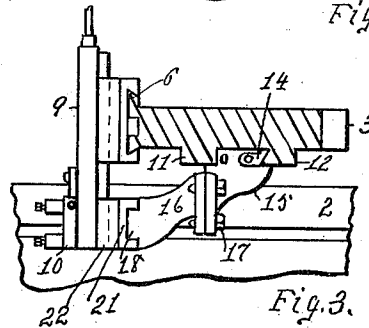
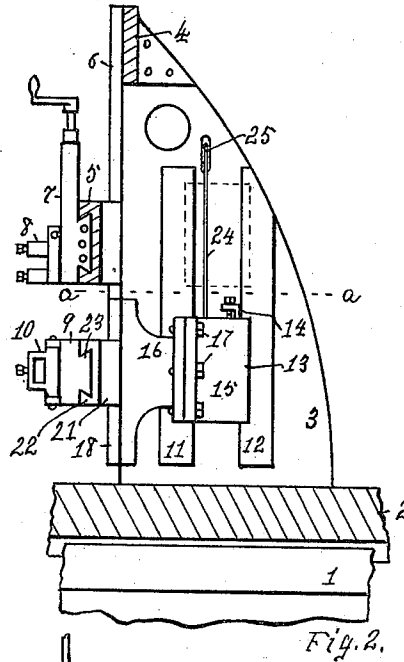
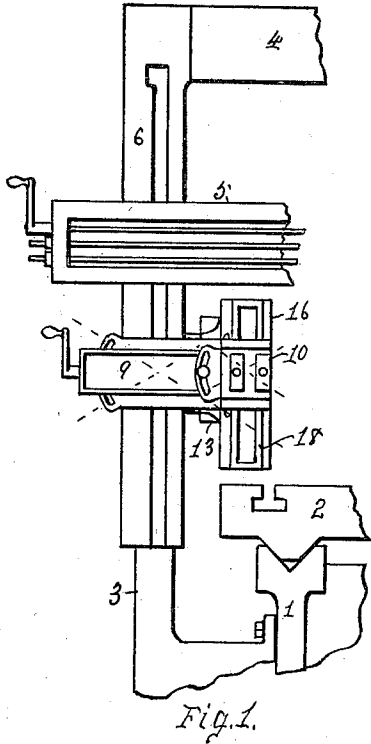


G. LANGEN & C. MEIER.
METAL WORKING PLANER.
APPLICATION FILED OCT. 30, 1908.

1,029,875.

Patented June 18, 1912.



Witnesses,

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UNITED STATES PATENT OFFICE.

GEORGE LANGEN AND CHARLES MEIER, OF CINCINNATI, OHIO, ASSIGNORS TO THE
CINCINNATI PLANER COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

METAL-WORKING PLANER.

1,029,875.

Specification of Letters Patent.

Patented June 18, 1912.

Application filed October 30, 1908. Serial No. 460,314.

To all whom it may concern:

Be it known that we, GEORGE LANGEN and CHARLES MEIER, citizens of the United States, residing at Cincinnati, Ohio, have invented new and useful Improvements in Metal-Working Planers, of which the following is a specification.

Our invention relates to metal working planers of the class adapted to use on wide articles, and the objects of our improvements are to provide means for adapting wide planers for use in planing the edges of narrow articles; to provide vertically adjustable brackets for supporting the inner ends of the side heads; to make the brackets removable from interference with the cross rail; to provide counter-balancing weights for the brackets to facilitate their vertical adjustment; to provide means for adjusting the side heads on the brackets vertically and in different vertical angles, and to provide simple and durable construction and assembly of parts for obtaining increased range of duty, facility of operation, and efficiency of action. These objects are attained in the following described manner as illustrated in the accompanying drawings, in which:—

Figure 1 is a front elevation of parts of a metal working planer embodying our improvements; Fig. 2, a longitudinal section with parts broken away, and Fig. 3, a plan of one of the side heads and bracket with parts in section on the line *a—*a** of Fig. 2.

In the drawings, 1 represents the bed of a metal working planer, 2 the table slidably mounted thereon, 3 one side of the housing secured to the bed, 4 the arch connecting the opposite sides of the housing together, 5 the cross rail vertically adjustable on the faces 6 of the housing, 7 one of the heads provided with a tool holder 8 and adjustably secured on the cross rail, and 9 one of the said heads provided with a hinged tool holder 10 and adjustably secured on the corresponding face 6 of the housing, all being constructed and arranged in the ordinary manner.

The inner walls of the housing are each provided with vertical guide plates 11 and 12 whereon the corresponding brackets 13 are adjustably secured by means of a taper gib 14. Said brackets are each formed of a base member 15 and a projecting member 16 which may be removably secured thereto by

means of cap screws 17. Members 16 are converged in a forward direction and each terminates in a vertical guide face 18 in the plane of the faces 6 of the housing.

Shoes 21 adjustably secured in the usual manner on the respective guide faces are each provided with a rotatively adjustable member 22 which is formed with a V-groove 23 wherein the corresponding side head may be slidably secured and at different vertical angles.

Counterbalancing weights (not shown) are connected to the brackets by means of cables 24 which are supported on sheaves 25 journaled near the top of the housing. Said weights serve to facilitate the vertical adjustment of the brackets and to maintain the members 15 in an elevated position as shown by dotted lines in Fig. 2, from interference with articles on the bed when the projecting members are removed from interference with the adjustment of the cross rail.

The heads and the side heads if desired may be each provided with the ordinary power feeding mechanism (not shown).

In operation, when the side heads are adjusted toward the center of the housing for planing the edges of narrow articles, the brackets secured in proper vertical adjustment serve as abutments for the inner end portions of said heads to keep them from springing, chattering or straining their connections with the faces of the housing and for resisting the thrust on the cutting tools during action. For planing wide articles, the projecting members of the brackets may be removed and the base members moved and maintained by means of the weights in elevated position from danger of contact with articles on the table.

Having fully described our improvements, what we claim as our invention and desire to secure by Letters Patent of the United States is:—

1. In a metal working planer the combination of a housing formed with a vertical guide on its face, an inwardly projecting bracket adjustably secured thereto and terminating in a vertical guide in the plane of the former guide, similar swiveled saddles slidably mounted on the respective guides, and a side head slidably supported on the saddles.

2. In a metal working planer the combination of a housing, a side head adjustable on the face thereof, an inwardly projecting bracket adapted to be secured in different
5 positions of vertical adjustment on the housing, said bracket terminating in a vertical guide face, and a saddle slidably mounted on said guide face and movably engaging with

the side head for resisting the working thrust thereon.

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Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."