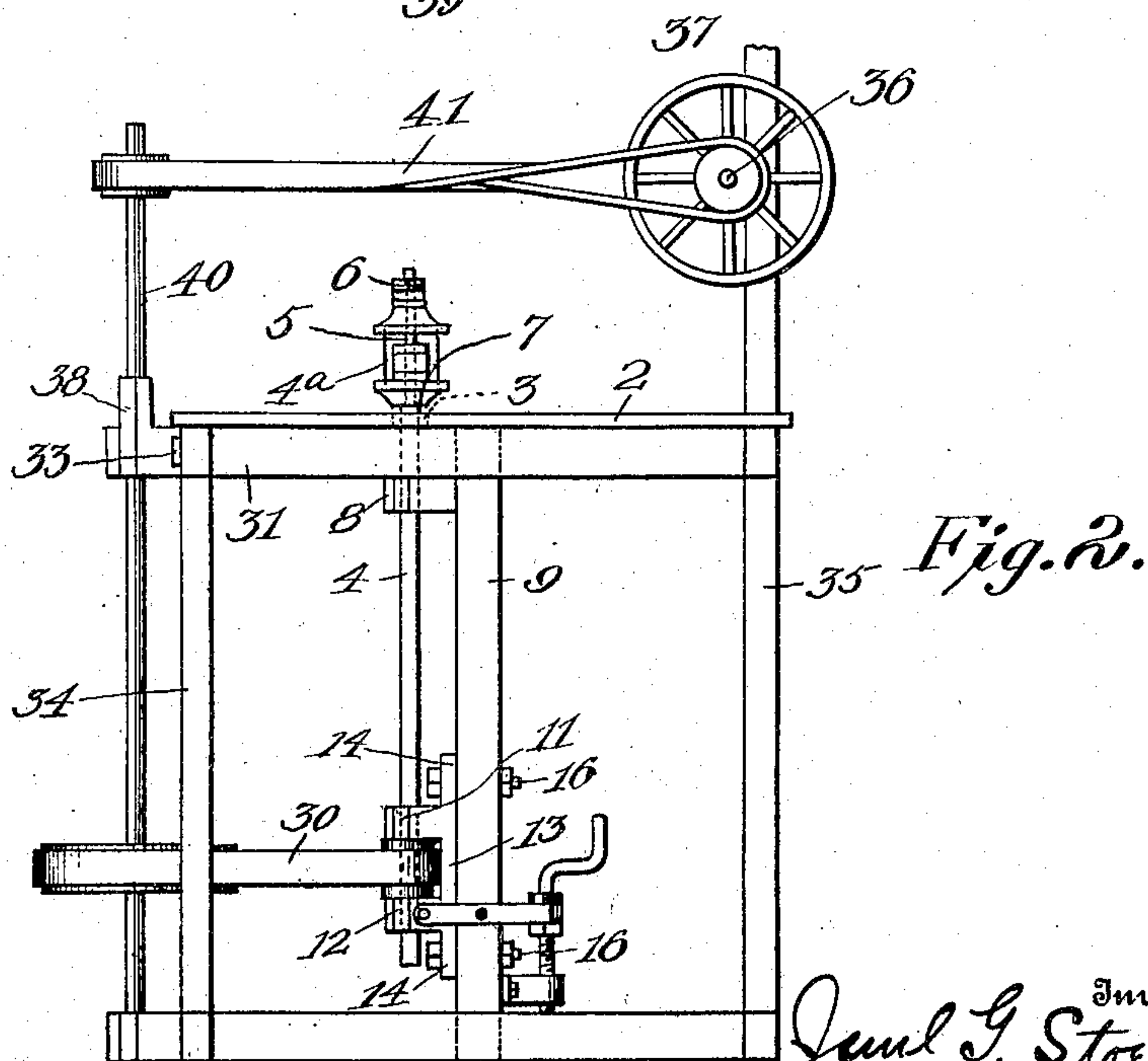
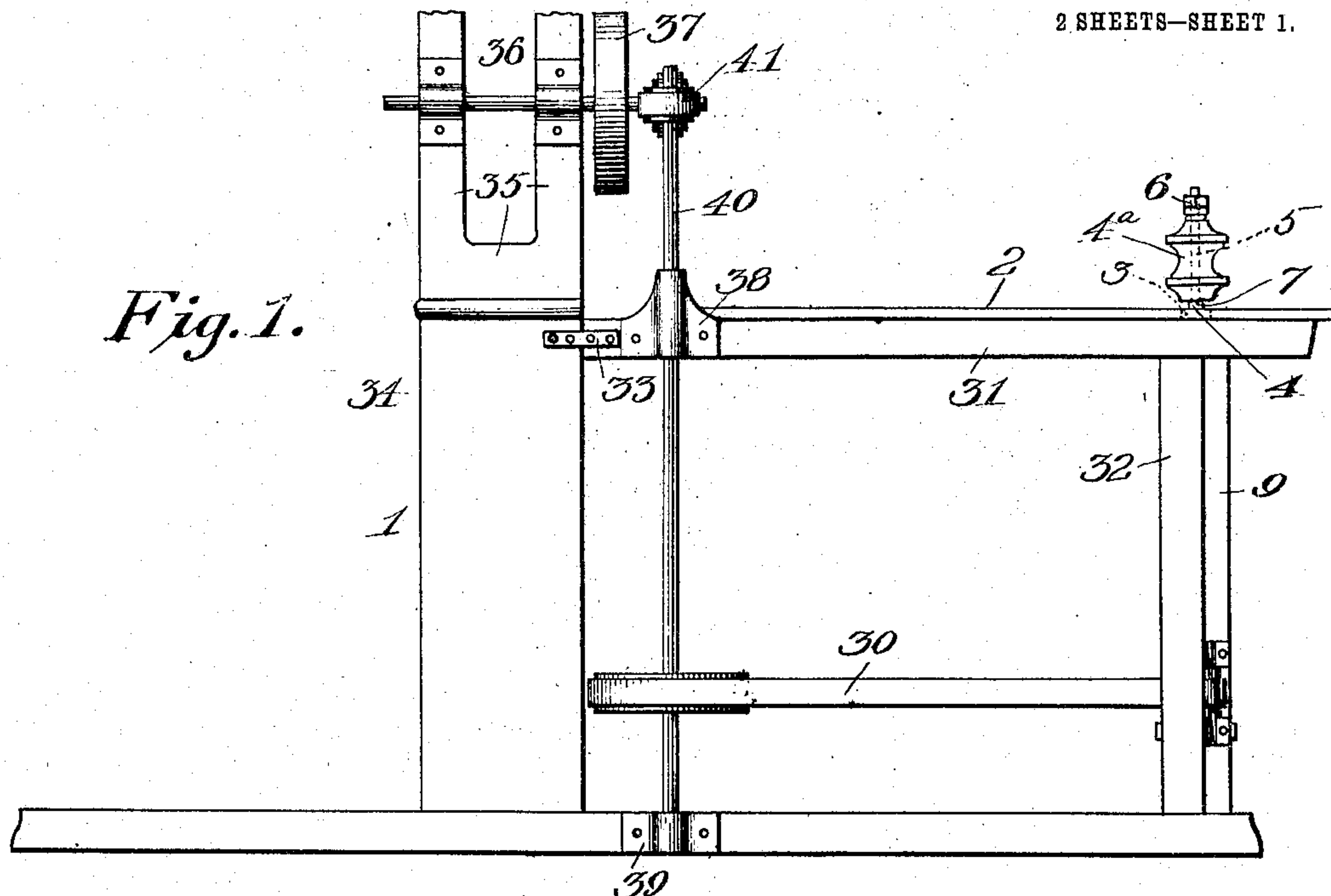


J. G. STOEN.
MACHINE FOR ROUNDING FELLIES.
APPLICATION FILED APR. 4, 1908.

907,913.

Patented Dec. 29, 1908.

2 SHEETS—SHEET 1.



Witnesses

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

JUNL G. STOEN, OF MONTEVIDEO, MINNESOTA.

MACHINE FOR ROUNDING FELLIES.

No. 907,913.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed April 2, 1908. Serial No. 425,205.

To all whom it may concern:

Be it known that I, JUNL G. STOEN, a citizen of the United States, residing at Montevideo, in the county of Chippewa and State of Minnesota, have invented certain new and useful Improvements in Machines for Rounding Fellies, of which the following is a specification, reference being had to the accompanying drawings.

10 My invention relates to improvements in machines for shaping or planing wood and to one especially designed for rounding the spokes of vehicle wheels and for similar purposes.

15 The object of the invention is to provide an improved means for mounting and adjusting the spindle of the cutting or planing head.

Another object of the invention is to provide a mechanism of this character especially adapted for use in connection with my improved wheelwright machine set forth in Letters Patent #891,745 granted to me June 23, 1908.

25 With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

30 Figure 1 is a side elevation of my improved wood working machine; Fig. 2 is an end view of the same; Fig. 3 is an enlarged detail vertical section; and Fig. 4 is a detail horizontal section taken on the plane indicated by the line 4—4 in Fig. 3.

In the drawings 1 denotes a suitable supporting frame at the top of which is arranged a work supporting table 2 having a central opening 3. The latter is provided to receive the projecting upper end of a vertical spindle or shaft 4 which carries a cutting head 4^a which may be of any suitable form and construction. As illustrated, said head 45 is secured upon the reduced upper end 5 of the spindle by a nut 6 which clamps in against a shoulder 7 formed on the spindle. The shaft 4 is mounted for both rotary and sliding movement in a stationary bearing 8 50 fixed upon the upper part of a vertical post or support 9 within the frame 1. The lower end of the spindle is journaled for rotation in bearings 11, 12 provided in spaced relation upon a slide 13 mounted for vertical 55 movement upon one face of the lower portion of the post. Said slide is mounted for

vertical movement by forming upon its top and bottom projections 14 having vertically extending slots 15 to receive clamping bolts 16. These bolts pass through transverse openings in the post 9 and have their heads 17 engaged with the outer faces of the projections 14 and clamping nuts 18 upon their screw threaded ends. It will be seen that when the nuts 18 are loosened the slide or 65 vertically movable member 13 may be raised or lowered to raise or lower the cutter head according to the work to be performed by the machine; and that when said nuts are tightened the slide will be effectively secured to the post.

The slide is adapted to be adjusted by a yoke lever 19 of substantially U-shape adapted to extend around the post 9 and having its parallel arms pivoted intermediate their ends 75 to opposite faces of the post, as shown at 20. The free ends 21 of said arms are disposed upon opposite sides of the slide 13 and are apertured to receive pivots 22 upon said slide, as clearly shown in Figs. 3 and 4. The closed end of the lever 19 is formed at its center with an enlargement 23 having a vertical opening to receive a vertical rod 24 having at one end a screw threaded portion 25 that works through a stationary nut 26 in the 85 form of a bracket fixed to the lower portion of the post. The upper end of the screw rod 24 is swiveled in the lever or yoke 19 by providing upon it, above the enlargement 23 a fixed collar 27 and below said enlargement a stop nut 27^a. The upper extremity of the screw rod is preferably bent to provide a crank handle 28 so that the rod may be readily turned to raise or lower it and consequently to oscillate the lever 19 and raise or 95 lower the bearing slide 13. Fixed upon the spindle 4 in the open portion of the slide 13 between the bearings 11, 12 is a pulley 29 to receive a driving belt or band 30.

As above stated, the frame 1 may be of 100 any suitable form and construction, but when the invention is to be used in connection with my improved wheelwright machine set forth in my patent application above referred to, I preferably make it, as illustrated, 105 of suitably connected upper side bars 31 which support the table 2 and which are supported at one end by uprights 32 and are connected at their other ends by straps 33 to side pieces 34, 35 of an upright frame. The side piece 35 has suitably journaled upon its 110 extended upper portion a main drive shaft 36

having a driving belt wheel 37. Journaled in bearings 38, 39 upon the frame 1 is a vertical shaft 40, the upper end of which carries a pulley which is connected by a crossed belt 41 to a pulley upon one end of the shaft 36; and upon the lower portion of said vertical shaft 40 is a pulley or wheel around which the belt 30 passes. The pulley 29 is comparatively wide and the slidable bearing 12 has very little longitudinal movement so that there will be no likelihood of the belt 30 being pulled off of the driving wheel on the shaft 40 when the cutter is adjusted.

In operation, it will be seen that when the main drive shaft 36 is rotated, its motion will be imparted through the belt 41, the shaft 40 and the belt 30 to the spindle 4. The latter rotates the cutter head and the work to be shaped rests upon the table 2 and is shoved up against said head. Owing to the manner of mounting and adjusting the spindle 4, it will be seen that the machine may be adapted for planing and shaping various kinds of work.

Having thus described my invention what I claim is:

1. In a machine of the character described, the combination of a support including a post, a table thereon, a stationary bearing, a slide upon said post and provided with spaced bearings, a cutter carrying spindle mounted for rotation in the bearings on the slide and for both rotary and sliding movement in the stationary bearing, a driving element fixed to the spindle between the spaced bearings on the slide, whereby the spindle will move with the slide, a yoke-shaped lever surrounding the post and having its arms pivoted intermediate their ends to the opposite faces of the post and pivoted at their ends to the slide, and means for adjusting said lever.

2. In a machine of the character described, the combination of a support including a post, a table thereon, a stationary bearing, a slide upon said post and provided with spaced bearings, a cutter carrying spindle mounted for rotation in the bearings on the slide and for both rotary and sliding movement in the stationary bearing, a driving element fixed to the spindle between the spaced bearings on the slide, whereby the spindle will move with the slide, a yoke-shaped lever surrounding the post and having its arms pivoted intermediate their ends to the opposite faces of the post and pivoted at their ends to the slide, and a screw for adjusting said lever.

3. In a machine of the character described,

the combination of a support including a post, a table thereon, a stationary bearing, a slide upon said post and provided with spaced bearings, a cutter carrying spindle mounted for rotation in the bearings on the slide and for both rotary and sliding movement in the stationary bearing, a driving element fixed to the spindle between the spaced bearings on the slide, whereby the spindle will move with the slide, a yoke-shaped lever surrounding the post and having its arms pivoted intermediate their ends to the opposite faces of the post and pivoted at their ends to the slide, means for operating said lever and means for clamping said slide in an adjusted position.

4. In a machine of the character described, the combination of a support having a post, a work table upon the support, a stationary bearing, a slide arranged upon the post and formed with slots, guiding and clamping bolts in the post and the slots in the slide, spaced bearings upon the slide, a cutter carrying spindle mounted for rotary and sliding movement in the stationary bearing and for rotary movement in the bearings on the slide, a driving pulley or element fixed to the spindle between the bearings on the slide, whereby the spindle will move with the latter, a yoke-shaped lever to surround the post and having its arms pivoted intermediate their ends to the post and at their extremities to the opposite sides of the slide, the closed end of the lever being formed with an opening, a rod swiveled in said opening and having a crank handle at one end and a screw threaded portion at its other, and a stationary nut to receive said screw threaded portion of the rod.

5. In a machine of the character described, the combination of a support, a table thereon, a stationary bearing, a slide arranged on the post and formed with vertically extending slots and with spaced bearings, guiding and clamping bolts in the support and the slots of said slide, a cutter carrying spindle mounted for rotary and sliding movement in the stationary bearing and for rotary movement in the bearings on the slide, a driving element fixed to the spindle between the bearings on the slide, whereby the spindle will move with the latter and means for adjusting said slide.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JUNL G. STOEN.

Witnesses:

O. H. LUNDQUIST,
H. E. BRAUM.