No. 788,436. PATENTED APR. 25, 1905.

L. R. SLEVIN.

PLANING OR MITERING TABLE.

APPLICATION FILED FEB. 5, 1904.

FIG. I

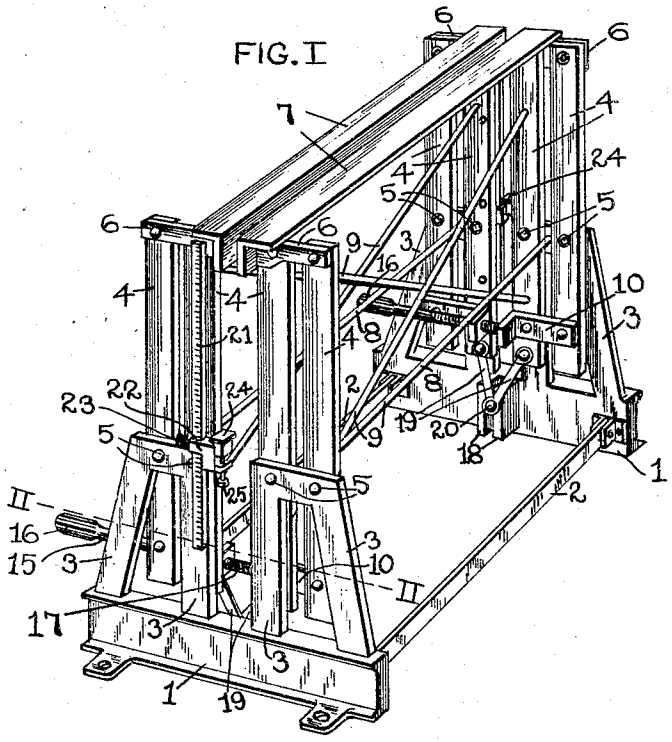


FIG. II

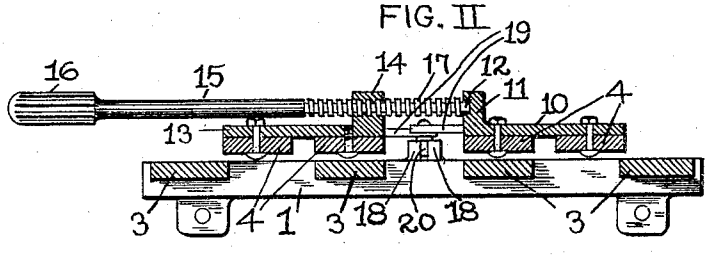
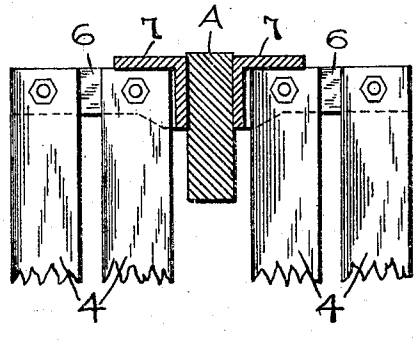


FIG. III



ATTEST.

H. J. Fletcher.

M. P. Smith.

INVENTOR.

LOUIS R. SLEVIN.

BY. Wright Brothers

ATTY'S

No. 788,436. Patented April 25, 1905

UNITED STATES PATENT OFFICE.

LOUIS R. SLEVIN, OF ST. LOUIS, MISSOURI.

PLANING OR MITERING TABLE.

SPECIFICATION forming part of Letters Patent No. 788,436, dated April 25, 1905.

Application filed February 5, 1904. Serial No. 192,116.

To all whom it may concern:

Be it known that I, LOUIS R. SLEVIN, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Planing or Mitering Tables, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a table for holding boards or other pieces of wood in a fixed position while being planed or mitered and for furnishing level bench-jaws on which a cutting implement operates during its action on the object held by the table.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a perspective view of my planing-table. Fig. II is an enlarged horizontal section taken through one end of the table on line II II, Fig. I. Fig. III is an enlarged vertical section through the bench-jaws of the table.

1 designates a pair of end bases that are united by ties 2 and each surmounted by a pair of standards 3.

4 designates pairs of uprights that are swingingly connected intermediate of their ends to the upper ends of the standards 3 by pivot-bolts 5. The upper ends of each pair of uprights 4 are pivotally and swingingly united by cross-ties 6, secured thereto.

7 designates a pair of bench-jaws, one of which is secured to the upper ends of the uprights 4 at one side of the planing or mitering table and the other of which is secured to the uprights at the other side of said table. The bench-jaws 7 have absolutely plane upper faces to receive a plane or other cutting implement that is operated thereon. Each of the bench-jaws is of angle shape in cross-section, and the horizontal wing of each furnishes the plane upper surfaces, while the vertical wing of each jaw extends downwardly, whereby the two vertical wings of the jaws occupy positions parallel with each other to receive a board or other article to be operated upon placed between the jaws, as indicated at A, Fig. III.

8 designates ties connecting the standards 3, and 9 designates ties connecting the uprights 4 at one end of the table with the uprights at the other end.

The uprights 4 being pivoted to the standards 3 in pairs are arranged to partake of parallel swinging movement at each end of the table and during such movement carry therewith the bench-jaws 7, so that said jaws are maintained in approximately the same parallel dispositions with relation to each other when the uprights are swung in either direction. The swinging of the uprights is accomplished by the following means: 10 designates bracket-ties pivotally and swingingly connecting the lower ends of one pair of the uprights at each end of the table and provided with arms 11, that contain sockets 12. (See Fig. II.) 13 designates brackets secured to the other pairs of the uprights 4 opposite to the brackets 10, each of these brackets 13 being provided with an arm 14, containing a threaded aperture positioned in alinement with the sockets 12 in the bracket-arms 11. 15 designates screw-rods provided at their outer ends with handles 16 and having screw-threaded inner portions 17 that operate in the screw-threaded apertures of the bracket-arms 14 and the ends of which terminate in the bracket-arm sockets 12, in which they are loosely seated, as seen in Fig. II. When the screw-rods 15 are rotated, the screw-threaded portions thereof by operating in the threaded arms of the brackets 13 and in the sockets of the bracket-arms 11 cause movement of said bracket-arms away from each other, and as a consequence the lower ends of the uprights 4 are moved correspondingly to cause the bench-jaws at the upper ends of the uprights to approach each other to clamp the article placed between said jaws.

18 designates guides projecting from the sides of the braces 1, and 19 designates equalizing-links arranged in pairs at each end of the table and each pivoted at one end to one of the uprights 4 of each pair of up-

rights. The lower ends of these links are connected by slide-pins 20, that operate in the guides 18 when the pairs of uprights are swung in the manner mentioned. These equalizing-links by their connection to the uprights and having the riding engagement provided by the slide-pins serve to direct the movement of the uprights and maintain them in the same relative positions at all times. It will be seen that when the lower end of one pair of the uprights is swung inwardly the link 19, connected thereto, will be thrown downwardly to carry the other link in a like direction and swing the second pair of uprights in a direction corresponding to that of the first pair of uprights. When either pair of uprights is swung in the opposite directions, a reverse movement is imparted to the links and second pair of uprights.

21 designates upright scale-bars secured to the table at each end thereof.

22 designates slides loosely fitted to the scale-bars 21 and adapted to be held at any desired elevation on said bars by set-screws 23.

24 designates rest-blocks carried by the slides 22 and by which the article held between the bench-jaws 7 may be adjusted and upheld previous to being clamped between the bench-jaws to be operated upon. The rest-blocks 24 are loosely applied to the slides 22, and vertical adjustment thereof is provided through the medium of adjustment-screws 25, passing through the slides and entering into the rest-blocks. By this construction the piece of work to be operated upon—as, for instance, a piece of board—may be readily adjusted vertically to the desired position at each end of the table, so as to acquire the proper positioning thereof before the article is clamped and work is begun thereupon.

In the use of my table the article to be planed or mitered is readily and quickly clamped between the bench-jaws subsequent to its being placed therebetween and adjusted to the desired position, and the upper surfaces of the bench-jaws being absolutely plane furnish working surfaces on which the cutting implement may be operated with the greatest degree of accuracy until the face of the article upon which the operator is working is brought to the desired finish.

I claim as my invention—

1. In a planing or mitering table, the combination of a pair of bench-jaws provided with plane top surfaces, and means whereby said bench-jaws are rockingly supported to maintain their clamping-faces and top surfaces in unchanging parallel planes, substantially as set forth.

2. In a planing or mitering table, the combination of two sets of swingingly-mounted uprights, bench-jaws at the upper ends of said uprights, means for swinging said uprights to impart movement to the bench-jaws, jaw-supporting means carried by said uprights so connected thereto as to maintain the clamping and top surfaces of said jaws respectively in unchanging parallel planes, and means for maintaining said uprights in alinement with each other, substantially as set forth.

3. In a planing or mitering table, the combination of two sets of swingingly-mounted uprights arranged in pairs for parallel movement, bench-jaws at the upper ends of said uprights, means for swinging said uprights, and jaw-supporting means carried by said uprights so connected thereto as to maintain the clamping and top surfaces of said jaws respectively in unchanging parallel planes, substantially as set forth.

4. In a planing or mitering table, the combination of two sets of swingingly-mounted uprights arranged in pairs, bench-jaws at the upper ends of said uprights, bearings carried by said uprights, screw-rods operating in said bearings to secure said uprights, and jaw-supporting means carried by said uprights so connected thereto as to maintain the clamping and top surfaces of said jaws respectively in unchanging parallel planes, substantially as set forth.

5. In a planing or mitering table, the combination of two sets of swingingly-mounted uprights, bench-jaws at the upper ends of said uprights, and equalizing-links for controlling said uprights, substantially as set forth.

6. In a planing or mitering table, the combination of a base, two sets of swingingly-mounted uprights pivoted to said base, bench-jaws at the upper ends of said uprights, means for swinging said uprights, equalizing-links connected to said uprights, guides projecting from said base, and slide-pins carried by said links and operating in said guides, substantially as set forth.

LOUIS R. SLEVIN.

In presence of—
NELLIE V. ALEXANDER,
E. S. KNIGHT.