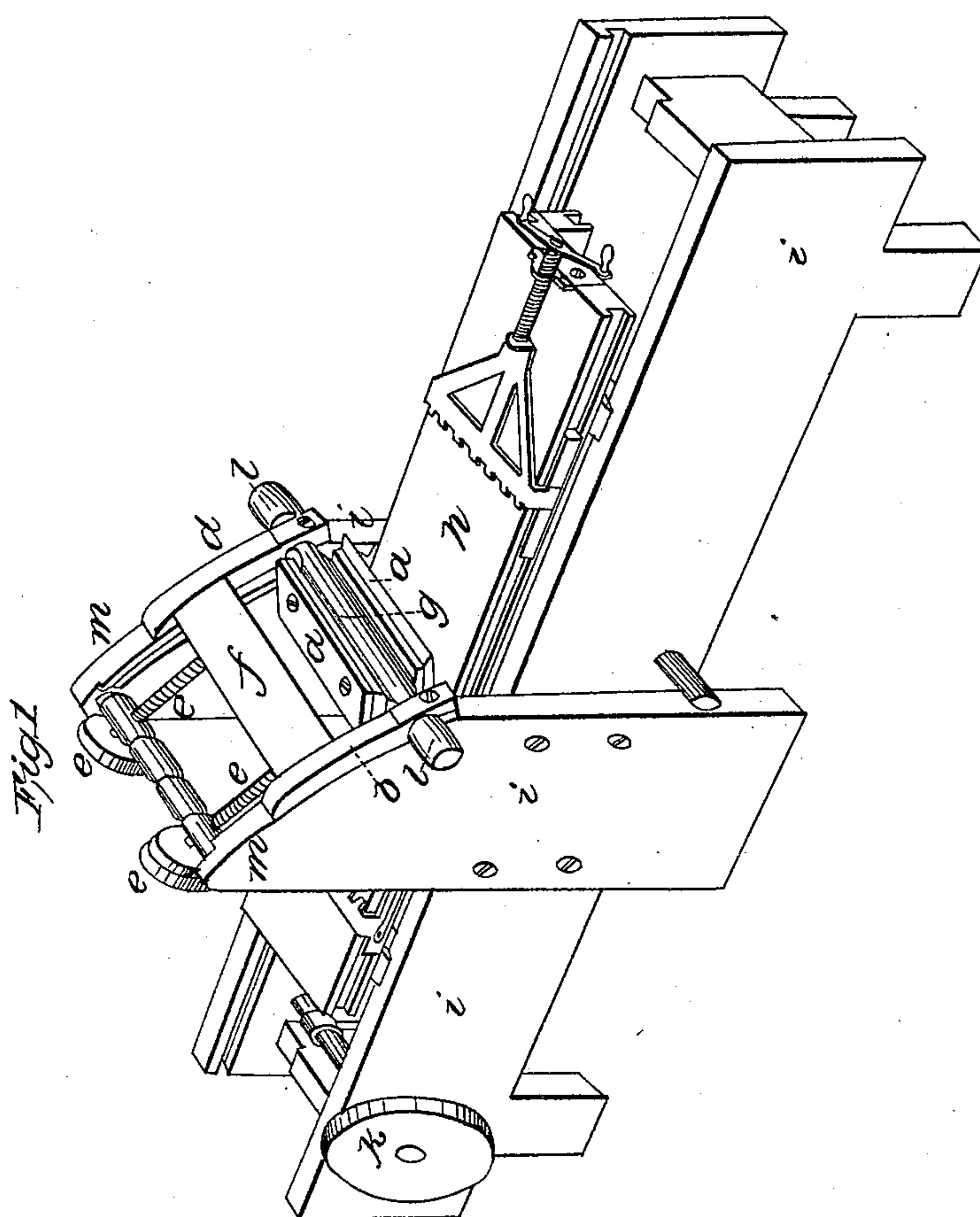
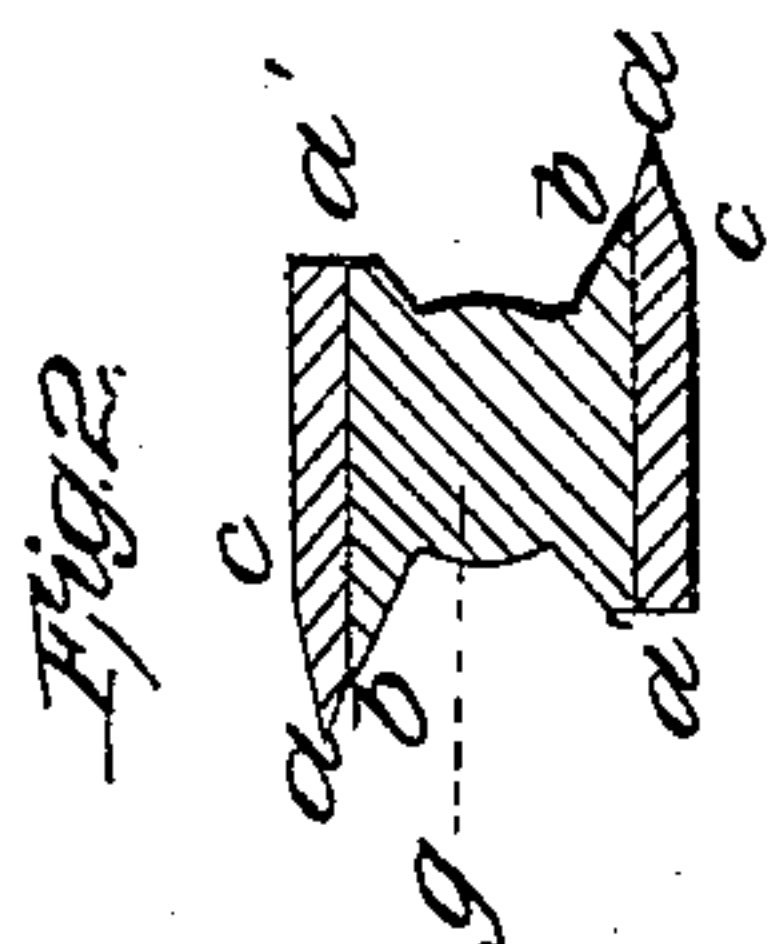


W. Nixon,
Wood Planing Machine.
No 13,757. Patented Nov. 6, 1855.



UNITED STATES PATENT OFFICE.

WILLIAM NIXON, OF ADRIAN, MICHIGAN,

CUTTER-HEAD FOR ROTARY PLANERS.

Specification of Letters Patent No. 13,757, dated November 6, 1855.

To all whom it may concern:

Be it known that I, WILLIAM NIXON, of Adrian, in the county of Lenawee and State of Michigan, have invented an Improvement in Planing-Machines, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the annexed drawings, of which—

Figure 1 is a perspective view of the machine, and, Fig. 2, a detached end view of the cutters.

My invention consists in so mounting the plane stocks that they may be adjusted to different thicknesses of plank or different depths of cut without changing the tension of the driving belt; and also in constructing the plane stock so as to make it fulfil the purposes of a cap iron as herein set forth.

The revolving cutter stock *g* has its bearings in sliding pieces *d, d*, which are firmly connected together by a cross piece *f*. These sliding pieces are inclined at an angle of about forty five degrees and rest with their under concave circular surfaces on the upper edges *m m* of the uprights *i, i* which form part of the main frame of the machine. These upper edges of the uprights are curved in a convex way so as to conform to the concave circular under surface of the sliding pieces. The center of this circle lies

in the axes of the two driving pulleys *k, k*. Belts pass over said pulleys *k, k*, and pulleys *l, l*, on the axis of cutter stock *g*. Thus the sliding pieces can be moved up or down the circular ways *m, m* without changing the distance between the axis of the cutter stock *g* and driving pulleys *k, k*, by which means the driving belts will be kept at a uniform tension whatever the elevation of the cutter-stock above the planing bed *h* may be. The cutters *a a*, are attached to the cutter stock *g* and are provided at their cutting edge *a* with a double bevel *a, c* and *a, b*. At the termination of the bevel *a, b* at *b* in rear of the cutting edge *a* the cutter stock rises abruptly thereby throwing the shavings back and preventing the cutter from entering any deeper into the material to be planed, so that it supplies the place entirely of a cap iron and gives a firm support for the cutter.

What I claim as my invention and improvement in planing machines is—

The double bevel of the cutter, in combination with the bevel on that part of the stock or cylinder which is in front of the cutter, so that the stock may act as a cap iron to the cutter, and to clear the shavings, as set forth.

WM. NIXON.

Witnesses:

WM. L. GREENLY,
JNO. R. MADISON,