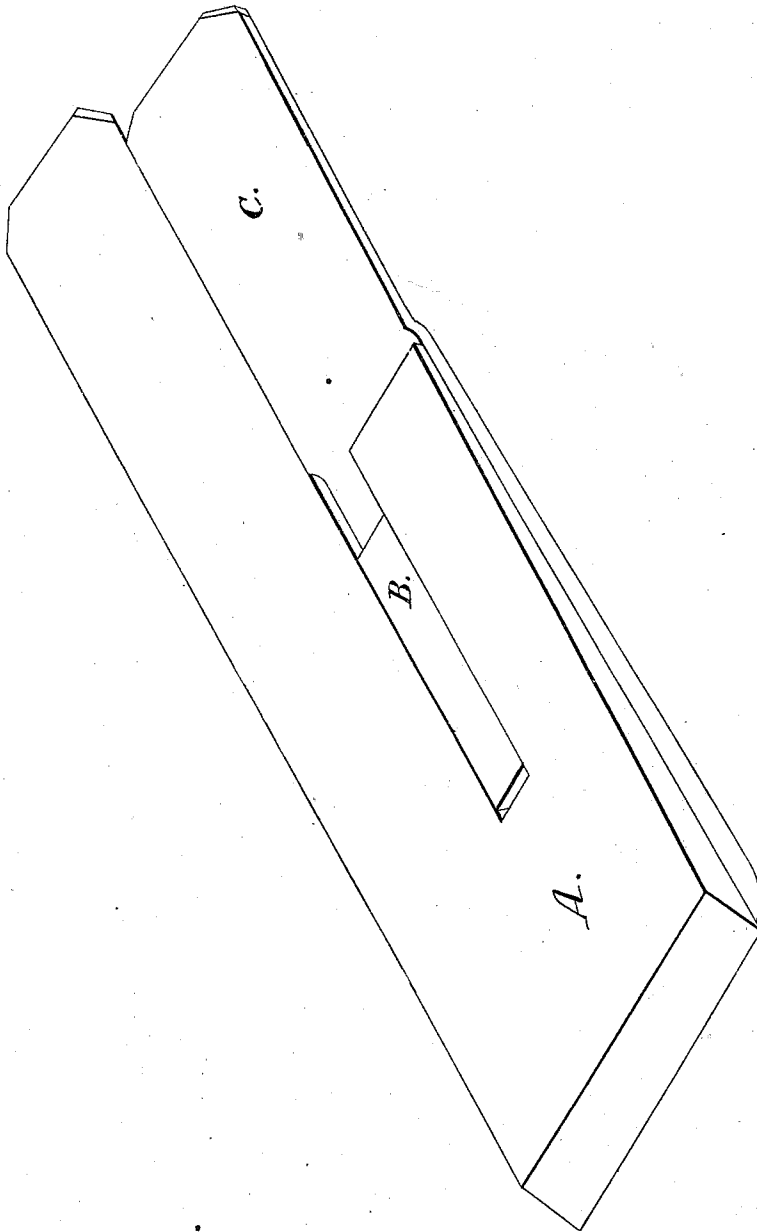


*F. Beals,*  
*Bench Plane.*

*No. 8276.*

*Patented Mar. 16, 1852.*



# UNITED STATES PATENT OFFICE.

FORDYCE BEALS, OF PITTSFIELD, MASSACHUSETTS.

## DOUBLE-PLANE IRON.

Specification of Letters Patent No. 8,796, dated March 16, 1852.

*To all whom it may concern:*

Be it known that I, FORDYCE BEALS, of  
Pittsfield, in the county of Berkshire, in the  
State of Massachusetts, have invented new  
5 and useful Improvements in Double-Plane  
Irons; and I do hereby declare that the fol-  
lowing is a full, clear, and exact description  
of the construction and operation thereof,  
reference being had to the accompanying  
10 drawings, and to the letters of reference  
thereon, it being a part of this specification,  
in which—

A is the iron, C a section of the cap, and  
B a dovetail slide or projection of cap.

15 The nature of my invention consists in  
an improved arrangement for connecting  
and adjusting the cap to the iron.

To enable others skilled in the art to  
make and use my invention I will proceed  
20 to describe its construction and operation.

I construct my plane irons of any desired  
width, thickness, or form, with the follow-  
ing exceptions: In the place of a screw bolt  
as now used I substitute a dovetail slide  
25 formed by an oblong projection with beveled  
edges, either forged, screwed, or riveted or  
fastened in some feasible way to inside of  
cap, as shown at B in accompanying draw-  
ings, this projection being placed in the slot  
30 made in iron, as shown at B, of correspond-  
ing width, and edges of corresponding angle  
or bevel brings the cap with ease and ac-  
curacy to a parallel position with iron and  
obviates the necessity of a bolthead or pro-  
35 jection of any kind on the back side of iron.

Also my improvement consists in an elon-

gation of a portion of the cap to the length  
or to nearly the length of the iron, the  
elongation being wholly upon one edge and  
nearly half the entire width, as shown at 40  
C in drawing. To make this arrangement  
convenient I remove a portion of the iron  
from the slot upward (the iron being in a  
working position) the entire thickness and  
45 one half or near one half its width, thus  
giving place for the elongated part of cap  
as shown at C.

I disclaim all contrivances, arrangements,  
or forms of cap or iron which together com-  
pose a double iron now in general use. 50

What I claim as my invention and desire  
to secure by Letters Patent is—

The new and improved mode of fastening  
and adjusting the cap to the iron by means  
of a projection and slot forming a dovetail 55  
slide giving new facilities for the operation;  
and also a level surface to the back of the  
iron; also the elongation of part of the  
width of the cap and its occupying the  
place of a removed part of iron, giving the 60  
operator new facilities in nicely adjusting  
cap to edge of iron without removing it  
from the stack, the same as herein described  
using for the purpose the aforesaid arrange-  
ments of parts or any other substantially the 65  
same and which will produce the same  
effects in like manner.

FORDYCE BEALS.

Witnesses:

JULIUS ROCKWELL,  
JAMES D. COLTER.