stop-plate against swivel-head 3, which gives to the hub four different angles without changing set-screws I I or collars R R. The bed is held at the desired angle by a turn of set-screw I.

By adding to this mortising-machine the above-mentioned improvements the operator is enabled to speedily and accurately change the hub to the desired angles, move the rest for the length of mortise, and turn the hub after one mortise is cut for the next with ease and dispatch.

What we claim, and desire to secure by Let-

ters Patent, is—

1. The thumb-lever A when used in combination with the spring C to draw the indexpin out of holes in dial-ring.

2. The sliding plate H on the tilting-bar L when used to raise the spring K, as specified.

3. The swivel-head 3, movable stop-plates U U, set-screws I I, and adjustable collars R R, when connected with bed W by connecting-bar P, for the purpose herein specified.

DALPHON L. GIBBS. EDWARD JOSLIN.

Witnesses for Dalphon L. Gibbs:
Titus Carrier,
I. C. Chapman.
Witnesses for Edward Joslin:

GEO. W. STURTEVANT, STEPHEN BARKER.