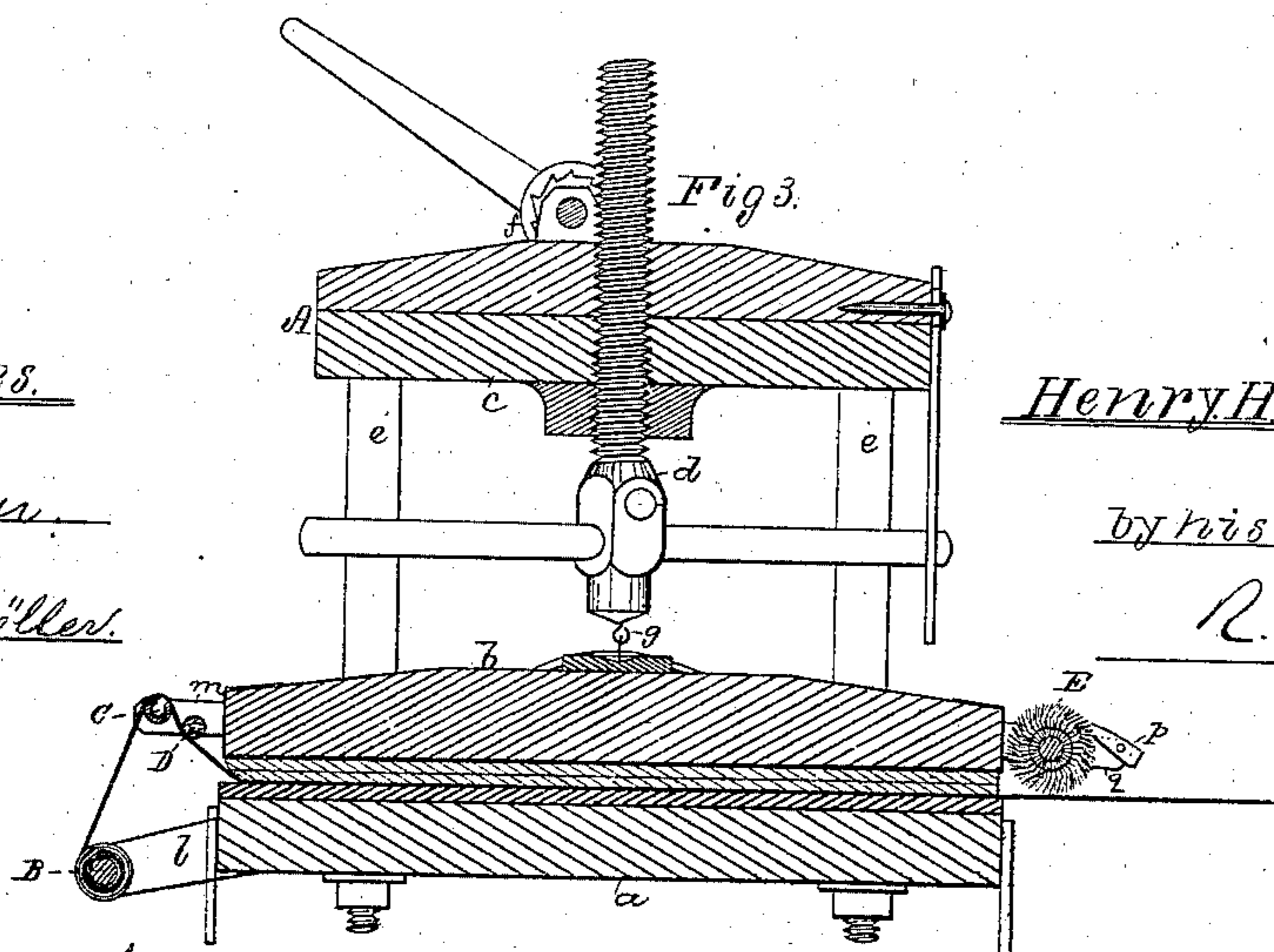
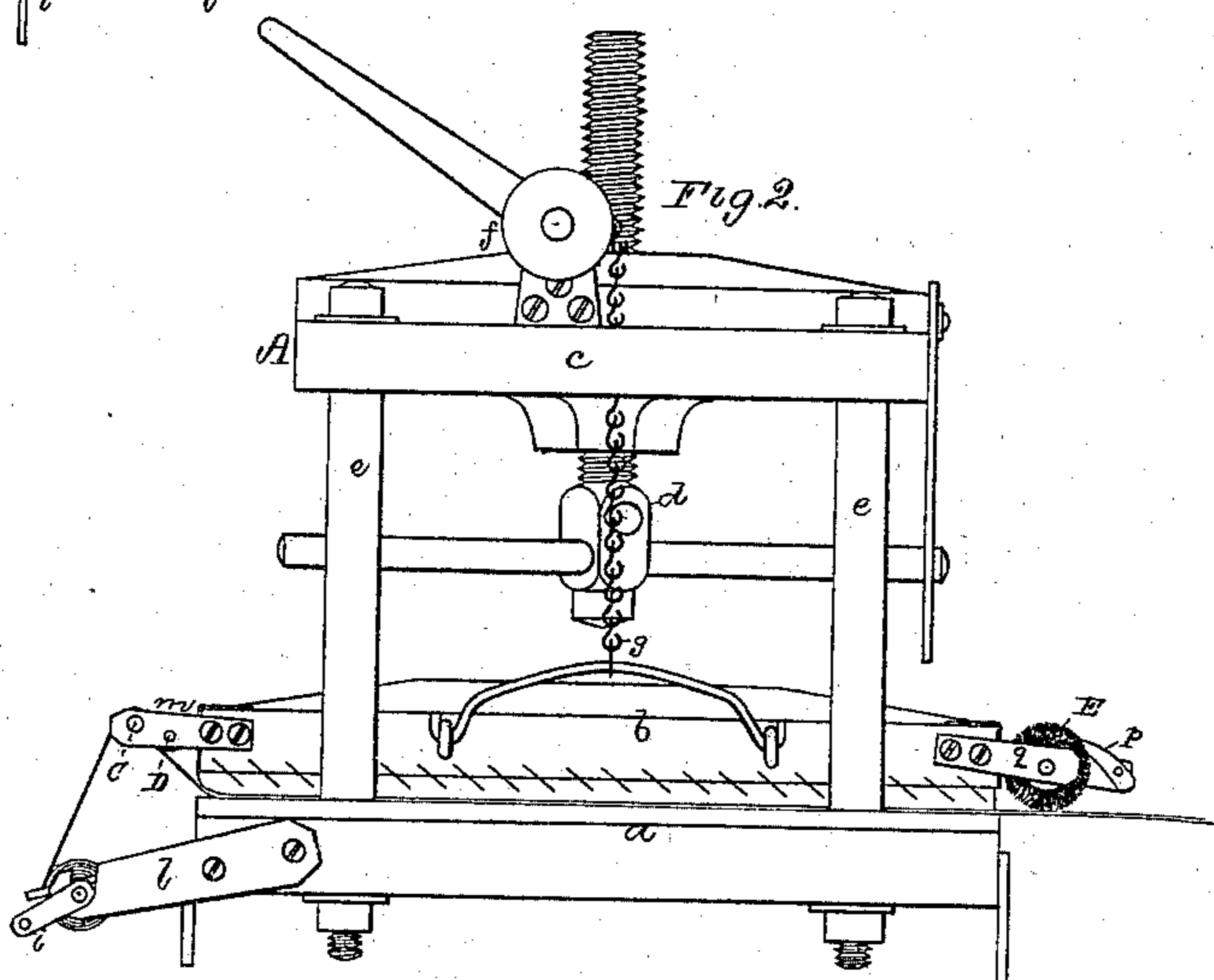
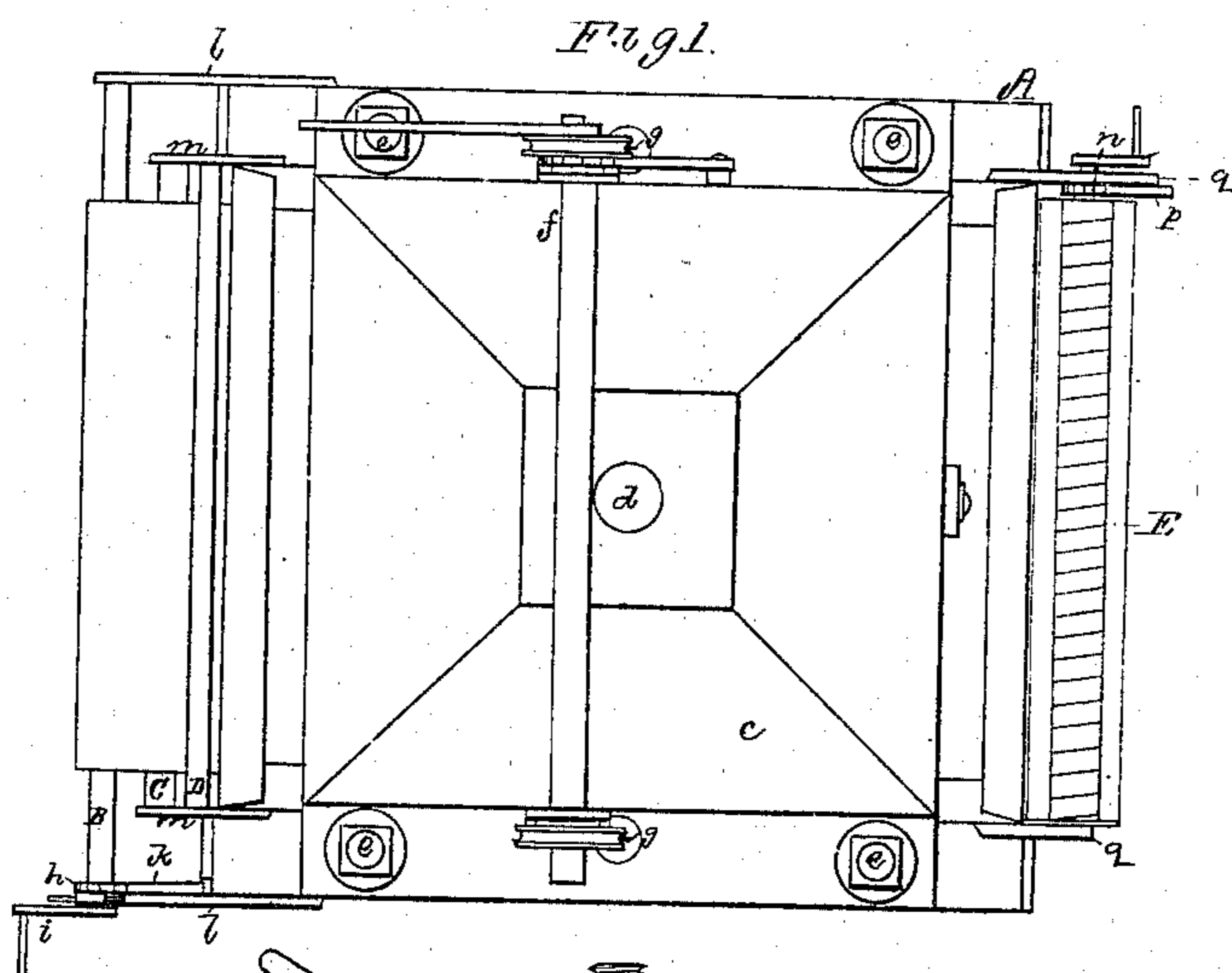


## Presses for Printing Fabrics.

Patented April 8, 1873.



Witnesses.

S. W. Piper.

L. A. Höller.

Henry H Townsend.

by his attorney.

R. W. Hardy

# UNITED STATES PATENT OFFICE.

HENRY H. TOWNSEND, OF MILTON MILLS, NEW HAMPSHIRE.

## IMPROVEMENT IN PRESSES FOR PRINTING FABRICS.

Specification forming part of Letters Patent No. **137,638**, dated April 8, 1873; application filed January 17, 1873.

*To all whom it may concern:*

Be it known that I, HENRY H. TOWNSEND, of Milton Mills, of the county of Strafford and State of New Hampshire, have invented a new and useful Press for Printing Fabrics; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section.

In such drawing, A denotes a screw-press, of which *a* is the bed, *b* the platen, *c* the cap, and *d* the pressure-screw, the bed and cap being connected by four upright rods, *e*, and the screw being screwed up through the cap at its center. The platen is provided with means of elevating it or raising it above the bed, such consisting of a windlass, *f*, and two chains, *g*, depending therefrom, as shown. To the bed of the press, at one end thereof, is pivoted a shaft or roller, B, provided with a ratchet-wheel, *h*, and a crank, *i*, a retaining-pawl, *k*, to operate with the ratchet-wheel, being extended from and pivoted to one of the brackets or arms *l l*, by which the shaft or roller B is supported. Furthermore, to that end of the platen which is next to the shaft or roller B there is pivoted, or to arms *m m* extended from the platen, either one or two rollers, C D, and to the opposite end of the platen there is similarly applied a toothed roller, E, provided with a ratchet-wheel, *n*, and a crank, *o*, a retaining-pawl, *p*, to operate with the ratchet last mentioned, being applied to the next adjacent supporting-arm *q* of the toothed roller. This latter roller I cover with card-cloth in preference to any other mode of fixing teeth to it.

The plate or type for printing a table-cover is to be laid on the bed and directly underneath the platen, with the printing-surface upward. The piece of cloth to be printed is at one end to be hooked on or otherwise prop-

erly attached to the shaft or roller B and to be wound thereon, the said cloth being extended from thence over the guide-roller C, and thence down between it and the platen or the other guide-roller D; thence underneath and against the platen, and between it and the bed; and finally such cloth is to be pressed into contact with the toothed roller E. This having been done, the roller B is to be revolved so as to stretch and strain the cloth firmly so as to remove from it any wrinkles or folds, and cause it to fit snugly to the platen, the retaining-pawls being down upon their ratchet-wheels. Next, the platen is to be depressed so as to bring the cloth into contact with the printing type or plate previously inked, and as a consequence the cloth will be printed. After this the platen should be raised, the pawls thrown up, and the roller E should be revolved so as to draw the cloth along, and bring a fresh portion of it underneath the platen, the part previously printed being drawn upward from the roller E. Next, the pawls should be depressed, and the roller B should be revolved backward so as to again stretch the cloth preparatory to its being again printed.

This machine has been found to be very useful for the purpose for which it is designed. It is all-important to stretch the cloth preparatory to each imprint, and to subsequently advance it, such being accomplished by the means as above described.

I claim—

The table-cover-printing press provided with the toothed roller E, the winding shaft or roller B, their ratchet-wheels *h n* and retaining-pawls *k p*, and the guide-roller C, or such and the roller D, all arranged substantially as and to operate as and for the purpose specified.

HENRY H. TOWNSEND.

Witnesses:

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