

A. K. HALL.

PLANES FOR MAKING EXCELSIOR.

No. 174,234.

Patented Feb. 29, 1876.

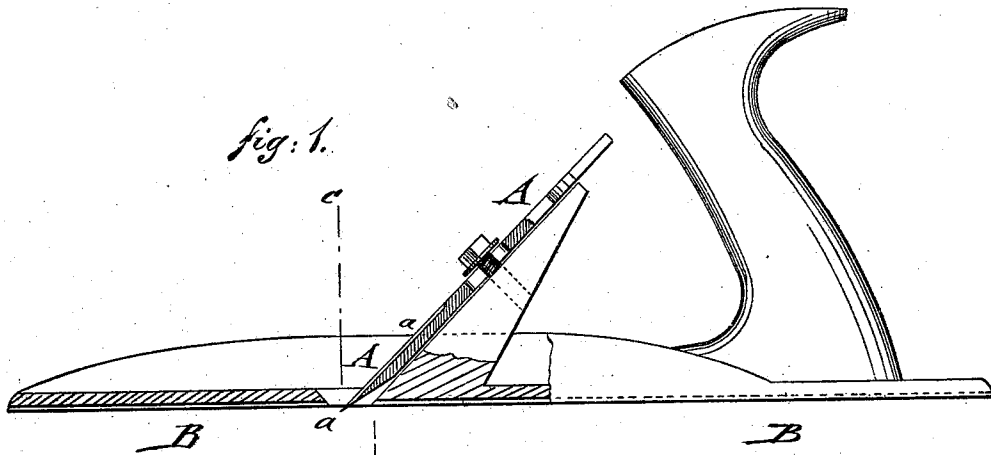
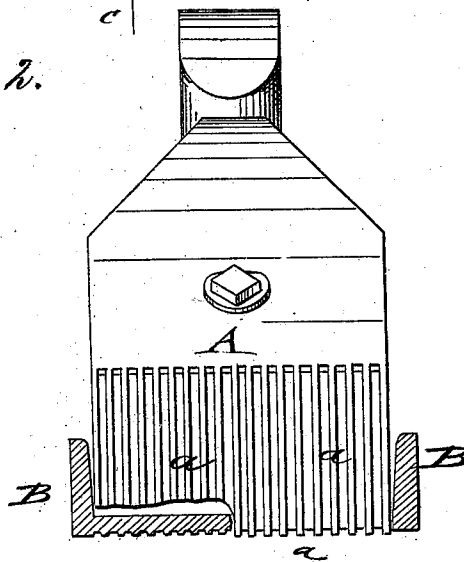


fig. 2.



WITNESSES:

Chas. Nida
Alex F. Roberts

INVENTOR:

Albion K. Hall

BY

Munn

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALBION K. HALL, OF JACKSON, MICHIGAN.

IMPROVEMENT IN PLANES FOR MAKING "EXCELSIOR."

Specification forming part of Letters Patent No. **174,234**, dated February 29, 1876; application filed December 18, 1875.

To all whom it may concern :

Be it known that I, ALBION K. HALL, of Jackson, Jackson county, Michigan, have invented a new and Improved Planing-Bit for Making "Excelsior," of which the following is a specification:

Figure 1 represents a sectional side elevation, and Fig. 2 a vertical transverse section on the line *c c*, Fig. 1, of my improved plane and bit for making "excelsior."

Similar letters of reference indicate corresponding parts.

My invention relates to an improved plane for making what is known as "excelsior," it being a thin shaving of wood, used for filling beds and for other upholstering purposes. The invention consists of a bit, with parallel rectangular grooves at the upper side, combined with a stock having corresponding grooves in its under side.

In the drawing, A represents my improved bit for planing off excelsior, that is used as a filling in upholstery. The bit is provided at the upper side with parallel rectangular grooves, *a*, at equal distance from each other, by which the form of the cutting-

edge, when sharpened at the proper angle, is maintained throughout the bit. The bit produces a twofold cutting of the shavings, one set at the outer edges of the raised ribs and the other at the bottom of the grooves, so that two distinct and separate shavings are formed for each groove of the plane. The bit is mounted in a stock, B, that is grooved at the lower surface to correspond with the grooves of the bit, which causes the stock to act as a guide to keep the plane in proper direction.

The manufacture of excelsior is by this bit greatly accelerated and facilitated, and a uniform quality of shavings furnished thereby.

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

The combination of a plane-bit, having rectangular tongues and grooves, with the stock B, provided with similar or corresponding ones on its under side, as shown and described.

ALBION K. HALL.

Witnesses:

M. BUTCHER,
THOMAS ETCHES.