(No Model.) 2 Sheets—Sheet 1.

F. GEISSEL.

TYPE RUBBING MACHINE.

No. 378,880. Patented Mar. 6, 1888.

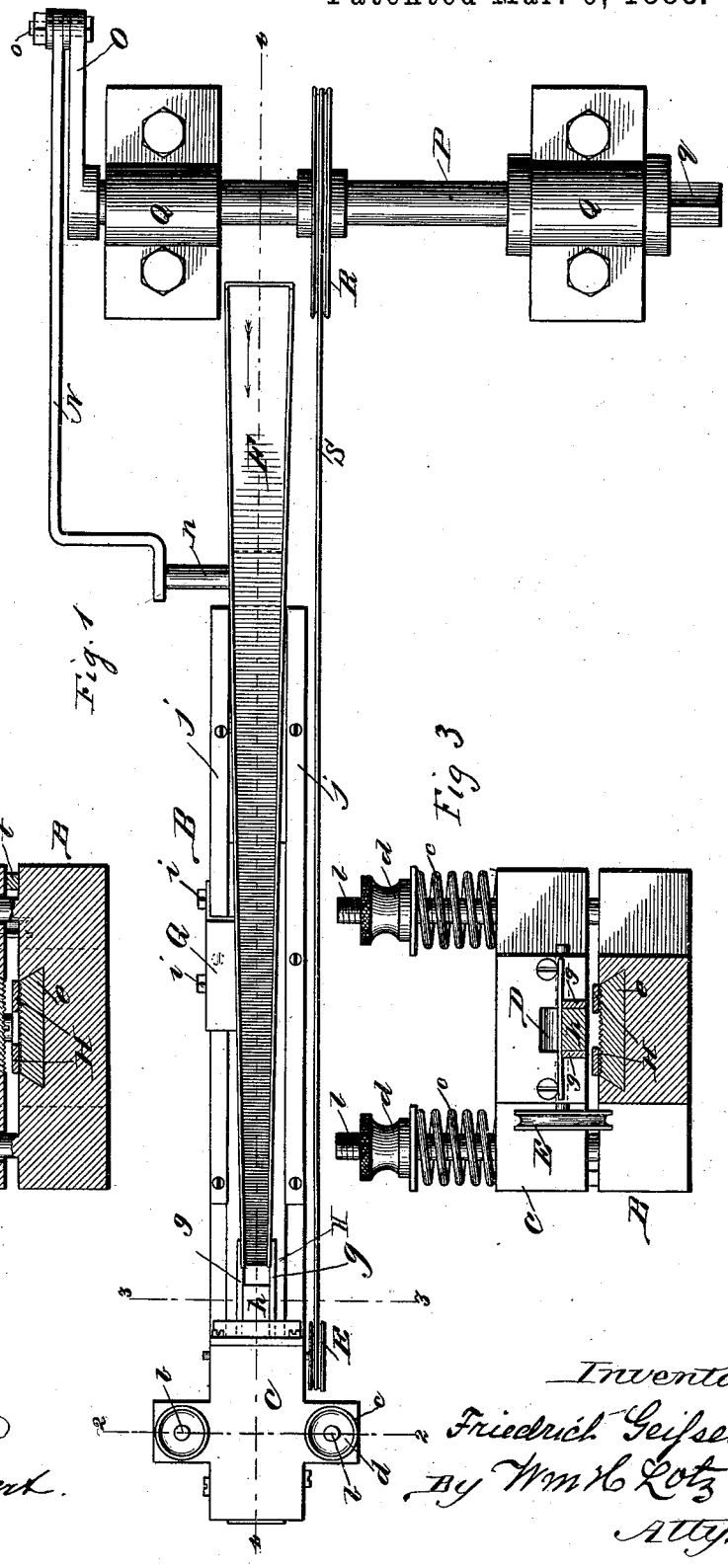


Fig. 1

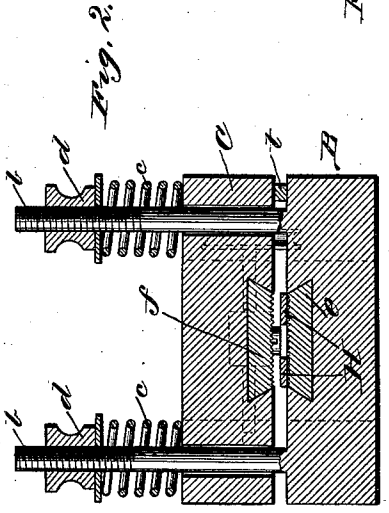


Fig. 2

Fig 3

Witnesses
W. Fossiter.
Otto Rubkert.

Inventor
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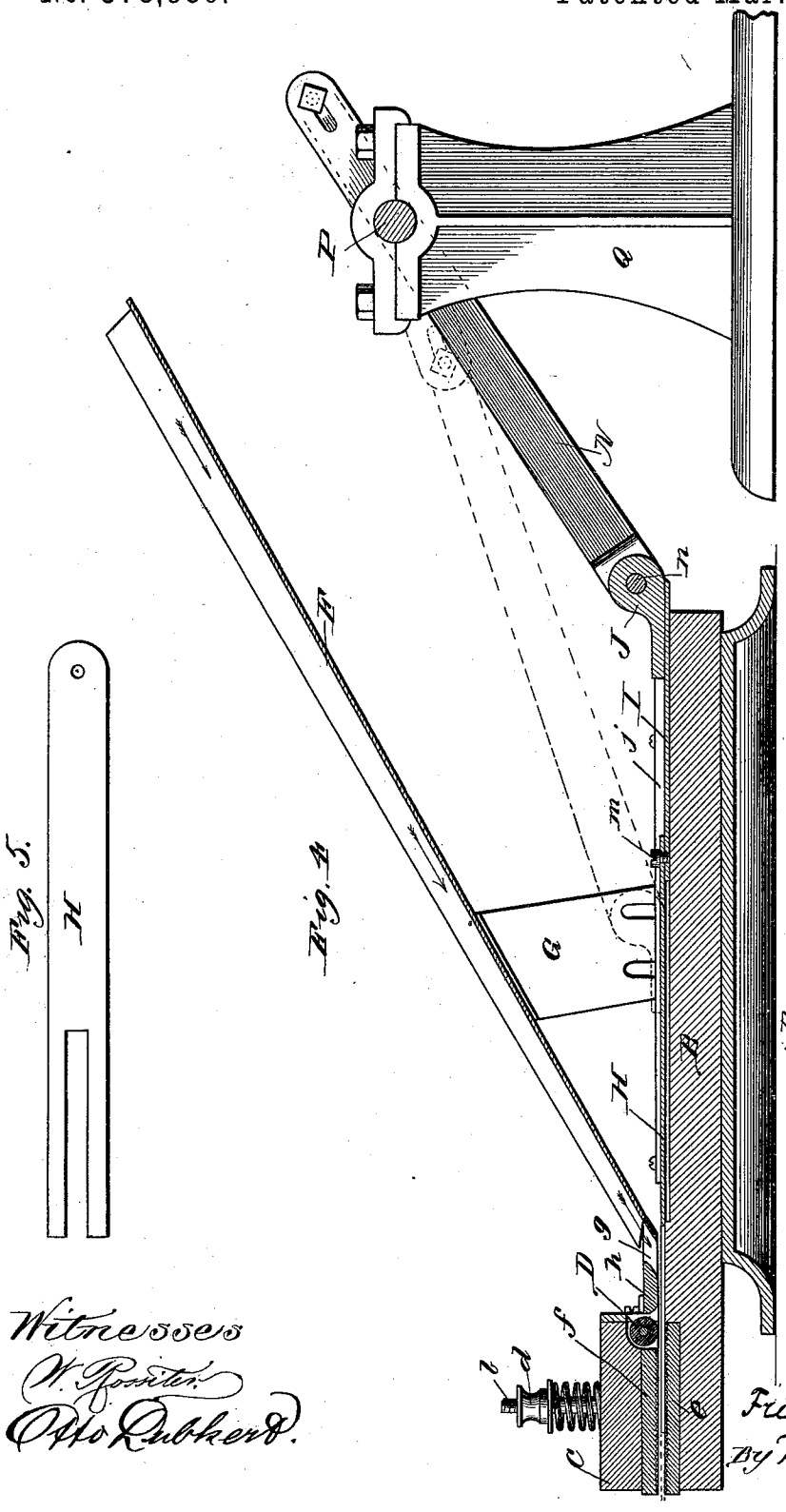
N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

F. GEISSEL.

TYPE RUBBING MACHINE.

No. 378,880. Patented Mar. 6, 1888.



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UNITED STATES PATENT OFFICE.

FRIEDRICH GEISSEL, OF CHICAGO, ILLINOIS.

TYPE-RUBBING MACHINE.

SPECIFICATION forming part of Letters Patent No. 378,880, dated March 6, 1888.

Application filed November 21, 1887. Serial No. 255,727. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH GEISSEL, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Type-Rubbing Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has for its object to provide an attachment to a type-casting machine for rubbing the sides of types after being cast to be smooth and parallel and of uniform thickness, and without damaging the bas-relief characters cast in the ends thereof; and with that object in view my invention consists of the novel devices and combinations of devices hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 represents a plan view of the attachment; Fig. 2, a vertical transverse section on line 2 2 in Fig. 1; Fig. 3, a similar section on line 3 3 in Fig. 1, and Fig. 4 a longitudinal vertical section on line 4 4 in Fig. 1; and Fig. 5 is a plan of the bifurcated push-bar detached.

Corresponding letters in the several figures of the drawings designate like parts.

A denotes the base of the machine, that is arranged to be fixed in any suitable manner to the frame of the type-casting machine as in proper position thereon, and B is the frame, being a longitudinal parallel bar of metal rigidly secured upon such base A. This frame B has cross-extensions at near its forward end, into which are secured screw-studs *b*, for holding and vertically guiding a cross-shaped block, C, yieldingly held down by spiral springs *c*, placed around such studs *b* and depressed by thumb-nuts *d*, screwed upon the upper ends of studs *b*.

Into the upper face of the forward end of frame B is dovetailed a cutter, *e*, and into the lower face of block C is dovetailed a cutter, *f*, both cutters on their opposing faces being file-cut or serrated to form fine cutting-edges for the type, which, being pushed through between, is shaved on both sides. The block C is hollowed out in its lower rearward edge for an india-rubber roller, D, pivoted upon a spindle journaled in the sides of block C and extending through at one side for mounting a pulley, E.

Rearward of roller D are secured two guide-plates, *g*, and between these guide-plates *g* is secured a plate, *h*, that is chamfered on its bottom edge. The guide-plates *g* are connected with the upwardly-extending side flanges of a rearwardly-extended inclined feed-plate, F, supported on and adjustably secured to frame B by a vertical bracket, G, that is rigid with plate F, and is vertically slotted in its lower end for clamping to frame B by screws *i*.

Upon the edges of the upper face of frame B are secured guide-strips *j*, between which slides the push-bar H, which is bifurcated in its forward end for receiving the type and holding it steady while forcing the same through between cutters *e* and *f*. This push-bar H is secured at its rear end upon the forward end of another bar, I, by a screw, *m*, and upon the rear end of bar I is rigidly secured an eyed plate, J, which is pivotally connected with the side stud, *n*, of a pitman, N, coupled at its opposite end to the crank-pin *o*, adjustably secured in the slotted end of crank O, mounted upon shaft P, which is journaled in two standard-bearings, Q. These bearings Q may be a part of the type-casting-machine, and the shaft P may be at the same time the main shaft of such type-casting machine. This shaft P may either be rotated by means of a hand-crank secured upon the squared end *q* of shaft Q or by mounting a pulley upon such shaft to drive by belt, and upon this shaft is also mounted a pulley, R, and an endless cord, S, is stretched over both pulleys R and E for rotating roller D. The inclined plate F should be placed in such position relative to the type-casting machine that each type, as it leaves such type-casting machine, will be discharged upon such inclined plate.

The *modus operandi* of the machine is as follows, to wit: A type being dropped upon the inclined plate F with its bas-relief character foremost, it will slide down thereon. The push-bar H being reciprocated by turning shaft P, the type will drop between the prongs of the same as soon as said push-bar has reached its extreme rearward position, the type being directed in its course by side plates, *g*, and by the under face of plate *h*. The push-bar H now moving the type to enter between the cutters *e f*, the roller D will hold it down to prevent its forward bas-relief character from com-

ing into contact with the rearward corner of cutter *f*. The push-bar H with each stroke will thus force a type through between cutters *e* and *f* to drop out at the front end of the machine. For adjusting the machine to the exact thickness to which the type is to be scraped down, a finished type, *t*, is inserted between frame B and block C, and then the thumb-nuts *d* are screwed down for adjusting the springs *c* for the desired pressure.

What I claim is—

1. In a type-rubbing machine, the frame B, with cutter *e*, and block C, with cutter *f*, and roller D, in combination with inclined feed-plate F and with reciprocating push-bar H, bifurcated at its forward end, substantially as set forth.

2. In a type-rubbing machine, frame B, with cutter *e*, and block C, with cutter *f*, roller D, and guide-plates *g* and *h*, in combination with inclined feed-plate F and with push-bar H, bifurcated at its forward end, substantially as set forth.

3. In a type-rubbing machine, the frame B, with cutter *e*, and block C, with cutter *f*, guided on studs *b* and yieldingly compressed by springs *c*, and provided with roller D and guide-plates *g* and *h*, in combination with inclined feed-plate F and with push-bar H, all substantially as set forth, for the purpose specified.

4. In a type-rubbing machine, the frame B, with cutter *e* and with guide-strips *j*, and the block C, with cutter *f*, and roller D, with pulley E, in combination with push-bar H, connected by pitman N with crank O of shaft P, having mounted pulley R, for transmitting motion to roller D by a cord, S, all substantially as set forth, to operate as specified.

In testimony whereof I affix my signature in presence of two witnesses.

FRIEDRICH GEISSEL.

Witnesses:
WILLIAM H. LOTZ,
OTTO LUBKERT.