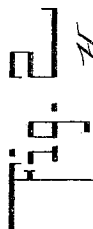
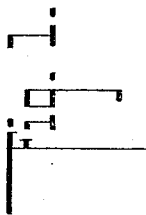


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2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

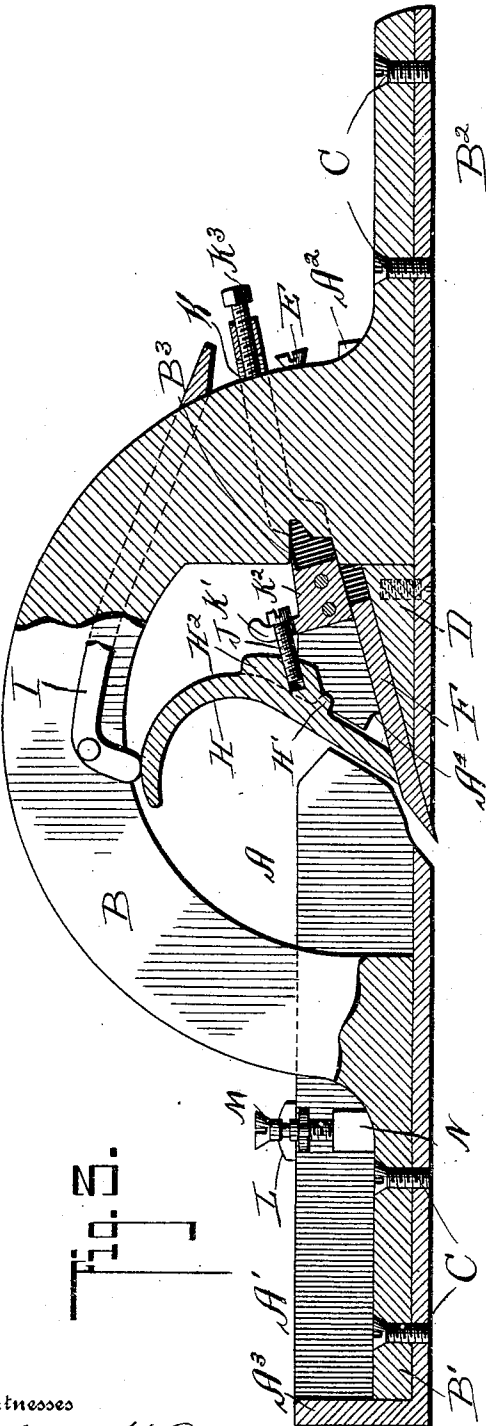


Fig. 5.

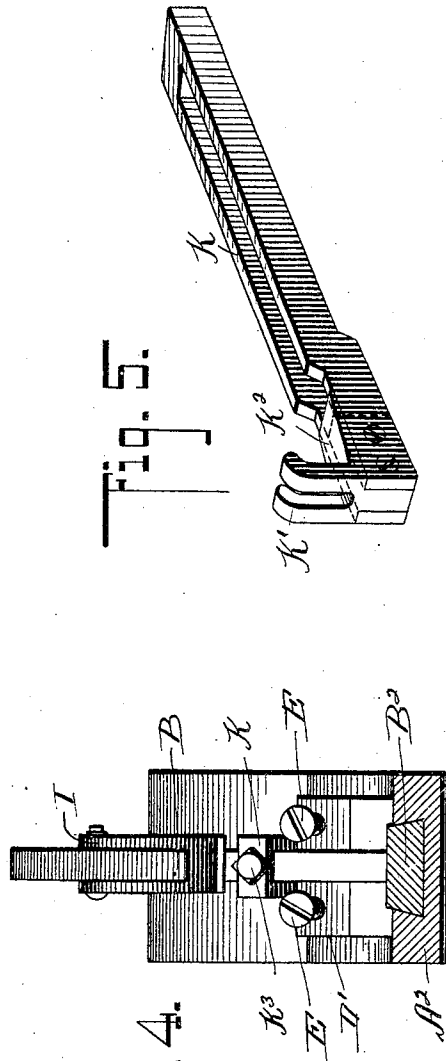


Fig. 4.

Fig. 5.

Witnesses

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RABBIT-PLANE.

932,417.

Specification of Letters Patent.

Patented Aug. 24, 1909.

Application filed October 23, 1907. Serial No. 398,826.

To all whom it may concern:

Be it known that I, FRED ALLEN SHONTZ, a citizen of the United States, residing in Eureka, in the county of Juab and State of Utah, have invented a new and useful Improvement in Rabbit-Planes, of which the following is a specification.

This invention relates to certain new and useful improvements in planes, and more particularly to rabbit planes, the object being to provide a plane which is especially adapted to take the place of the ordinary iron rabbit plane now in use.

Another object of my invention is to provide a plane which is so constructed that it will clean itself from shavings when in use, so that it can be used continuously without the user being compelled to stop at short intervals to clean the shavings from the space above the bit and from the side openings, as is the case with planes of this character now in use.

Another object of my invention is to provide a plane having a stock formed of two sections connected together by an arch forming a mouth between the sections, in such a manner that the shavings will not clog in the same.

A further object of my invention is to provide very novel means for adjusting and clamping the bit, so that it will be held firmly at each side, thereby preventing the bit from wobbling when planing hard wood.

A still further object of my invention is to provide a very novel bit clamping plate provided with a curved upper end for turning the shavings forward so that they can be easily thrown out.

Another object of my invention is to provide a clamping member for holding the clamping plate and for applying pressure to the upper part of the bit, so as to firmly hold it in place.

With these various objects in view, the invention consists in the novel features of construction, combination and arrangement of parts, hereinafter fully described and pointed out in the claims.

In the drawing forming a part of this specification:—Figure 1 is a side view of my improved plane. Fig. 2 is a top plan view of the same. Fig. 3 is a longitudinal sectional view of the plane, the handle being detached. Fig. 4 is a transverse sectional view of the plane, and Fig. 5 is a perspective view of the clamping member.

In the drawings A indicates a grooved stock formed of the sections A' A² which are provided with thickened portions on their bottom having longitudinal dove-tail grooves formed therein, in which are secured the outwardly projecting dove-tail tongues B', B², by screws C of an arch B, which connects the sections together, and hold the same in a rigid position. The side of the section A' being connected together at their forward end by an end-piece A³ and the sides of the section A² is cut away as shown. The space between the two sections forming a mouth for the stock which extends entirely through the same so that the shavings will not clog as will be hereinafter fully described.

Secured in the section A² of the stock is a frog D which is bifurcated and extends around to each side of the arch, and is provided with upwardly projecting lugs D' provided with threaded bores, in which are mounted adjusting screws E. The adjusting screws being provided with annular spaced ribs E' which are adapted to fit in the grooves F' formed in the side walls of the bifurcated arms F² of the forked upper end of the bit F, which is provided with shoulders F³ fitting in notches A⁴ formed in the edge of the sides of the section A² of the stock, and it will be seen that as the screws are turned, the bit will be drawn up and down as the case may be.

Sockets G are formed in the edges of the sides of the stock A², in which is mounted the rib H' of a clamping plate H which engages the bit and is provided with a curved upper end for throwing the shavings forward. The plate being held into the engagement with the bit by a bifurcated cam-lever I which is mounted on the arch B and engages the curved upper end, so as to force it down on the bit and securely clamp it in place. The plate H being provided with a shoulder H² on its rear side, above the ribs H', in which is secured a screw J, over which fits the bifurcated upwardly projecting lug K' of a clamping member K which is loosely mounted on the arch, and is provided with an inclined bearing portion K² adapted to fit in a notch B³ formed in the arch B for securely clamping the clamping plate and applying pressure to the bit so as to hold the same in place, the member being operated by an adjusting screw K³ which engages the edge of the arch and draws the bearing por-

tion K² into the notch which forces the bit down on the frog.

The sides of the section A' of the stock are provided with dove-tail grooves on their 5 outer faces in which are mounted dove-tail cutting knives L provided with arms L' working in slots communicating with the dove-tail grooves. The arms being provided with enlarged bifurcated ends which 10 work in annular grooves formed in adjusting screws M which are provided with threaded lower ends which are mounted in lugs N secured in the stock, and it will be seen that these knives will cut grooves, in 15 which the bit will follow, and at the same time the sides will be cut down smoothly, thereby saving a great amount of time, as with planes now in use the sides have to be cut with some other tool.

20 From the foregoing description, it will be readily understood that the bit can be readily removed or adjusted by loosening up the clamping member and clamping plate and that it will be firmly locked in adjusted position, so that it will be impossible for it to 25 move.

While I prefer to form the arch as shown, it is of course understood that it can be

formed either round or square of one piece, or of two thin arches secured together or 30 spaced apart, and of any height or length desired.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent:— 35

In a device of the kind described, the combination with a stock formed of two sections having dove-tail grooves in their upper 40 faces, of a notched arch provided with dove-tail tongues adapted to be secured within said grooves and space said sections apart to form a mouth, a frog secured in one section carrying an adjustable bit extending out 45 through the mouth, a clamping plate mounted on said section provided with a curved upper end, a cam lever engaging said end and a clamping member loosely mounted on said arch connected to said clamping plate and provided with an inclined bearing portion adapted to engage a notch formed on 50 said arch, for the purpose described.

FRED ALLEN SHONTZ.

Witnesses:

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