

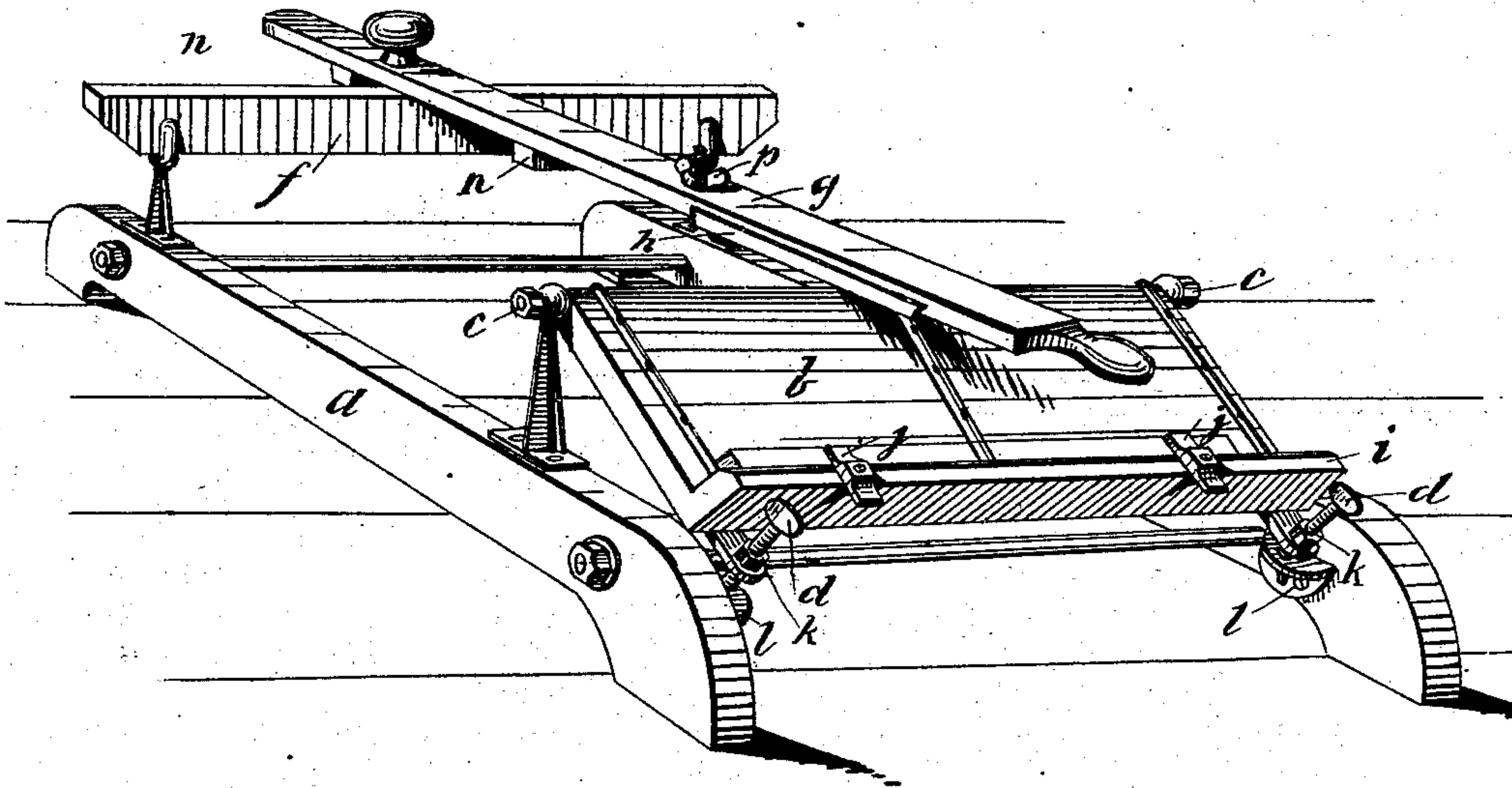
(No Model.)

J. A. STEPHENS.  
KNIFE EDGING MACHINE.

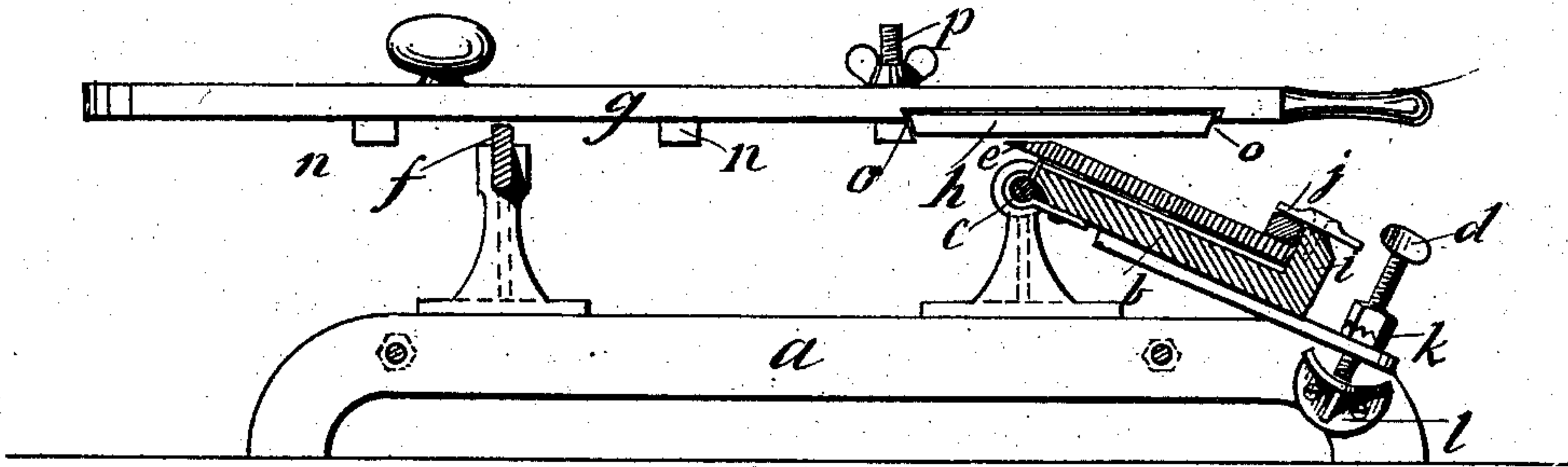
No. 272,345.

Patented Feb. 13, 1883.

*Fig 1,*



*Fig 2,*



WITNESSES:

*Chas. T. Howell,*  
*C. Sedgwick*

INVENTOR:

*J. A. Stephens*  
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# UNITED STATES PATENT OFFICE.

JAMES A. STEPHENS, OF BROCKVILLE, ONTARIO, CANADA.

## KNIFE-EDGING MACHINE.

SPECIFICATION forming part of Letters Patent No. 272,345, dated February 13, 1883.

Application filed August 12, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES ALFRED STEPHENS, of Brockville, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Knife-Edging Machine, of which the following is a full, clear, and exact description.

My invention consists of a contrivance of mechanism to be used for whetting the edges of paper-cutting and other knives, requiring to be frequently sharpened, with the oil-stone between the grindings, the object of the contrivance being to insure greater accuracy of the work, and to enable it to be done much quicker than it can be in the common way of applying the stone directly to the knife-edge by hand. The said contrivance consists of an adjustable table to hold the knife, so as to alter the plane of the edge at will, and a stone holder and gage contrived to enable the operators to rub the edge of the cutter powerfully and accurately with the stone, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of my improved knife-edging machine, and Fig. 2 is a longitudinal sectional elevation of the same.

On any suitable bench or other support, *a*, I arrange a knife-holding table, *b*, on a pivotal support, *c*, at one edge, and with adjusting-screws *d* or other equivalent means of altering the plane of the table, which is to be held in the slanting position shown, or thereabout, by preference, so that the plane of the cutting-edge *e*, to be sharpened, will be level, or thereabout, or so that said edge will be in the plane of a gage or rest, *f*, which I arrange in connection with the knife-table *b*, so that the stone-holder *g*, to which I attach the stone *h*, resting on said gage while the stone rests on the edge of the knife, will hold the stone ac-

curately and invariably to the edge during the operation, and so that the operator may apply the power of both hands to the working of the stone. The table *b* has a ledge, *i*, at the lower edge for the back edge of the knife to rest against under the pressure of the stone, and the buttons *j* may be applied to said ledge to be used for clamping the knife down with keys, if desired.

The adjusting-screws *d* have check-nuts *k* to secure them in position, and cup-brackets *l* are attached to the frame for steps for said screws to work in.

The stone-holder has elastic buffer-stops *n*, attached to it for limiting the travel of the stone to its length by contact with the rest *f*. The stone may be attached to the holder by the dovetail groove *o* and bolt *p*, and thumb-screw, or any other approved means.

This machine will be constructed in different sizes and with other modifications, as may be required for knives of different shapes and sizes.

I am aware that it is not new to support the tool on a bed which turns freely on its pivots while the tool is being edged, or to clamp the tool in an oscillating holder, or to hold the tool on a reciprocating slide-frame, or on an angle-frame pivoted at the vertex of its angle; but

What I do claim is—

In a knife-edger, the knife-holding table *b*, having one edge pivoted at an elevation and the other provided with a ledge, *i*, and button *j*, in combination with the base *a*, having standards carrying the transverse rod *c*, the screw *d*, the check-nuts *k*, and the cup-bracket *l*, whereby the knife may be held in varying positions for grinding or edging, as described.

JAMES A. STEPHENS.

Witnesses:

C. F. FRASER,  
S. O. RICHARDS.