(No Model.)

T. HALL & D. YOUNG.

PICKER MOTION FOR LOOMS.

No. 432,527. Patented July 22, 1890.

Fig. 1.

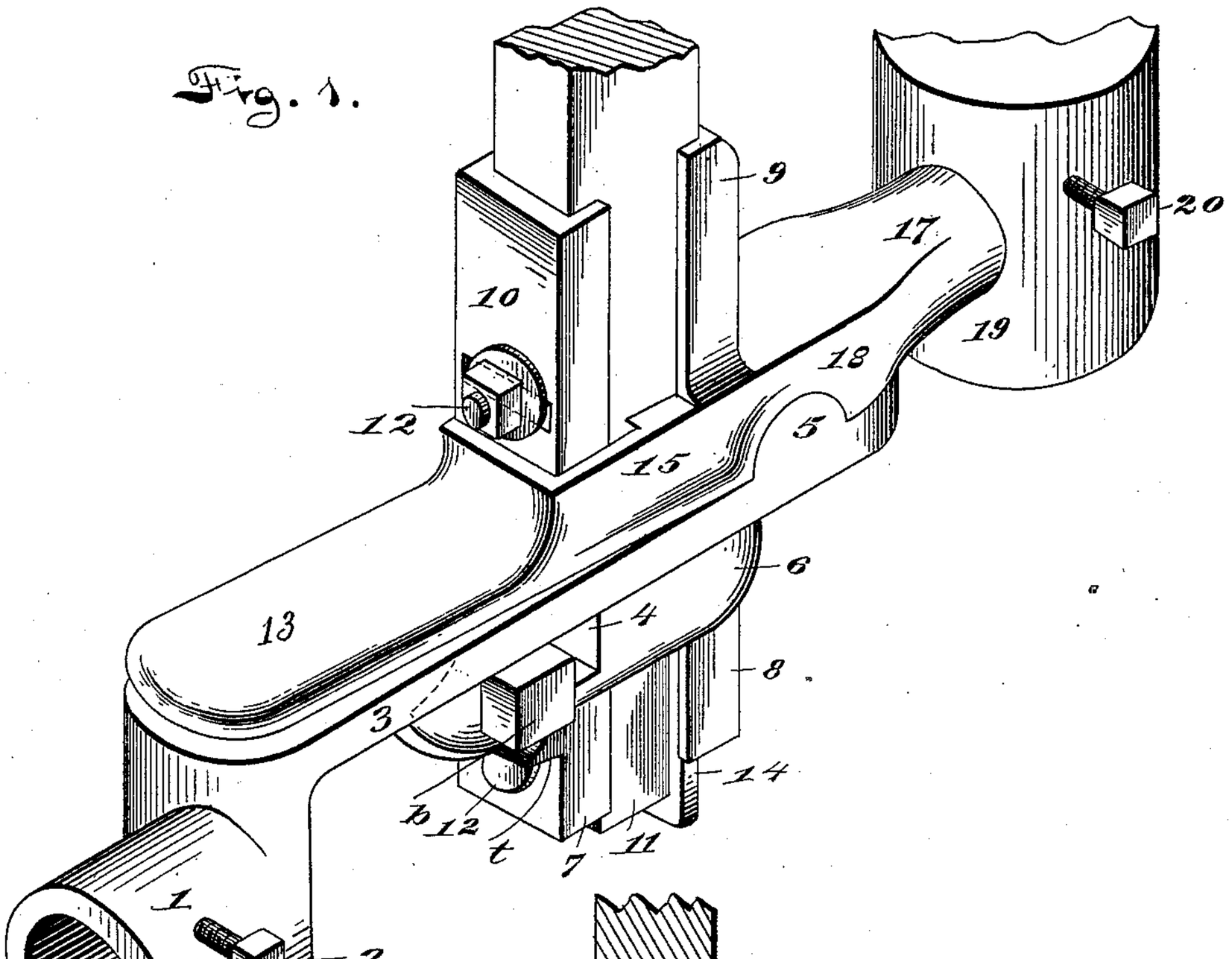
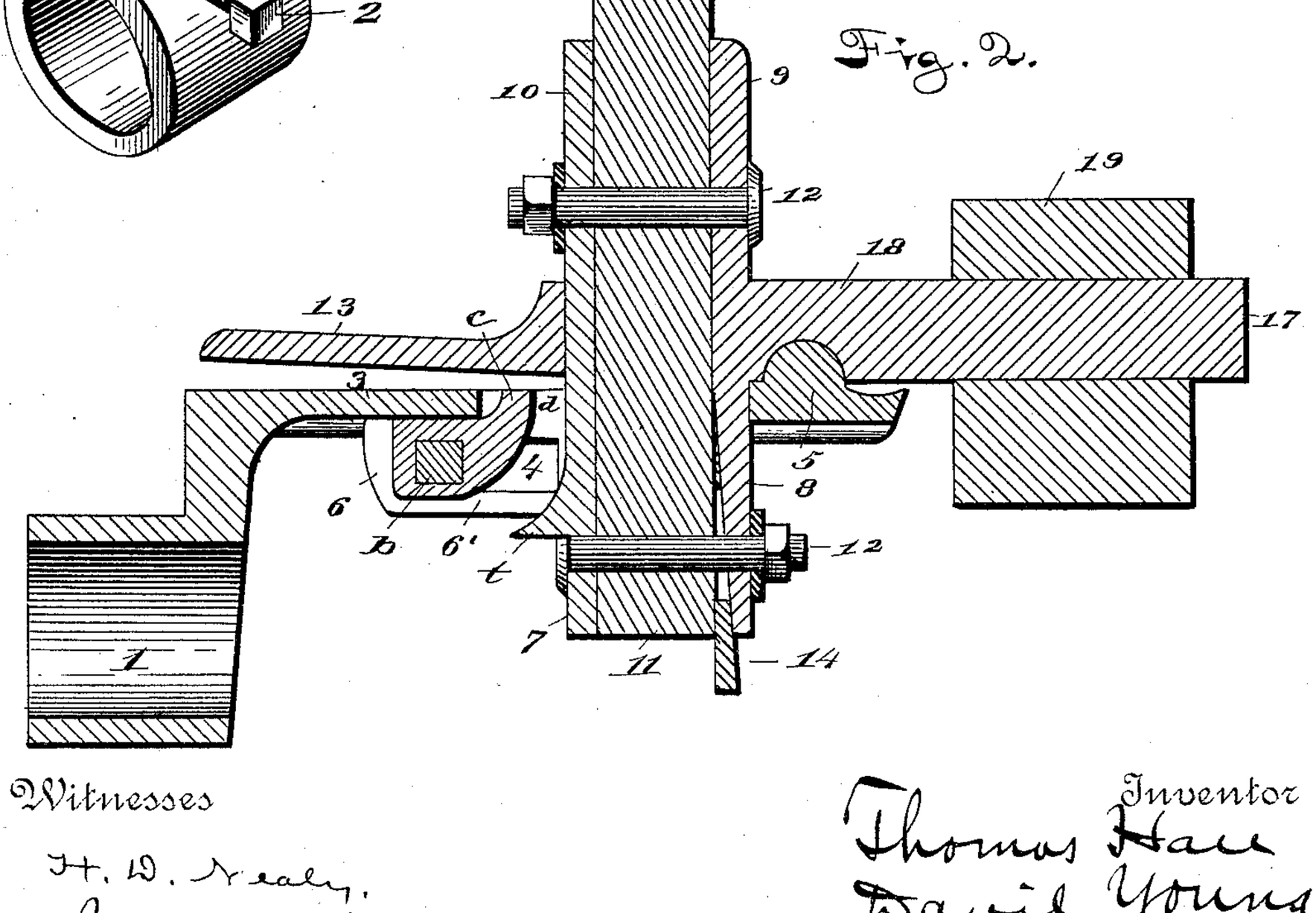


Fig. 2.



Witnesses

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THOMAS HALL AND DAVID YOUNG, OF LAWRENCE, MASSACHUSETTS.

PICKER-MOTION FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 432,527, dated July 22, 1890.

Application filed April 24, 1889. Renewed April 5, 1890. Serial No. 346,641. (No model.)

To all whom it may concern:

Be it known that we, THOMAS HALL and DAVID YOUNG, citizens of the United States, residing at Lawrence, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Picker-Motions for Looms; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention relates to certain novel improvements in the construction of picker-motions for looms, which improvements will be fully understood from the following description and claims, taken in connection with the annexed drawings, in which—

Figure 1 is a view in perspective of part of a picker-stick having our invention applied thereto, and Fig. 2 is a sectional view taken vertically and longitudinally through Fig. 1.

Referring to the annexed drawings by numbers and letters, 1 designates a hub, which is secured to the lay rock-shaft by a set-screw 2. 3 designates the rocker-bed on which said hub is formed, having a flat upper surface and provided near one end with a transverse arc-bearing 5, adapted to receive the arc-shaped recess 18 in the bottom of the rocker 15, and allow the latter to articulate freely. The recess 18 and the arc-shaped bearing afford a fulcrum for the rocker and allow it free vibration without using bolts. The rocker can thus be lifted from its seat when necessary for lubricating it. The said rocker-bed is constructed with flanges 6 6 on its bottom, having oblong slots 4 transversely through them that receive the square head and body of a transverse bolt *b*, which bolt passes through a longitudinally-adjustable block 6′, having a curved upturned lip *c*. (Shown clearly in Fig. 2.) This block 6′ is provided with the lip *c* for a double purpose—to wit, by reason of its protruding through the vertical slot *d* it prevents lateral displacement should the bolt and nut attachment wear loose; also, the point of impingement of the lip against the part 10 is brought in or nearly in the horizontal plane of the axis of vibration of the rocker 13. The said lip of the block 6′ also affords an abutment to keep the rocker upon its fulcrum-seat and to compensate for wear. The slots 4 4, through the flanges 6 6, above referred to, are in a plane at right angles to the slot *d*, and terminate short of the sheath of the picker-stick, as clearly shown in Figs. 1 and 2 of the annexed drawings.

11 designates the picker-stick, which passes vertically through the rocker and through an oblong slot *d*, made through the rocker-bed 3. The rocker is constructed with an upper flanged guide 9 and a lower flanged guide 8, which form a vertical elongated bearing for the outer edge of the picker-stick, and which are cast integral with the rocker.

Against the opposite edge of the picker-stick 11 we apply a flanged guide or clamp 10, and confine this guide or clamp and the picker-stick in proper place to the rocker by means of bolts 12 12 and a bifurcated wedge 14. The grooves between the flanges of the clamp 10 and the guides 8 and 9 are wider than the thickness of the picker-staff, and the aperture through the upper portions of the clamp 10, through which the upper bolt 12 passes, is elongated laterally, as shown in dotted lines, Fig. 1, so that when the nut on said upper bolt is loosened the picker-staff can be adjusted laterally and properly aligned with respect to the raceway for the shuttle. It will be observed that we form a curved stop *t* on the lower part of the clamp 10, the object of which is to afford an abutment for the lip *c* of block 6′, by adjusting which latter the throw of the picker-stick can be regulated. It will also be observed that we adjustably apply a weight 19 on the extension 17 of the rocker 15, which weight gives a positive throw to the picker-stick, and can be secured to the rocker-extension at any desired distance from the fulcrum 5 of the rocker-bed by means of a set-screw 20.

The wedge 14 not only serves as an auxiliary means for securing the picker-stick rigidly between the flanged clamp and guides; but by means of this wedge the position of said stick can be accurately adjusted in a direction with respect to the length of the rocker and its bed.

Having described our invention, we claim—

1. The combination, with the picker-stick,

the rocker having an arc-shaped recess in its under side, and provided with an extension and an adjustable weight thereon, the flanged guides 8 9, cast solidly with the rocker and the flanged clamp, and fastening-bolts therefor, of the rocker-bed provided with the arc engaging the arc-shaped recess in the lower face of the rocker, all as specified.

2. The combination, with the picker-stick, the weighted rocker provided with the flanged guides and clamp, the stop *t*, formed thereon, the bolts 12, and an adjusting-wedge, the rocker-bed provided with a vertical passage through it for the said picker-stick, the guide 8, and the lower part of the clamp 10, the adjustable block 6′, provided with a lip adapted to contact with the stop *t* on the clamp 10, and the bolt *b*, passed transversely through the said block and the flanges on the rocker-bed, as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

THOMAS HALL.
DAVID YOUNG.

Witnesses:
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PERCY HALL.