(No Model.) 2 Sheets—Sheet 1.

H. J. HENDEY.

ADJUSTABLE TABLE FOR SHAPING MACHINES.

No. 305,922. Patented Sept. 30, 1884.

Fig. 1.

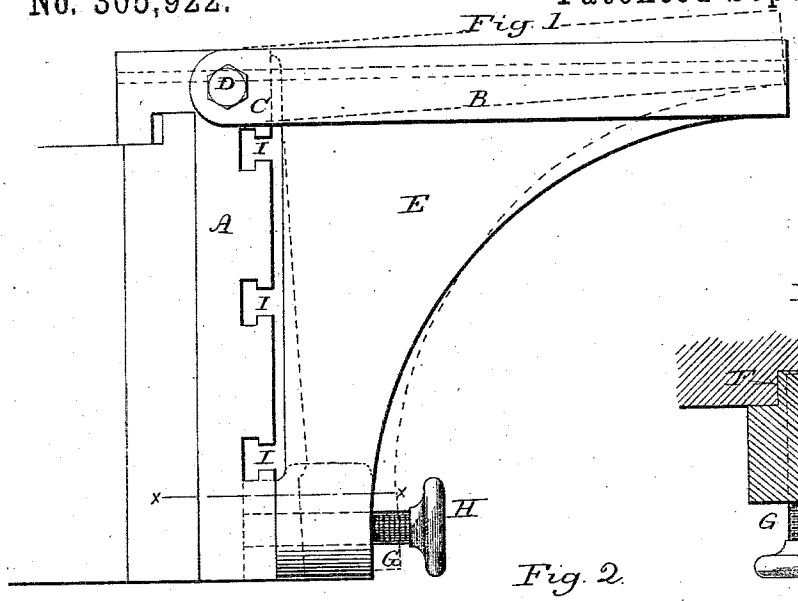


Fig. 3.

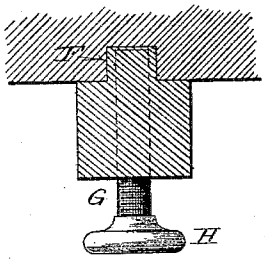
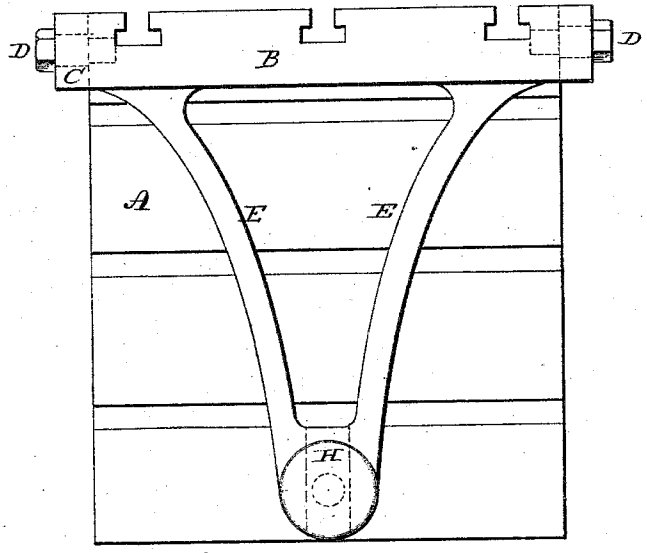


Fig. 2.



Witnesses,
J. R. Chumway
Geo. C. Curtis

Henry J. Hendey
Inventor
By Atty's
Wm. D. Earle

N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 4

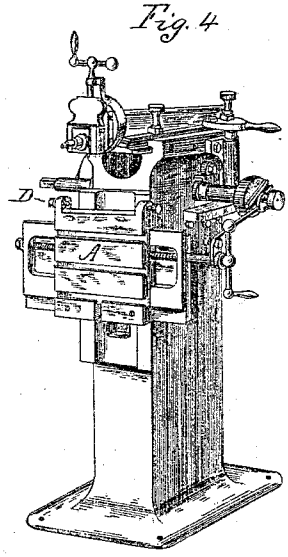
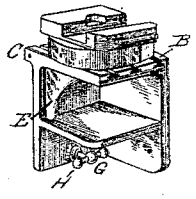


Fig 5



Witnesses
L. D. Kelsey
Emil Kerten

Henry J. Hendey
Inventor
By Atty
Wm. C. Ewald.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY J. HENDEY, OF TORRINGTON, CONNECTICUT.

ADJUSTABLE TABLE FOR SHAPING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 305,922, dated September 30, 1884.

Application filed January 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY J. HENDEY, of Torrington, in the county of Litchfield and State of Connecticut, have invented new Improvements in Adjustable Table for Shaping-Machines; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a front view; Fig. 3, a transverse section through line *x x*, looking down; Fig. 4, a perspective view of the shaping-machine, the vertical work-plate constructed to receive the adjustable table, the table removed; Fig. 5, a perspective view of the adjustable table, having a work-holder applied.

This invention relates to an improvement in the work-holding plate or table for that class of metal-working machines commonly called "shaping-machines," applicable to other metal-working machines which employ a horizontal work-holding table, and which table is made adjustable in guides up and down and to the right and left with relation to the tool, the holder carrying the tool having a reciprocating movement imparted to it to operate upon the work secured to the table. In Fig. 4 I illustrate such a shaping-machine. The work-holding plate is arranged upon horizontal guides, and the horizontal guides on vertical guides, so that the work-plate may be adjusted to the right and left or up and down with relation to the tool. The tool-holding head is arranged upon a longitudinal carriage to which a back-and-forth reciprocating movement is imparted. This construction of machine is too well known to require more than illustration, in view of the fact that my improvement relates only to the work-table. As shown in Fig. 4, the work-plate presents simply a vertical surface. In some cases the work-plate has a horizontal table extending from it, presenting a surface to hold the work parallel with the patn of the cutter. It frequently occurs that the surface to be operated upon by the tool is inclined to the opposite surface of the piece to be wrought. To hold such an article, the usual practice has been to build up between the table and the article until the surface to be worked upon shall come to a horizontal plane parallel with the path of the moving tool. Such building up upon the table serves a very good purpose; but it requires time and experience to properly locate and secure the article.

The object of my invention is to construct the work-table so that it may be adjustable to any desirable inclination with relation to the moving tool.

To this end my invention consists in hinging to the vertical work-plate a removable auxiliary work-table, the point of hinging being at the inner end of the auxiliary work-table, the auxiliary table having an extension of a brace-like character downward and rearward, with an adjusting-screw in the foot, arranged to take its bearing upon the vertical work-plate, and so that by turning the screw the table may be set at any desired angle with relation to the path of the moving tool, the table turning upon its hinges as its center of motion, as more fully hereinafter described.

A represents the vertical work-plate, arranged upon horizontal guides, and adjustable thereon in a path at right angles to the path of the moving tool, the horizontal guides carrying the work-plate arranged on vertical guides, so as to be vertically adjustable toward or from the tool, in the usual manner for this class of machines.

B is the auxiliary work-table, made separate from the work-plate A. At the rear or inner end the table is constructed with ears or lugs C, and by which, by means of screws D, the work-table is hinged to the vertical plate, as seen in Fig. 1, the screws forming pivots upon which the work-table may turn as a center of motion. From the under side of the table a downward extension, E, of a brace-like character is made. On the rear side of this downward extension is a vertical rib, F, which fits into a corresponding groove in the vertical plate A, and so that when the foot of the downward extension or brace rests against the vertical plate A and the rib F in its groove the table stands firm, and substantially as does the horizontal work-table when made a permanent or inadjustable part of the vertical

work-plate, as in the usual construction. Through the foot of the downward extension E a screw, G, is introduced, and so as to take a bearing on the vertical plate A. It is provided at its outer end with a suitable hand wheel or head, H, by which it may be conveniently turned. Suppose it be desired to work an inclined surface. Turn the screw G inward, which will force the foot of the downward extension E outward, and correspondingly raise the front of the auxiliary table, as seen in broken lines, Fig. 1, until the required inclination is attained. The screw forms a sufficient bearing for the brace, and so that the auxiliary work-table will be held by its pivots strong and firm for the performance of the work. By thus constructing the auxiliary work-table it may be adjusted after the work is secured to it, or its inclination changed any time during the work, and without the necessary removal or change of position of the work upon the table. At the same time, if the table be required horizontal and in a plane parallel with the path of the tool, the adjusting-screw is turned to bring the table to that position, and then it works the same as in the common fixed horizontal table. When the vertical work-plate is required, the auxiliary table is easily removed by withdrawing the screws D, the face of the plate being provided with the usual T-shaped grooves, I. The surface of the auxiliary table is also provided with similar grooves.

I claim—

1. The herein-described improvement in shaping-machines, consisting in the combination therewith of the vertical work-plate A, the auxiliary work-table B, removably hinged to said vertical plate A, and constructed with a downward extension over the front of the vertical plate, with an adjusting-screw, G, at the foot of the extension, substantially as described, and whereby said auxiliary work-table may be turned upon its hinge and set at different angles with relation to the path of the tool.

2. The combination, in a shaping-machine, of the vertical work-plate A, the auxiliary work-table B, hinged thereto, said table constructed with a downward extension, E, over the front of the vertical work-plate, the lower end of said extension provided with a vertical rib, F, and the vertical work-plate with a corresponding groove to receive said rib F, and the adjusting device, substantially such as described, to turn said auxiliary table upon its hinge to set it at different angles to the path of the tool.

HENRY J. HENDEY.

Witnesses:

ISAAC W. BROOKS,

CHAS. L. MCNEIL.