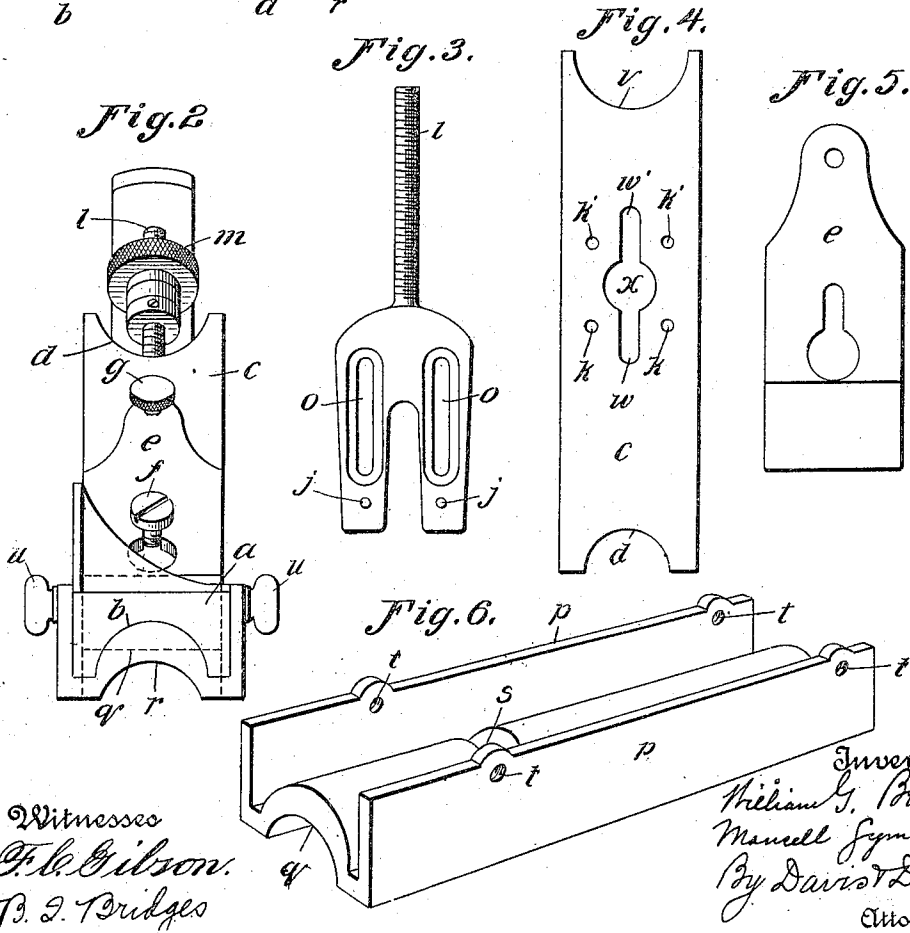
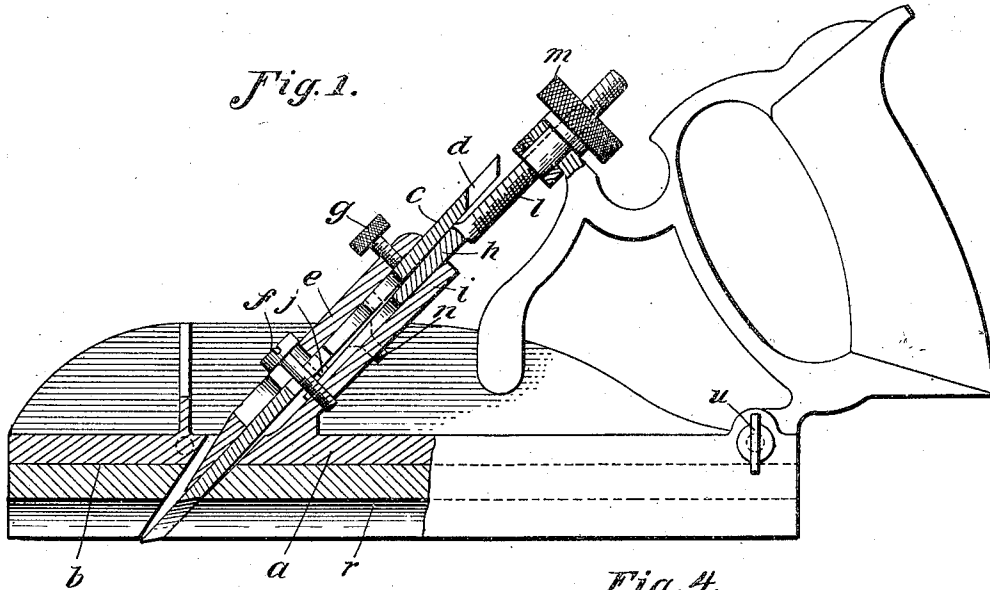


W. G. BEST & M. SYMONS.
 NOSING PLANE.
 APPLICATION FILED MAR. 18, 1912.

1,052,881.

Patented Feb. 11, 1913.



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UNITED STATES PATENT OFFICE.

WILLIAM G. BEST AND MANSELL SYMONS, OF OLYPHANT BOROUGH, PENNSYLVANIA.

NOSING-PLANE.

1,052,881.

Specification of Letters Patent.

Patented Feb. 11, 1913.

Application filed March 18, 1912. Serial No. 684,553.

To all whom it may concern:

Be it known that we, WILLIAM G. BEST and MANSELL SYMONS, citizens of the United States, and residents of Olyphant borough, county of Lackawanna, State of Pennsylvania, have invented certain new and useful Improvements in Nosing-Planes, of which the following is a full and clear specification, reference being had to the accompanying drawing, in which—

Figure 1 is a view partly in side elevation and partly in vertical section of our improved plane; Fig. 2 is a front end elevation thereof; and Figs. 3, 4, 5 and 6 detail views of parts hereinafter described.

This invention has relation to improvements upon that type of hand plane which is provided with a longitudinal channel in its working face curved in cross section and a bit having a similarly curved notch in its cutting edge, whereby the plane is adapted for planing nosings, and the object of the present improvements is to adapt the plane for working upon curved surfaces of different radii, as more fully hereinafter set forth.

In the drawing, *a* designates the body of the plane grooved longitudinally at *b* in its working face as usual. The bit *c* is provided at one end with the usual curved notch *d* which forms a curved cutting edge corresponding to the groove in the body of the plane when the bit is clamped properly in place. To clamp the bit in place we employ the usual clamp plate *e* and clamp screws *f* and *g*. The bit is adjusted up and down by means of a plate *h* which is slidingly fastened to the inclined body lug *i*, said plate *h* being provided with a pair of pins *j* near its lower end adapted to enter corresponding holes *k* in the bit, whereby when the said plate *h* is moved up and down the bit will be moved accordingly. A screw *l* and a nut *m* are employed to move the plate *h* up and down, and a pair of screws *n* threaded through slots *o* serve to clamp the plate *h* against the body lug *i* and at the same time allow the plate *h* to be adjusted longitudinally.

To adapt the plane for use on a nosing differing in curvature from the groove *b* and the cutting edge *d*, we provide a supplemental shoe illustrated in Fig. 6 and consisting of vertical side flanges *p* and a bottom plate

q having its upper face curved to fit into the groove *b* and its lower face longitudinally grooved at *r* to fit the nosing, this groove being curved in cross section, the radius of the curvature being different from that of the groove or channel *b* in the body of the plane. This shoe is provided with an inclined transverse slot *s* through which the cutting edge of the bit extends, and the side walls are provided with screw threaded openings *t* for the passage of clamp screws *u* for detachably attaching this shoe to the main body of the plane.

The bit is provided at the end opposite the cutting edge *d* with a cutting edge *v* curved to correspond with the curvature of the channel *r*, and the bit is made reversible end for end so that either cutting edge may be brought into requisition.

In order that the clamping and adjusting devices of the bit may operate as well with one end of the bit in use as with the other, the holes *k*, *k* are duplicated at *k'* and the slot *w* through which the screw *f* extends is duplicated at *w'*, these two slots *w* and *w'* being connected by an enlarged opening *x* for the passage of the head of the screw *f* when the bit is removed or put in position.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent, is—

In combination with a nosing plane having in its working face a longitudinal groove curved in cross section, a detachable shoe for said working face having a longitudinal groove in its own working face, said groove being curved in cross section and having a different curvature from the groove in the plane body, said shoe being convex on its upper side to adapt it to fit within the groove in the plane body, the shoe and the plane body being provided with registering bit openings, and means for detachably attaching said shoe to the plane body, whereby bit cutting edges of different curvatures may be interchangeably employed.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses this 8th day of March 1912.

WILLIAM G. BEST.
MANSELL SYMONS

Witnesses:

HARRY NEEDLE,
JOSEPH BEST.