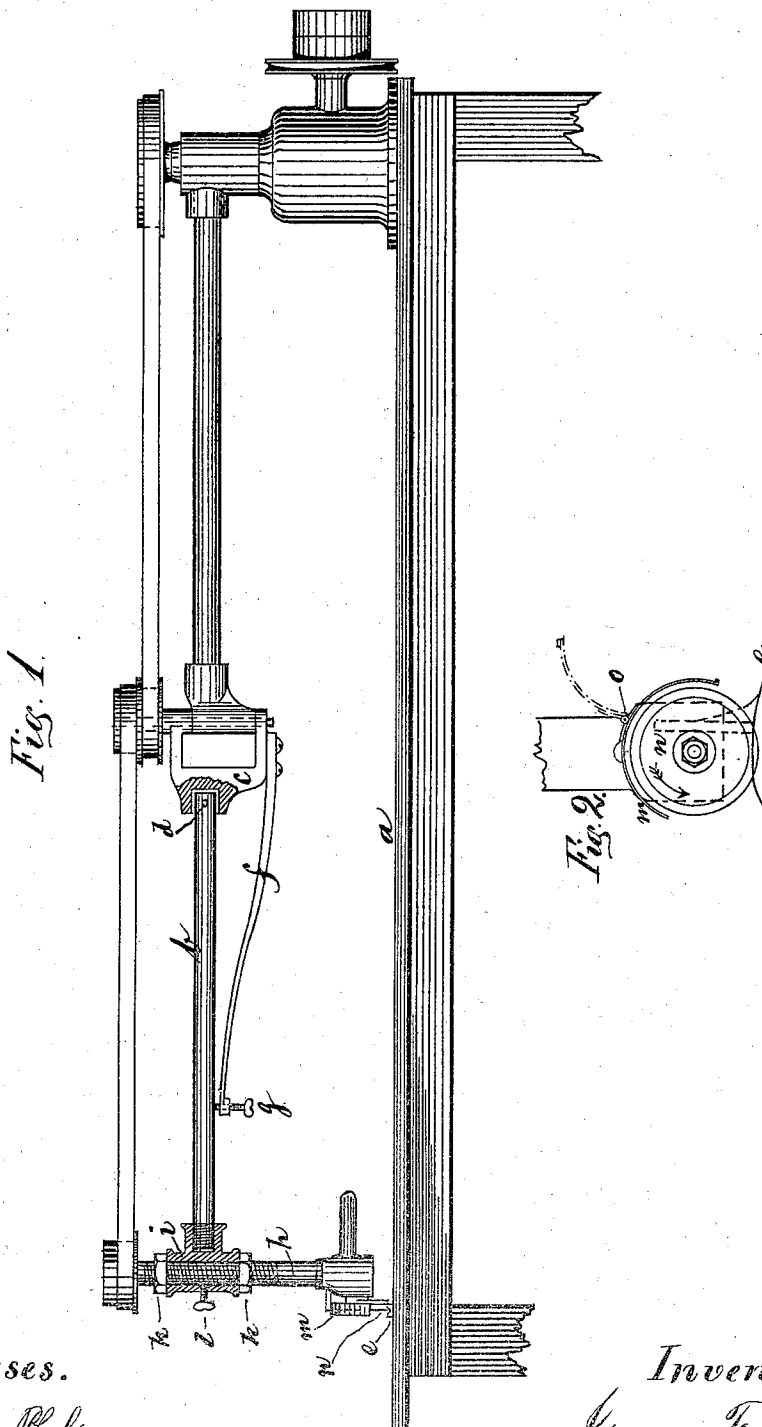


I. FENNO.

Cloth Cutting Machines.

No. 134,793.

Patented Jan. 14, 1873.



Witnesses.

George E. Phelps.

Wm. H. Hutchinson.

Inventor.

Isaac Fenno.

by Adrian Andrién atty.

UNITED STATES PATENT OFFICE.

ISAAC FENNO, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN CLOTH-CUTTING MACHINES.

Specification forming part of Letters Patent No. 134,793, dated January 14, 1873.

To all whom it may concern:

Be it known that I, ISAAC FENNO, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Machines for Cutting Cloth, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

My invention relates to certain improvements on cloth-cutting machines, consisting in the arrangement of a supporting-spring made to support the outer jointed arm that is made to move up and down, for the purpose of allowing the cutting-knife to be kept at the same distance from the upper side of the operating-table, even if the said table should not be perfectly level in all its parts. The weight of the arm keeps the foot or throat plate always in contact with the operating-table.

On the drawing, Figure 1 is a side elevation, and Fig. 2 is an enlarged end view of the knife and shield.

a is the operating-table, to which the machine is secured, and over which the knife is guided. The objection to this kind of a machine has been that when the table was not perfectly level the throat-plate would be lifted off from the table in one position of the machine, and crowded against it in another position thereof, owing to the connection being too rigid. This objection I now overcome by connecting the arm *b* loosely to the hinge part *c* by means of the pin *d* in such a manner that the arm *b* may move up and down, but not sidewise, around the pin *d*, by which ar-

range ment the foot or throat plate *e* will always be kept in contact with the table *a*, even if the said table should not prove exactly level. But as the weight of the arm *b* and its outer connections would create too much friction between the foot-plate and the table if it was not supported or balanced partially from below, I secure to the hinge part *c* a suitable spring, *f*, as shown, provided in its outer end with a regulating-screw, *g*, screwed through the spring *f*, and resting against the arm *b*, or in a similar way, by which the pressure of the throat-plate on the table can easily be adjusted and regulated. It is also necessary to adjust the sleeve *h* up or down, according to the size of the knife that is used, for which purpose I make it movable in a bearing, *i*, attached to the end of the arm *b*, as shown. When adjusted it may be held in place by means of check-nuts *k k*, as shown, or by means of a set-screw, *l*, or their equivalents.

The shield *m* that covers the knife *n* and protects the operator's hands during the operation is provided with a hinge, *o*, whereby a part of the shield may be moved away, as shown in dotted lines on Fig. 2, when it is desired to sharpen the knife, or for other reasons.

What I wish to secure by Letters Patent and claim is—

The hinged arm *b*, hinge part *c*, and the supporting-spring *f*, combined and operating as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of October, 1872.

ISAAC FENNO.

Witnesses:

FRED. O. STANTON,
GEORGE E. PHELPS.