

Knox & Corrister, Fluting Machine.

No. 53633.

Patented April 3, 1866.

Fig 1

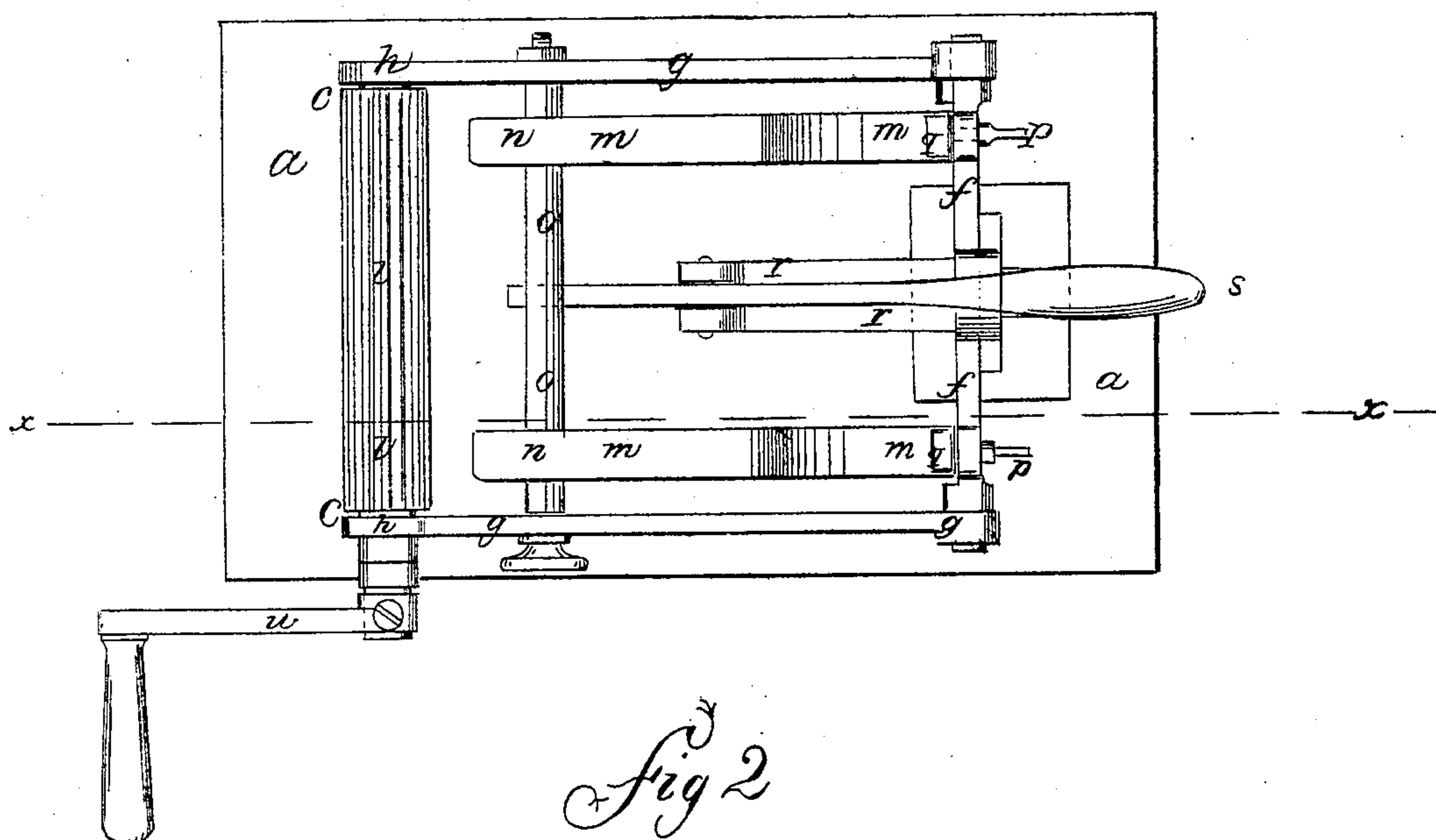
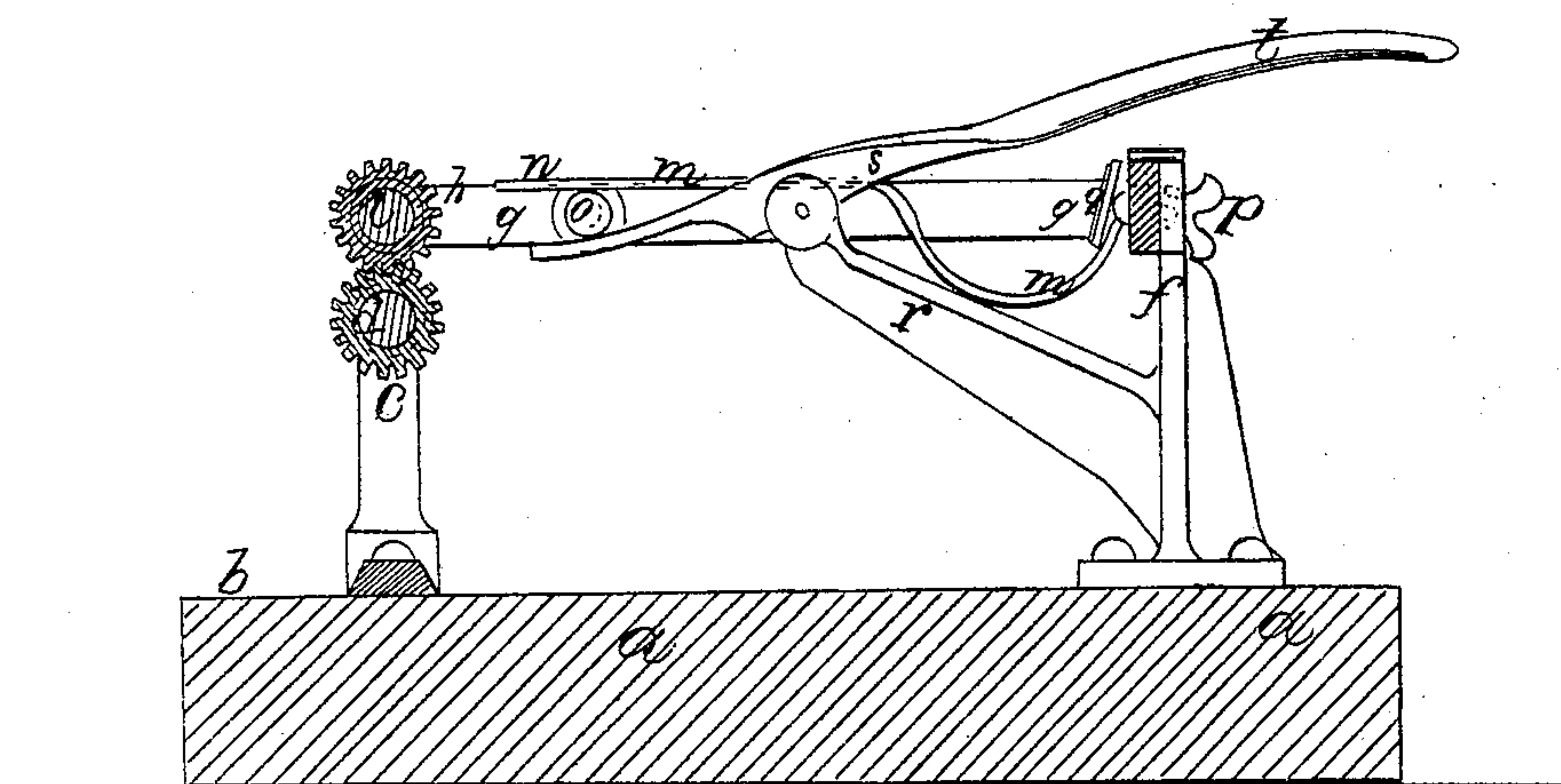


Fig 2



Witnesses.

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UNITED STATES PATENT OFFICE.

SUSAN KNOX AND W. D. CORRISTER, OF NEW YORK, N. Y.

IMPROVEMENT IN FLUTING-MACHINES.

Specification forming part of Letters Patent No. 53,633, dated April 3, 1866.

To all whom it may concern:

Be it known that we, SUSAN KNOX and W. D. CORRISTER, of No. 122 East Sixteenth street, in the city, county, and State of New York, have invented a new and useful Improvement in Fluting-Machines; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The present invention relates to machines for making "fluting-trimming," so called, used by ladies in the trimming of their dresses; and it consists in so arranging one of the two fluted rollers between which the material to be fluted—such as linen, lace, &c.—is passed that it can be readily raised or removed from the other, in order that the material passing between them can be removed therefrom; and, furthermore, it consists in an arrangement of parts whereby the rollers can be adjusted with regard to each other so as to produce a greater or lesser pressure upon the material passing between them, as may be desired.

Heretofore, when desired to remove the material being fluted by the rollers before it has entirely passed between them, it has been done by reversing the motion of the rollers, thus causing the material to travel back, the great objection to which was that as the material repassed between the rollers it necessarily produced irregularity in the fluting, which, as is obvious, was exceedingly disadvantageous; but by our improvement this objection is entirely obviated, as will be readily apparent from the following detail description thereof, the material being at any time and at any point of its length susceptible of an easy removal from the machine.

In accompanying plate of drawings our improvement is illustrated, Figure 1 being a plan or top view of the machine, and Fig. 2 a longitudinal vertical section taken in the plane of the line *x x*, Fig. 1.

a a in the drawings represent the bed-plate of the machine, which may be either the top of a table or a separate piece of wood or other suitable material, at one end of which, *b*, are two upright standards, *c c*, at a short distance apart, between which one of the fluted rollers

d is hung, turning at each end in suitable bearings thereof.

f is a standard-frame placed somewhat back of the position of the fluted roller *d* and secured to the bed-plate *a* in any proper manner, to which frame is hung in a horizontal plane a frame *g*, so as to be freely turned thereon. In outer end, *h*, of this horizontal frame *g*, and extending across the same, another fluted roller, *l*, similar in size and shape to the roller *d*, is hung so as to turn therein, which roller *l* interlocks with the corrugations in the other roller and is above the same, the frame being held firmly down, so as to bring its roller in close contact with the roller *d* by means of metallic spring-plates *m m*, fastened at one end to the fixed standard-frame *f*, and both bearing by their other ends, *n n*, upon the cross bar or rod *o* of the frame *g*, between its roller *l* and its hinged end.

The pressure with which the frame-roller *h* is made to bear upon the roller *d* is regulated at pleasure by simply turning the thumb-screws *p p*, that hold the springs to the frame *f*, which, through their head-plate *q*, thus increase or decrease the stiffness of the springs, as the case may be, and as is evident without further explanation.

In the upper end of the projecting arm *r* of the standard-frame *f* is hung a lever, *s*, one end of which is provided with a suitable handle, *t*, while the other passes under the cross-bar *o* of the horizontal frame *l*, so that by pressing down upon the handle end of the lever the frame *g* is caused to be swung upward, thus lifting the roller *l* from the roller *d*, the frame, when the hand is withdrawn from the lever-handle, falling by its own weight, aided by the force of the springs *m m*.

The material to be fluted is passed in and between the two fluted rollers, as in ordinary fluting-machines, motion being communicated to such rollers through a crank-handle, *w*, secured to one end of the lower roller, *d*, which motion can be continued till the whole of the material has been passed through them, unless desired to withdraw the same before being fully fluted, when the upper roller is raised, as before described, thus allowing the material to be readily removed, the advantages of which are evident to all.

The rollers *d* and *l* we intend to arrange in

such a manner in their respective bearings that they can be easily detached therefrom when desired to use rollers having larger or smaller corrugations; and as there are various well-known ways in which this can be accomplished, we do not deem it necessary to describe any one particular arrangement.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

A fluting-machine having the upper roller

hung in a horizontal spring swinging frame, substantially in the manner described, for the purpose specified.

The above specification of our invention signed by us this 31st day of July, 1865.

MRS. SUSAN KNOX.
W. D. CORRISTER.

Witnesses:

WM. DEAN OVERELL,
ALBERT W. BROWN.