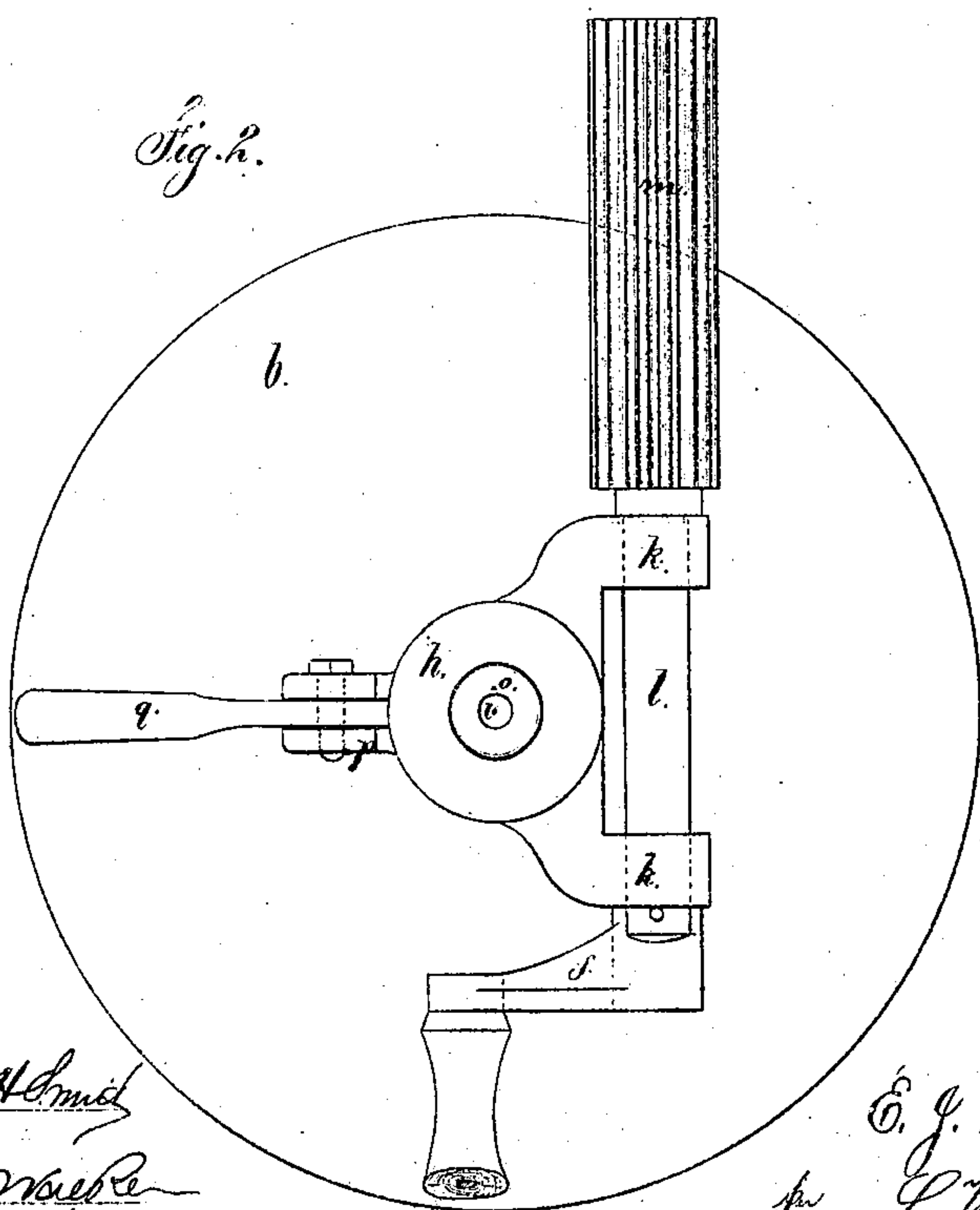
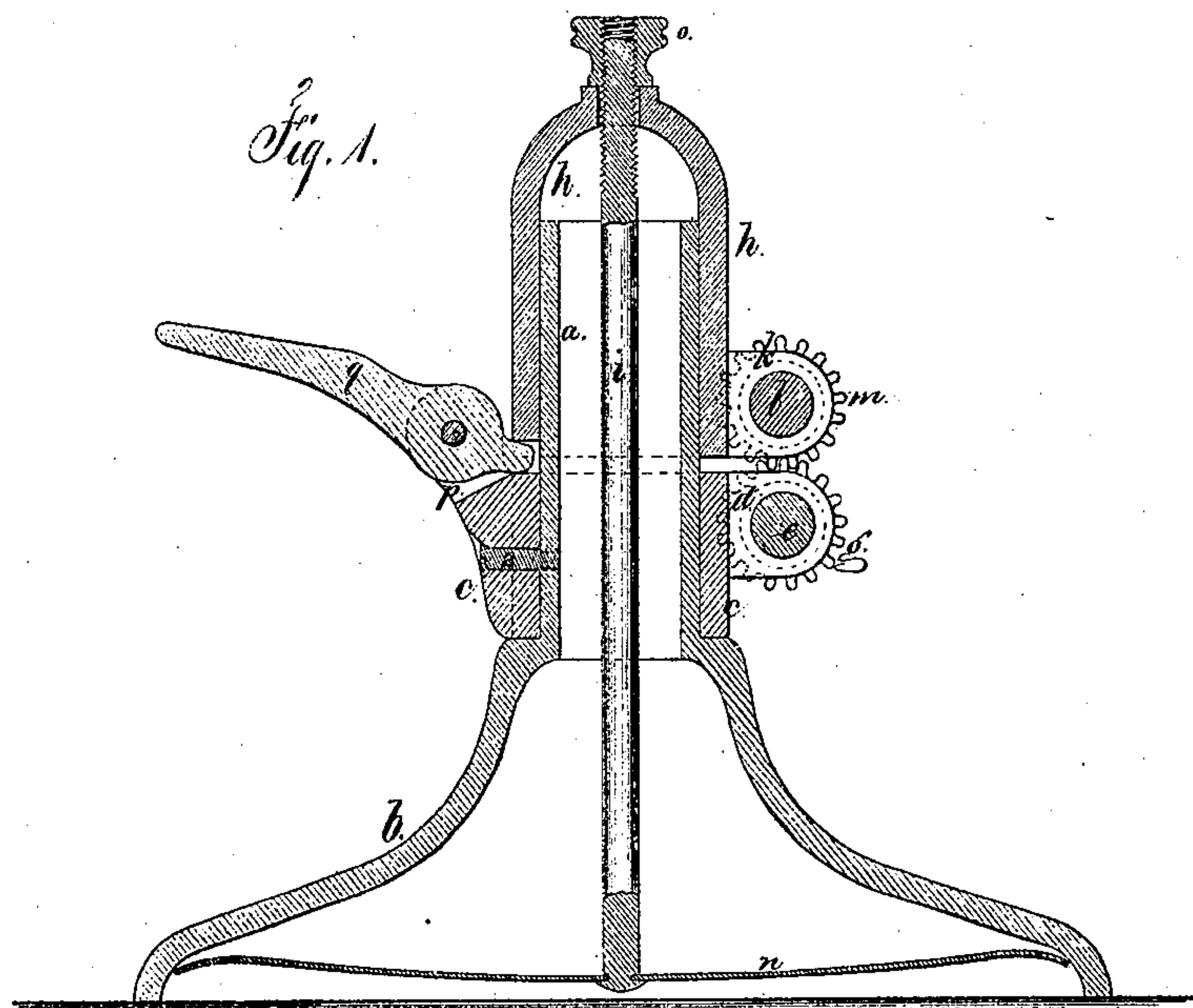


E. J. Manville,

Fluting Machine.

No. 87,182.

Patented Feb. 23. 1869.



Witnesses

Chas. A. Smith
Geo. A. Weber

E. J. Manville.
per L. W. Serrell atty

United States Patent Office.

ELI J. MANVILLE, OF WATERBURY, CONNECTICUT.

Letters Patent No. 87,182, dated February 23, 1869.

IMPROVEMENT IN FLUTING-MACHINES.

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

To all whom it may concern:

Be it known that I, ELI J. MANVILLE, of Waterbury, in the county of New Haven, and State of Connecticut, have invented and made a certain new and useful Improvement in Fluting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a vertical section of the standard, transversely of the roller-shafts, and

Figure 2 is a plan of the machine complete.

Similar parts are denoted by like letters.

This machine is constructed so that the rollers can be opened with facility, and any desired amount of yielding pressure applied to keep the rollers in contact.

My invention consists in a hollow cylindrical standard, carrying a ring-collar, to which the bearings for the shaft of the lower roller are connected, and also a lever that operates upon a cylinder sliding upon said standard, and carrying the bearings for the upper roller-shaft.

The pressure to keep the fluted rollers together is obtained from a spring within the hollow standard, connected by a rod to the sliding cylinder of the upper roller, which rod is adjustable to vary the spring-pressure.

In the drawing—

a is the hollow standard, rising vertically from the flaring base *b*, that sustains the same.

c is a collar around the lower part of the standard *a*, kept in place by a set-screw, 2, or other device, and this collar *c* carries, or is formed with the bearings *d d*, for the shaft *e*, upon one end of which is the crank *f*, for turning the rollers, and on the other end is the ordi-

nary fluting-roller *g*, with an opening at the end, for the introduction of a heater.

The sliding cylinder *h* is fitted upon the upper part of the standard *a*, and provided with the bearings *k*, for the shaft *l* of the upper roller *m*.

The cylinder *h* terminates with a dome, through which passes the rod *i* to the spring *n*, in the standard-base *b*.

This spring *n* may be helical. I have, however, shown a plate, or elliptical spring.

The nut *o* can be turned, to increase or lessen the pressure of the spring on the rollers.

Upon one side of the collar *c* are jaws *p*, carrying the lever *q*, that serves to lift the cylinder *h*, and separate the rollers, for introducing or withdrawing the article to be fluted.

By allowing the end of the lever *q* to enter a notch in the lower end of the cylinder *h*, the parts are prevented from turning around laterally.

This fluting-machine is very strong and durable, and can be constructed with great facility and cheapness, as almost all the finishing can be done in a lathe.

What I claim, and desire to secure by Letters Patent, is—

The hollow standard *a*, carrying the collar *c* and bearings for the shaft of the lower roller, in combination with the sliding cylinder *h*, carrying the upper roller, and a yielding pressure for keeping the fluting-rollers toward each other, substantially as set forth.

In witness whereof, I have hereunto set my signature, this 23d day of November, 1868.

E. J. MANVILLE.

Witnesses:

A. J. BUCKLAND,
JAMES WELLS.