

D. F. BRACKETT.

Improvement in Excelsior-Machines.

No. 131,147.

Patented Sep. 10, 1872.

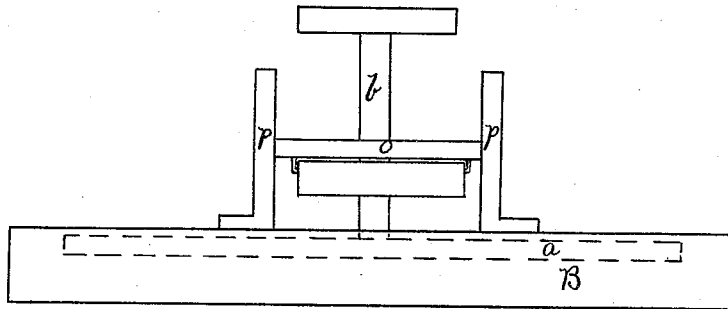


Fig. 2.

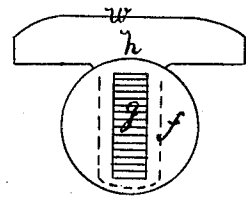


Fig. 3.

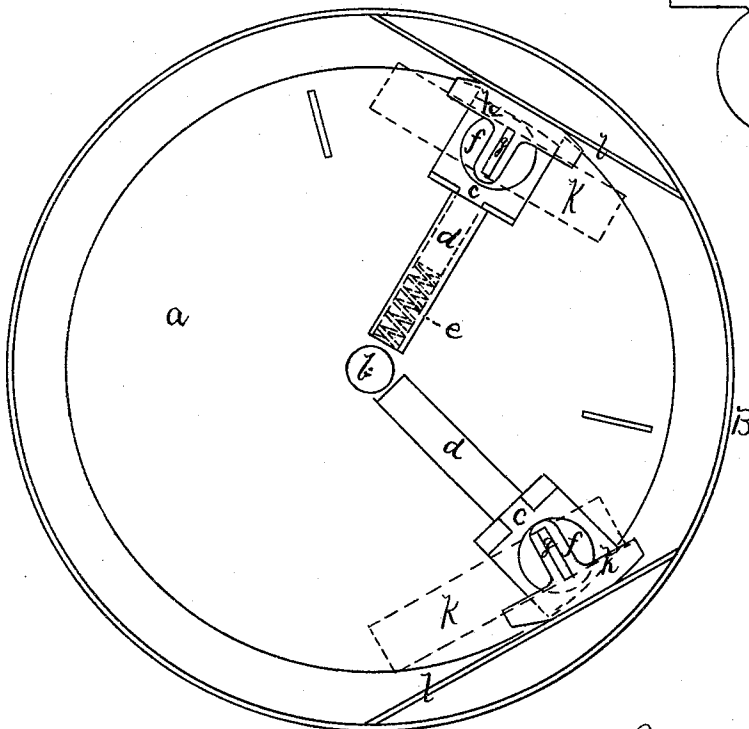


Fig. 1.

Witness  
*J. W. Riches*  
*John Martin*

Inventor  
*Daniel F. Brackett*  
By *Wm. Franklin Seavey atty*

# UNITED STATES PATENT OFFICE.

DANIEL F. BRACKETT, OF BANGOR, MAINE.

## IMPROVEMENT IN EXCELSIOR-MACHINES.

Specification forming part of Letters Patent No. 131,147, dated September 10, 1872.

*To all whom it may concern:*

Be it known that I, DANIEL F. BRACKETT, of Bangor, in the county of Penobscot and State of Maine, have invented a certain new and useful Improvement in "Excelsior"-Machines; and I hereby declare the following to be a full, clear, and exact description thereof, which will enable others to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 shows a plan of the under side of my invention; Fig. 2, an elevation; Fig. 3, a detail of the disk in which the slitters are fixed, together with the operating lever.

Same letters show like parts.

My invention relates to a rotary excelsior-machine, which is so constructed that the scorers, which slit the bolt and prepare it for the action of the planing-knives, are kept always parallel to the grain of the bolt while scoring it, avoiding all tendency to tear or rough it.

Reference to the drawing explains my devices. *a* shows a rotary wheel carrying the knives and planers, having its shaft at *b*. At *c* is an arm, moving in a sleeve, *d*, attached to the wheel *a*, and running back toward its center. This arm is pressed out toward the circumference of the wheel by means of a spring, *e*, contained in said sleeve. At the outer extremity of the arm, and inserted therein, is a circular disk, *f*, capable of a rotary motion upon its own center. In this disk are placed the scorers *g*, and attached to it is a lever or guide, *h*, the face of which, *w*, is always parallel to the scorer-blades, (see Fig. 3,) in whatever direction the disk is turned. *B* is

a circular casing surrounding the wheel *a*, which casing also serves as a track for the guide *h* to run on, said guide being pressed out against its inner surface by the spring *e*. At *k k* are openings made through the top of this casing, through which the bolts are presented to the knives. Across the inside of the casing in the track of the scorer-guide *h*, are straight guides *l l*, parallel to the openings *k k*.

The wheel *a* being rotated, the guides *h* follow the inner circumference of the casing *B* until they come to the straight guide, which forces them to move in a right line, and causes the disk *f* and attached scorers to turn sufficiently to keep the scorer-blades always parallel to the sides of the openings *k k* and the grain of the bolt. In Fig. 1 this is clearly shown, the two scorers being in different positions with regard to the bolt.

Any convenient means of holding the bolt to the knives may be adopted, as, for instance, that shown in Fig. 2, in which the bolt is dogged to a bar, *o*, running in perpendicular guides *p p*, and held down to the wheel by its own weight, or by a weight placed upon the bar *o*.

I do not claim the devices or combinations shown in the patent of Jacob Felber, No. 120,866, patented November 14, 1871; but

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

A rotary excelsior-machine, constructed substantially as and for the purposes set forth.

DANIEL F. BRACKETT.

Witnesses:

WM. FRANKLIN SEAVEY,  
J. Y. RICKER.