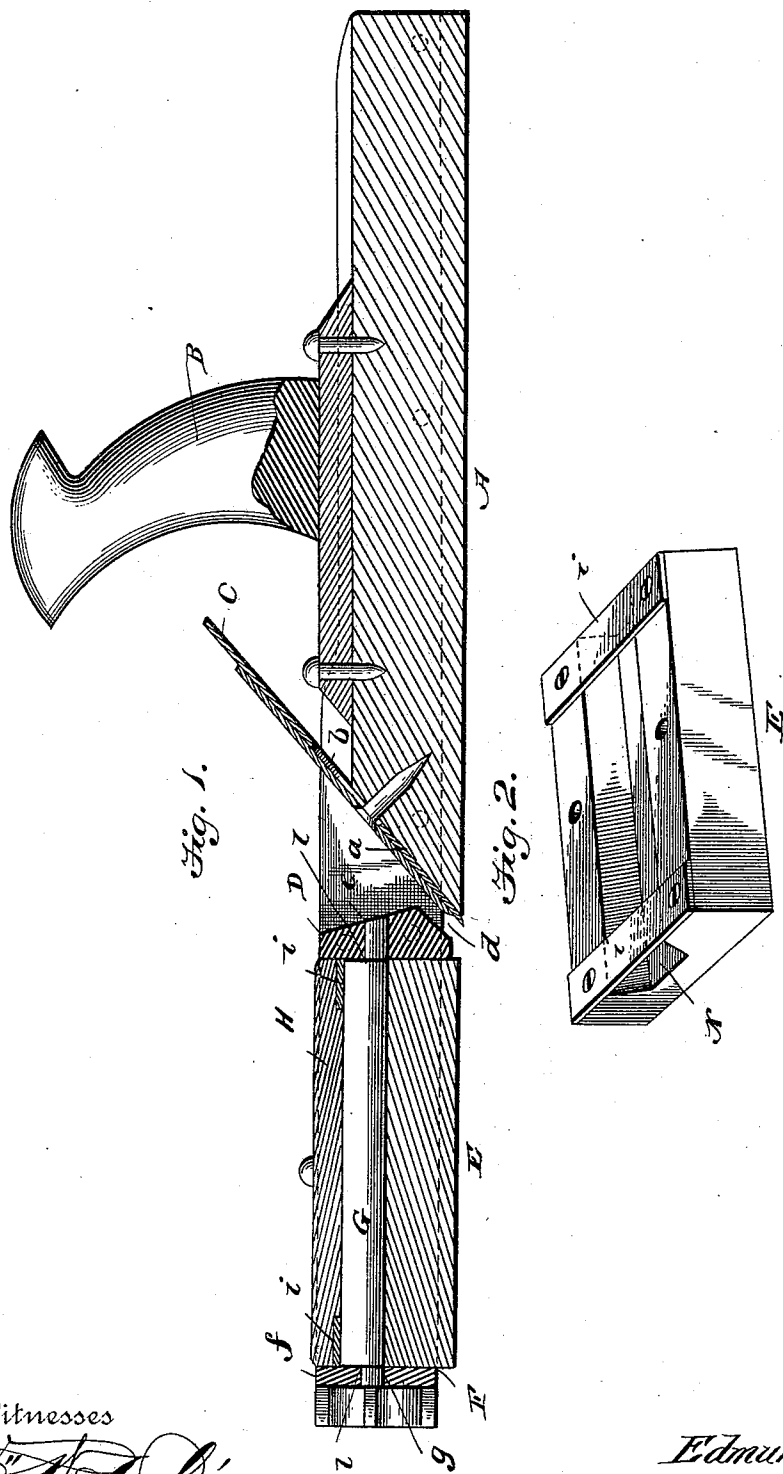


(No Model.)

E. P. HANN.
PLANE.

No. 426,806.

Patented Apr. 29, 1890.



Witnesses

James Sheehy
D. E. Dwyer

Inventor

Edmund P. Hann.

By his Attorney

James Sheehy

UNITED STATES PATENT OFFICE.

EDMUND P. HANN, OF PORTLAND, INDIANA, ASSIGNOR OF ONE-HALF TO
WILLIAM S. BAKER, OF SAME PLACE.

PLANE.

SPECIFICATION forming part of Letters Patent No. 426,806, dated April 29, 1890.

Application filed December 14, 1889. Serial No. 333,744. (No model.)

To all whom it may concern:

Be it known that I, EDMUND P. HANN, a citizen of the United States, residing at Portland, in the county of Jay and State of Indiana, have
5 invented certain new and useful Improvements in Planes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to
10 make and use the same.

This invention has relation to an improvement in planes; and it has for its object to provide means whereby the cut may be regulated without moving the bit and without the
15 employment of springs and levers or other like objectionable devices.

The invention will be fully understood from the following description and claims, when taken in connection with the annexed drawings, in which—

Figure 1 is a longitudinal sectional view of a plane constructed according to my invention, and Fig. 2 is a perspective view of the follower removed from the stock.

25 Referring to said drawings by letter, A indicates the stock, which may be mainly of any ordinary or approved construction and provided with a suitable handle B. The forward portion of the stock and in advance of the throat thereof is provided with a chamber,
30 which is inclosed by the longitudinal side plates or walls of the stock, and also the forward transverse wall thereof. The body of the stock is provided at its forward end with
35 a beveled seat *a* to seat the bit and the iron for securing the same in position.

The bit C is provided with the usual elongated slot *b* for adjusting the same; but, as will presently appear, such slot is only needed
40 at first placing the bit after it has been removed for repairs or the replacement of a new one.

Secured transversely in advance of the throat *d* and to the side walls of the stock is
45 a cross bar or block D, which is provided with an aperture *e* and serves as a bearing for one end of a cam-shaft, as will be presently explained. The forward transverse end wall *f* of the stock is also provided at a corresponding
50 point with a similar aperture *g* to receive the forward or opposite end of said cam-shaft.

E indicates what I shall denominate the "follower." This follower is provided with a truly planed engaging-face corresponding with the engaging-face of the main body of
55 the stock and is arranged in the chamber or recess F. This follower may consist of a block, as shown, having a longitudinal recess in its upper face, as N, to receive the cam-shaft G, and across the opposite ends of this
60 recess are strips *i*, which may be of metal or other suitable material. These strips are designed to furnish bearings for the cam-shaft, and the recess is preferably covered by a plate H or the like.

65 G indicates the cam-shaft. This shaft, which is designed to raise and lower the follower, has its opposite ends extended therefrom, as shown at *l*, and bear, respectively, in the aperture of the cross-bar D and the aperture
70 in the forward transverse wall of the stock. These journal ends being arranged at corresponding points and eccentrically on the opposite ends of the shaft G, it will be seen that by simply turning the shaft the follower may
75 be raised or lowered, as desired. By arranging the cam-shaft horizontally and causing it to exert its force transversely the follower can be raised or lowered evenly at all points
80 by a single cam and without having to place any objectionable lugs or other attachments on the top or bottom of the plane-stock, and it also permits of a hand-wheel or other means of rotating it being placed on the forward
85 end of the stock out of the way. The forward end of this shaft is provided with a small hand-wheel I for turning the same and manipulating the follower.

In operation it will be seen that when the bit has been set with respect to the lower face
90 of the main body of the stock and it is desirable to get a cut of less depth it is simply necessary to turn the cam-shaft by the hand-wheel until the follower has been lowered to the desired point. To increase the depth of
95 the cut the operation is simply reversed.

With a plane of this character it will be seen that there is little or no chance for lateral deviation of the cutter, as when once set it remains so, as the adjusting of the cut is per-
100 formed by the follower and the manipulating cam-shaft.

While I have described minutely the parts in the exact construction and combination as illustrated, yet I do not wish to be understood as confining myself to such, as it is obvious
5 that the object in view might be arrived at by other devices such as would suggest themselves to a skilled mechanic. It is necessary, however, that a cam and also a follower be used.

10 Having described my invention, what I claim is—

1. A plane having a practically fixed bit, in combination with a follower arranged in advance thereof and a rotatable cam-shaft
15 having its axis arranged horizontally and exerting its pressure transversely thereto for raising and lowering said follower, substantially as specified.

2. The combination, with a stock having a

chamber in advance of the throat, a cam-shaft 20 journaled therein and adapted to exert pressure transversely to its axis of rotation, and carrying a hand-wheel on one end, of a follower suspended on said shaft and adapted to be raised and lowered thereby, substan- 25 tially as specified.

3. The combination, with the stock, of the vertically-movable follower, the cam-shaft bearing in said follower, and bearings in the stock for receiving the opposite ends of the 30 shaft, substantially as specified.

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

EDMUND P. HANN.

Witnesses:

WILLIAM S. BAKER,
DAVID V. BAKER.