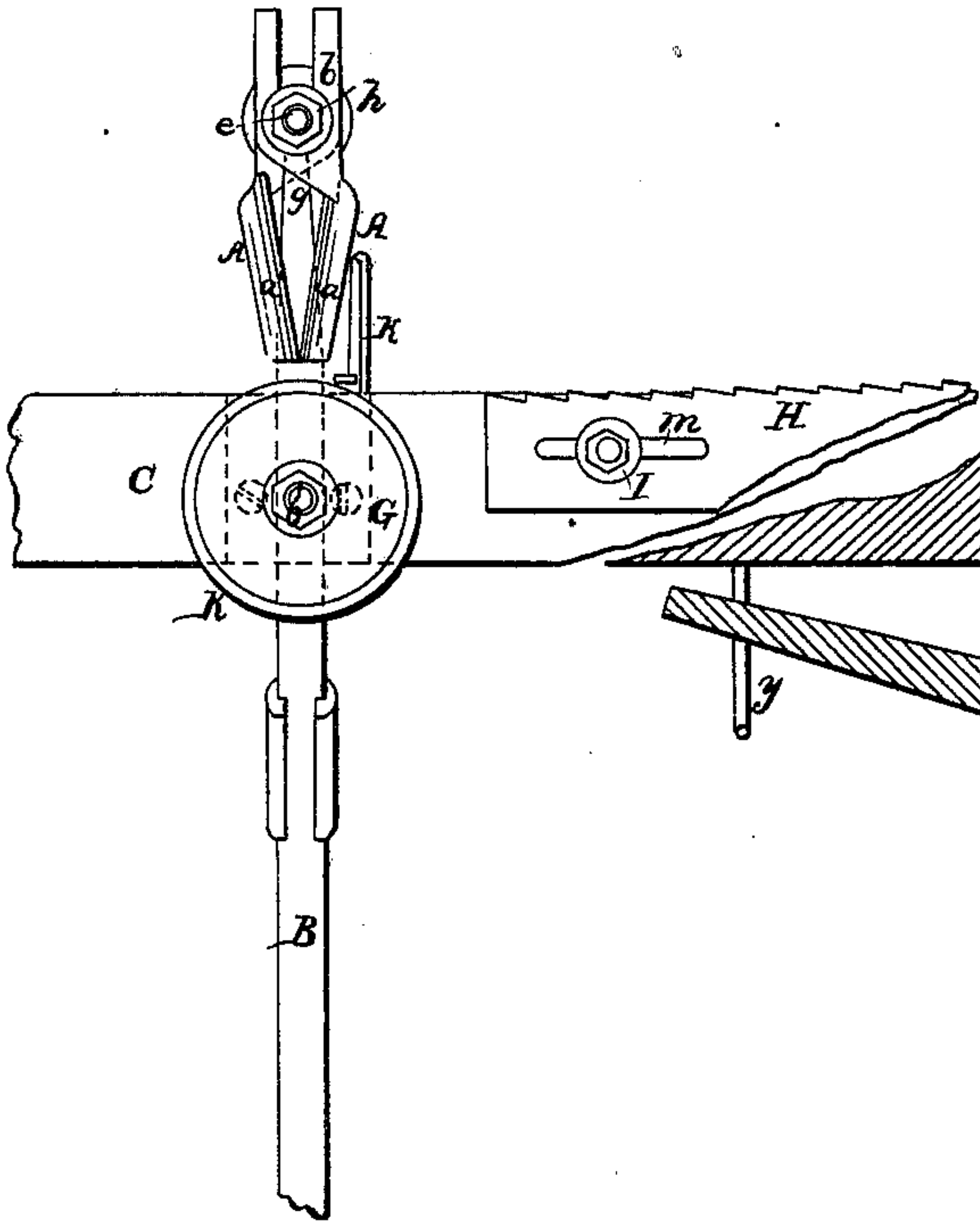


Working Pattern.

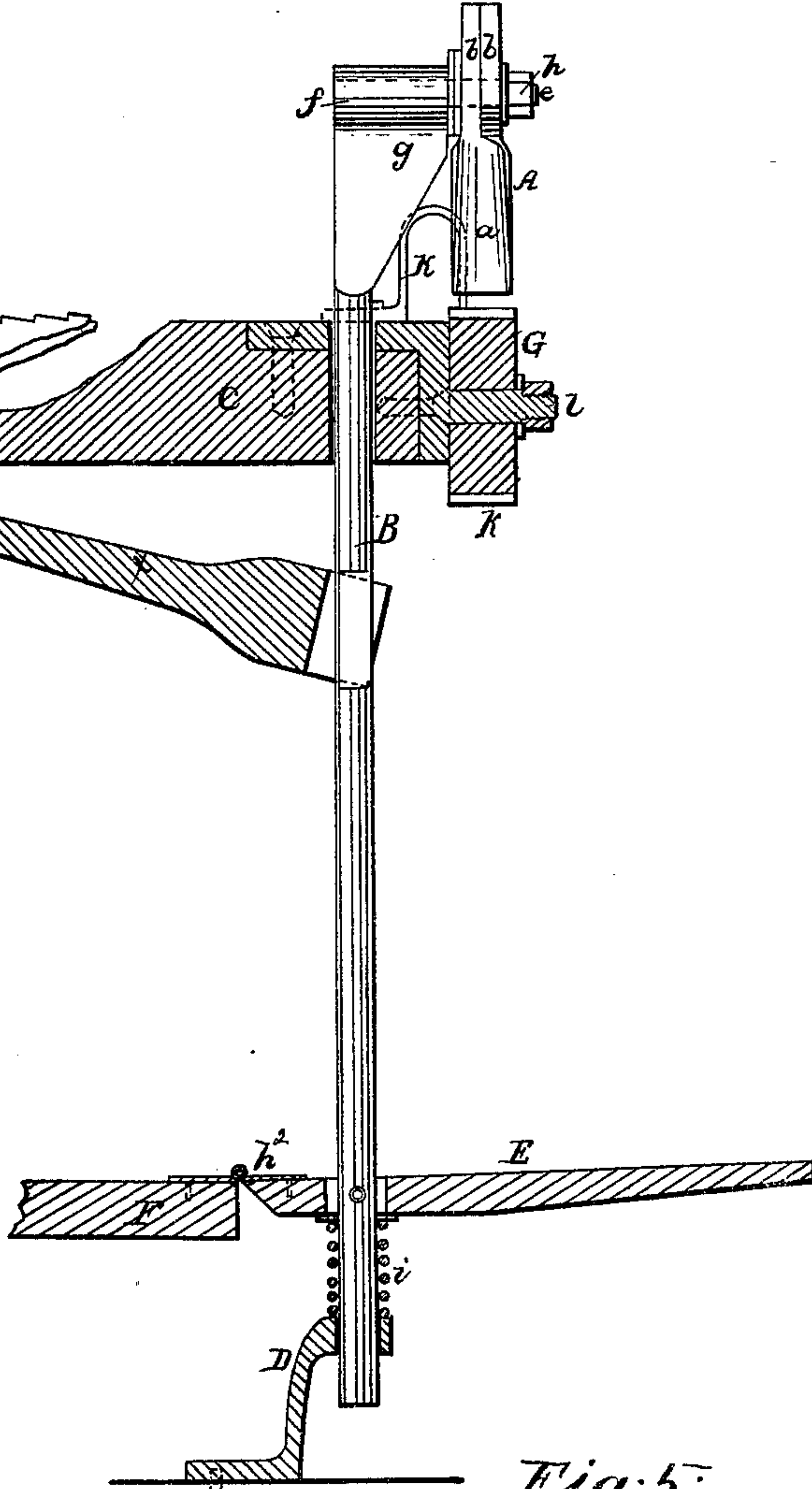
No 91,370.

Patented Jun. 15, 1869.

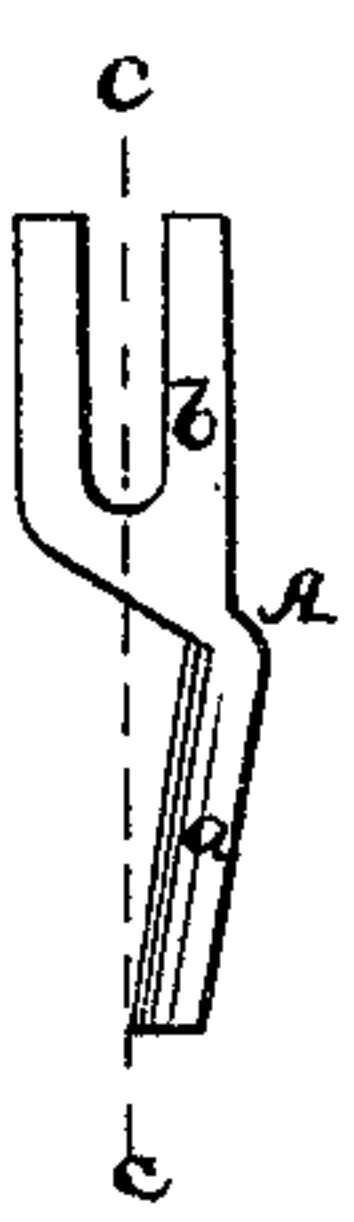
Fig; 1;



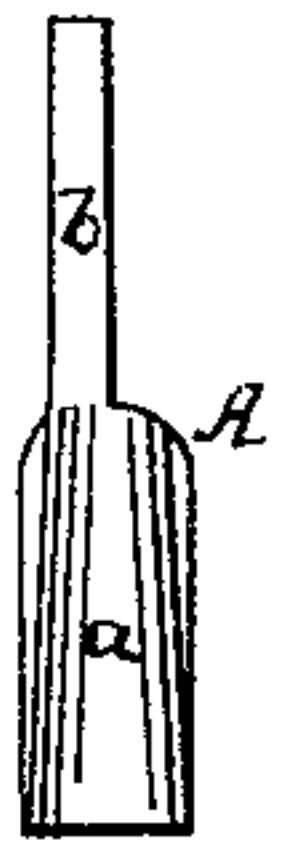
Fig; 2;



Fig; 3;



Fig; 4;



Fig; 5;

Inventor;

J. A. Sevey.

by his attorney.

R. V. Adair.

Witnesses;

S. A. Piper.

Lamitz & Möller.

United States Patent Office.

JAMES A. SEVEY, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 91,370, dated June 15, 1869.

IMPROVEMENT IN MACHINE FOR ROUNDING WHALEBONE FOR CORSETS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, JAMES A. SEVEY, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful Machine for Rounding the Ends of Strips of Whalebone as Used in Corsets; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 denotes a front elevation, and

Figure 2, a vertical section of it.

Figure 3 is a side view, and

Figure 4, a front view of one of the rounding-chisels.

Figure 5 is a view showing the arrangement of the cutting-edges of the two chisels.

Each of the said chisels, shown at A A in the drawings, has a gouge-shaped blade, *a*, and a furcated shank, *b*. In other words, the blade is concave on one side and convex on the other.

The cutting-edge is disposed in or about in the axis of the shank, but the blade is disposed at an acute angle with such axis, as shown in fig. 3, in which the dotted line *c c* denotes the axis of the shank.

One side of the shank is in the plane of the axis of the blade, as shown in fig. 4, the whole being so that the shank of one cutter, when placed side by side against that of the other, as shown in fig. 2, will bring the two cutters into positions, with respect to each other, as shown in fig. 1, in which case the backs of the blades of the two cutters range at an acute angle with each other, their forked shanks being made to receive the shank of a screw, *e*, projected from a shoulder, *f*, formed on the head *g* of a vertical slide-rod, B.

A nut, *h*, screwed on the screw *e*, and against the outermost shank of the two cutters, serves, with the screw and shoulder, to confine the cutters in place.

The slide-rod B extends down through a bench, C, a foot-guide, D, and a treadle, E, the latter being connected to a support-piece, F, by a hinge, *h*².

The rod B is pivoted to the treadle, which rests on a helical spring, *i*, supported by the foot-guide D.

The purpose of the spring is to elevate the treadle, the rod B, and the two cutters.

Directly underneath the cutters is a wheel, G, formed of wood or other suitable material, and provided with copper, or a soft metal tire, *k*.

This wheel revolves on a spindle, or journal, *l*, projected from the bench C.

Furthermore, an adjustable serrated rack, H, is fixed to the bench, and arranged as represented in fig. 1, it being held to the bench by screws and nuts, one set of which is shown at I, the screw being exhibited as extended through a slot, *m*, made in the rack.

An edge-gauge, K, projecting from the top of the

bench, and arranged with respect to the cutters in manner as shown in figs. 1 and 2, serves to determine the position of a strip of whalebone on the wheel, some one of the notches of the rack being employed to determine the length of the piece to be severed from a strip by the cutters.

By pressing the treadle E downward, the knives A A will be simultaneously depressed toward the bed-wheel G, and as their convexities, or backs are arranged toward each other, the said knives, in passing through a strip of whalebone, when upon the bed-wheel, will make two curved cuts through it.

In consequence of the backs of the knives being arranged so as to stand toward each other, and make an acute angle with each other, as shown in fig. 1, the piece of whalebone extending between the two cuts will pass into the space between the two knives without clogging therein, and finally will be expelled therefrom by other pieces, so introduced successively.

The machine, when at work, thus not only separates a long strip of whalebone into a series of shorter strips or pieces, but rounds the adjacent ends of two of them at each separation of one of such shorter pieces from the main piece.

In using the machine, a workman should place on the top of the bed-wheel the strip of whalebone to be reduced. Next, he should press one end of the strip against that tooth of the rack which determines the length of the piece to be separated. After this, he should depress the treadle so as to cause the knives to descend upon and cut through the strip.

In order to prevent the rod B, during its vertical movements, from turning around, I project from it an arm *x*, into a long staple *y*, the latter being extended from the bench.

I claim the arrangement of the blades *a a*, of the two gauge-cutters A A, viz, so as to stand with their convexities in opposite directions, and with their backs at an acute angle with each other, as specified.

I also claim the arrangement of the blade of each cutter, with respect to its furcated shank, the blade, under such arrangement, having its back at an acute angle with the axis of the shank, and one side of the shank disposed on, or about on a line with the axis of the blade, as set forth.

I also claim the combination of the two knives A A, arranged and provided with operative mechanism, substantially as described, with the bed-wheel G, the gauge K, and the rack H, disposed with and applied to the bench C, as set forth.

J. A. SEVEY.

Witnesses:

R. H. EDDY,
S. N. PIPER.