

(No. Model.)

E. A. ROWLEY.

MACHINE TABLE.

No. 262,323.

Patented Aug. 8, 1882.

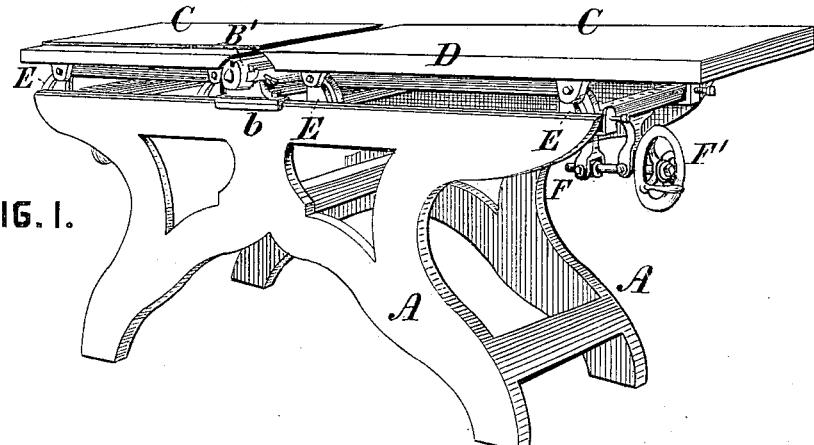


FIG. 1.

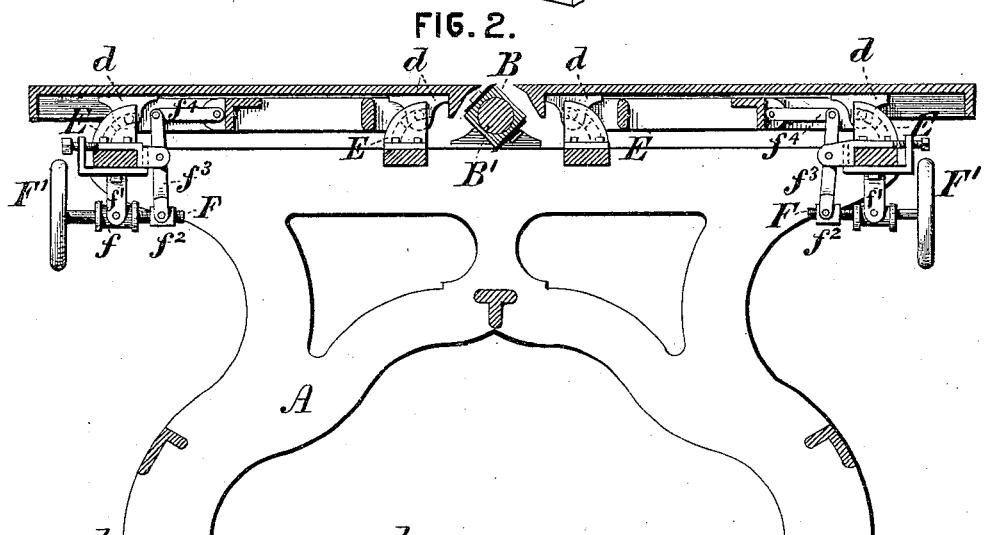


FIG. 2.

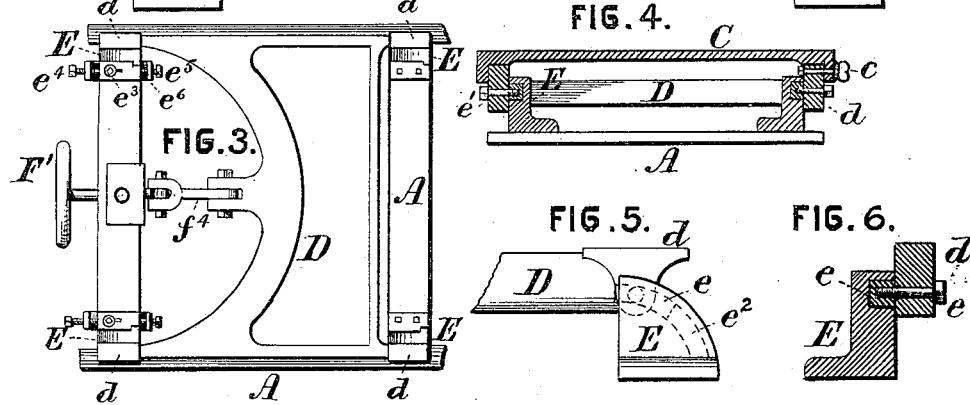


FIG. 3.

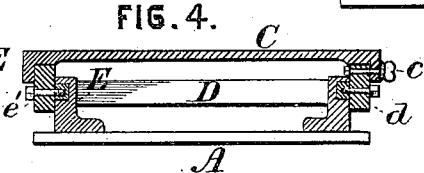


FIG. 4.

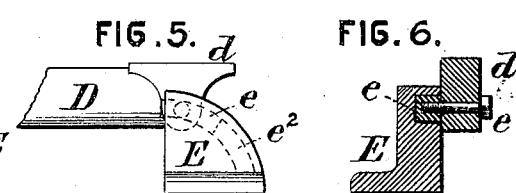
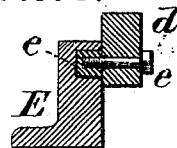


FIG. 5.

FIG. 6.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWIN A. ROWLEY, OF WILLIAMSPORT, PENNSYLVANIA, ASSIGNOR TO
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MACHINE-TABLE.

SPECIFICATION forming part of Letters Patent No. 262,323, dated August 8, 1882.

Application filed June 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWIN A. ROWLEY, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain 5 new and useful Improvements in Hand Planers or Jointers, of which improvements the following is a specification.

The object of my invention is to enable the tables of a hand-planer to be raised and lowered 10 equally at all points, so as to insure their true horizontality in any position in which they may be adjusted relatively to the cutter-head.

To this end my improvements consist in the combination of a fixed frame having four segmental guides, a movable yoke provided with blocks fitting in said guides, and a table supported upon said yoke; also, in the combination of a fixed frame, four segmental guides, a movable yoke, and an adjusting-screw and 15 links connected to the yoke; also, in the combination of a fixed frame, four segmental guides, and means for independently adjusting said guides relatively to the frame. The improvements claimed are hereinafter more fully set 20 forth.

In the accompanying drawings, Figure 1 is a view in perspective of a hand-planer embodying my invention; Fig. 2, a vertical longitudinal section through the same; Fig. 3, a plan 25 or top view of one of the movable yokes; Fig. 4, a transverse section through one of the tables and a pair of the segmental guides; Fig. 5, a side view, in elevation, of one of the guides; and Fig. 6, a transverse section through the same.

The frame A of the machine is composed of 30 two vertical standards united by upper and lower cross-bars cast in one piece with the standards, and supports centrally upon its top the bearings b of a transverse shaft, B, upon 35 which the cutter-head B' is secured. The tables C, over which the stock is passed to and from the cutter-head, are each supported on four lugs, d, which are faced off truly at top, and are formed at the corners of a yoke or frame, 40 D, each table being secured to one of the lugs of its yoke by a set-screw, e, passing through a slot in the table, so that the latter may be 45 adjusted toward and from the cutter-head, as may from time to time be required. Each of the

lugs d of the yokes is secured by a bolt, e', to a 50 curved block or die, e, fitting in a segmental guide-slot, e², formed in a guide, E, secured to one of the upper cross-bars of the frame A, adjacent to one of the lugs d, the vertical movements of the yokes and the tables which they 55 carry, which are effected as presently to be described, being thus simultaneously and similarly governed at each of their four corners. Two of the guides E of each yoke are adjustable longitudinally upon the frame for the purpose of enabling the tables to be leveled by raising or lowering their corners, such adjustment being effected by means of bolts e³ passing through slotted holes in the guides and securing them to the frame, and by set-screws e⁴ e⁵ 60 bearing against the ends of the guides and engaging threads in lugs e⁶, cast upon or bolted to the frame, and tongued or fitted between ribs to prevent lateral motion. The yokes D and the attached tables C are moved vertically, as required, to raise and lower the working-surfaces of the tables relatively to the cutter-head by adjusting-screws F, which are rotated by hand-wheels F' in bearings f, pivoted to hangers f', secured to the outer upper cross-bars of the frame 75 A. The screws F engage nuts f², pivoted to the lower ends of double-armed levers f³, which are pivoted intermediately to the upper frame cross-bars, and connected at their upper ends to links f⁴, which are in turn pivoted to the 80 yokes D.

It will be seen that by reason of the segmental guides E in the vertical movements of the yokes and tables imparted by the rotation of the adjusting-screws the horizontality 85 of the tables is preserved in all changes of position, as, being uniformly guided in curvilinear paths of similar radius at each of their four corners, they are necessarily raised and lowered equally throughout. Further, the separate adjustment of the guides relatively to the frame enables independent adjustment of the level of the tables relatively to the cutter-head to be 90 readily made.

I claim as my invention and desire to secure 95 by Letters Patent—

1. The combination, substantially as set forth, of a fixed frame having four segmental

guides upon its top, a movable yoke connected to blocks fitting in said guides, and a table supported upon said yoke.

2. The combination, substantially as set forth, of a table supported at each of its corners by a block fitting a segmental guide secured to a fixed frame, and mechanism by which the blocks are moved simultaneously in the guides.

3. The combination, substantially as set forth, of a fixed frame, segmental guides secured thereto, a yoke connected to blocks fit-

ting the guides, and an adjusting-screw rotat-
ing in a bearing on the frame and engaging
a nut pivoted to a lever connected to the yoke.

4. The combination, substantially as set forth, of a fixed frame, segmental guides se-
cured thereto, and a device for independently
adjusting the guides upon the frame.

EDWIN A. ROWLEY.

Witnesses:

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