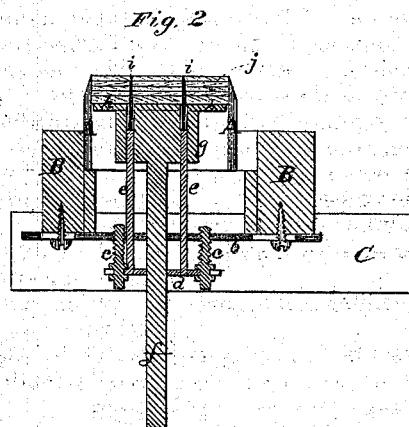
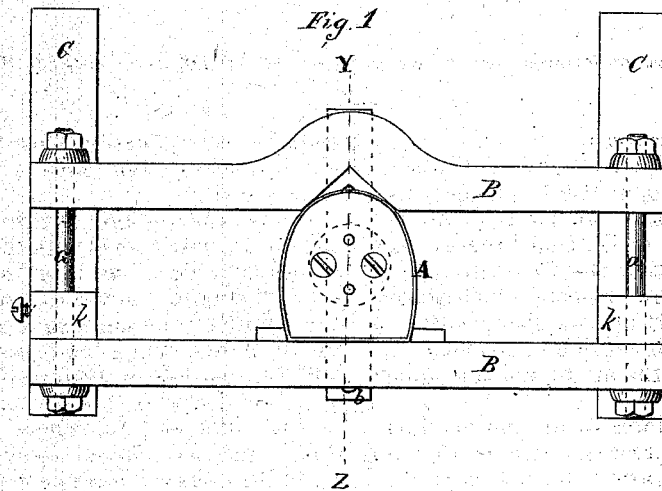


N. J. SIMONDS.

Improvement in Cutting-Presses.

No. 115,118.

Patented May 23, 1871.



Witnesses
Herbert S. Whitman
C. L. Mauston

Inventor.
N. J. Simonds
By T. W. Porter Atty

UNITED STATES PATENT OFFICE.

NATHAN J. SIMONDS, OF WOBURN, MASSACHUSETTS.

IMPROVEMENT IN CUTTING-PRESSES.

Specification forming part of Letters Patent No. 115,118, dated May 23, 1871.

To all whom it may concern:

Be it known that I, NATHAN J. SIMONDS, of Woburn, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Cutting-Presses; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to which it appertains to practice it.

This invention relates to an improvement upon that class of presses which is used for cutting leather and various fabrics, and is especially adapted to be used upon the press for which Letters Patent have been allowed to myself; and the invention consists in combining with the cutting-die suitable devices by which the successive layers, as they are cut into the die, may be nailed together by nails, which are held in the plunger, and upon which the leather is forced while being cut, as will be hereinafter more fully described.

Figure 1 is a top or plan view of my invention, and Fig. 2 is a transverse vertical section taken on line *y z*, Fig. 1.

Similar letters of reference indicate like parts in the several figures.

In the drawing, A represents the cutting-die, which is seated upon bearings formed upon bars B B, these bars resting upon the press ledges C C, and are adjusted relatively to the die by means of the screw-rods *a a*, which are secured in the projections *k* formed upon ledges C, as shown. *b* is a bar secured to the under side of bars B, while the shorter bar *d* is suspended beneath bar *b* by the screws *c c*, as shown. *f* is the plunger-rod, which slides freely in holes formed in bars *b d*. *g* is a circular head formed upon or secured to rod *f*; and *h* is a plate of the form of the interior of the die, and which is firmly secured to the top of head *g*. *ee* are two steel pins, secured at their lower

ends in bar *d*, passing thence through bar *b* and loosely through holes in head *g* and plate *h*, as shown.

In use, the plunger is thrown up, bringing the top of plate *h* level with the edge of the die, when the nails *ii* are inserted, the pins *ee* being adjusted by means of screws *c c*, so that the points of the nails shall be even with the top of plate *h*, when the press is set in motion and the leather is cut into the die, as shown at *j*, each layer as it is cut being impaled upon the nails, and the whole gradually forced down until the desired thickness is reached, when the nails will have penetrated each thickness and secured the whole together, when the plunger is raised and the heel thereby thrown out, when the operation is repeated.

The devices by which the plunger is raised and held in position, and allowed to recede automatically as the leather is cut into the die, are fully described and shown in the drawing accompanying my said application for Letters Patent for cutting-presses, and any person of ordinary skill in the construction of such presses could readily supply a variety of devices for these purposes; and as it is not my intention to confine myself to any device or method of carrying out my invention, which consists in combining the cutting and nailing devices, a more extended description is deemed unnecessary.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In combination with cutting-die A, the perforated vertically-sliding plate *h* and vertically adjustable pins *ee*, all arranged to operate substantially in manner as and for the purposes specified.

NATHAN J. SIMONDS.

Witnesses:

T. W. PORTER,
C. L. MARSTON.