(No Model.)

G. J. B. RODWELL.

VULCANIZED RUBBER DIE OR STAMP.

No. 349,664. Patented Sept. 21, 1886.

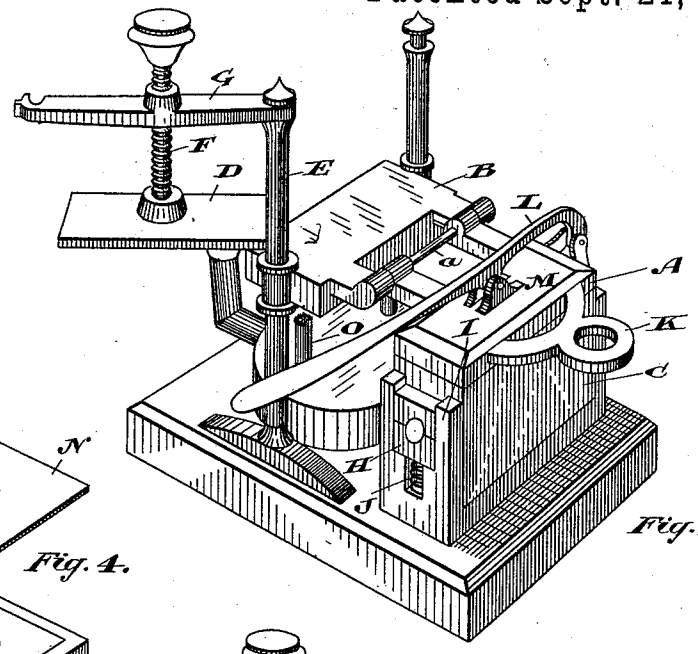


Fig. 1.

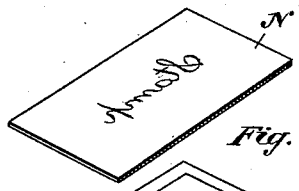


Fig. 4.

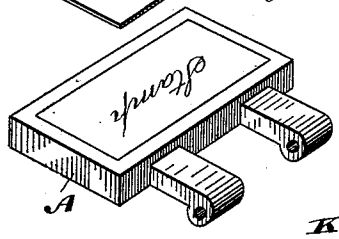


Fig. 3.

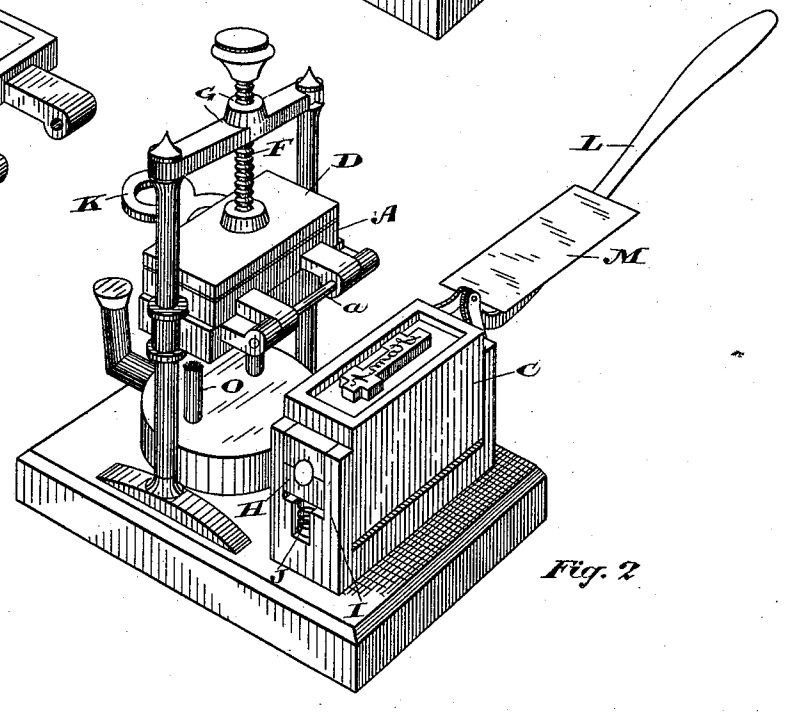


Fig. 2.

Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE J. B. RODWELL, OF TORONTO, ONTARIO, CANADA, ASSIGNOR OF ONE-HALF TO HERBERT CANNING SECORD, OF SAME PLACE.

VULCANIZED RUBBER DIE OR STAMP.

SPECIFICATION forming part of Letters Patent No. 349,664, dated September 21, 1886.

Application filed February 6, 1886. Serial No. 191,083. (No model.)

To all whom it may concern:

Be it known that I, GEORGE JAMES BELLAMY RODWELL, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, manufacturer of rubber stamps, have invented an Improved Machine for the Manufacture of Vulcanized Rubber Dies or Stamps, of which the following is a specification.

The object of the invention is to produce a machine by which, comparatively speaking, unskilled parties can make, with rapidity and ease, vulcanized rubber dies or stamps; and it consists, essentially, in pivoting the flask which contains the impression material between a case in which the type to be copied is set, and a press for compressing a piece of rubber onto the mold for receiving the impression therefrom, substantially as hereinafter more particularly explained.

Figure 1 is a perspective view of my improved machine, showing the flask resting on top of the case. Fig. 2 is a perspective view of the machine, showing the case in the press. Fig. 3 is a detail of the flask containing the impression material. Fig. 4 is a detail of the piece of rubber to be formed into a die or stamp.

A represents a flask, made any suitable size. This flask is pivoted at *a*, which pivot is at such a point that the flask A may be thrown either onto the bed-plate B or the case C.

D is a follower pivoted on one of the standards E, and operated by a screw, F, which passes through a nut in the top plate, G, also pivoted on the same standard as the follower D, so that the follower and screw may be swung clear of the bed-plate B, as indicated in Fig. 1.

Having filled the flask A with suitable impression material—for instance, dental plaster, or any other plastic material which will receive an impression from the type—I swing the flask off the bed-plate B onto the case C, as indicated in Fig. 1, in which case the type has already been set. After compressing the flask with sufficient force to obtain the impression from the type on the material in the flask, the said flask is swung back onto the bed-plate A. With the view of insuring an even impression, I pivot the case C in boxes H, which are carried between the jaws I, located at either end of the case C. The said boxes are supported on springs J, so that when no pressure is upon the case the said case will swing freely on its pivot; but when it becomes necessary to force the flask down upon the case the springs J yield sufficiently to allow the case to rest on the bed-plate, so that the necessary pressure to secure the impression is possible. In small machines the handle K, attached to the flask A, will be found sufficient to insure the necessary pressure; but in larger machines I provide a lever, L, provided with a pivoted plate, M, which may be brought down upon the top of the flask A, and the necessary pressure secured by the lever L. Having obtained the impression from the type in the case C, I, as before stated, swing the flask back onto the bed-plate B, and after placing the piece of rubber N on top of the mold, I swing the follower D over into the position in which it is shown in Fig. 1, and screw down the follower with sufficient pressure to secure the impression from the mold. I should have mentioned that the piece of rubber N is prepared for vulcanizing, and it is vulcanized when under pressure in the press by means of the lamp O, which is placed below the bed-plate B, and when lighted heats the said bed-plate and contents of the flask H to the required heat to vulcanize the rubber, as stated.

Those familiar with the art of manufacturing rubber dies or stamps will understand that the chief advantage of my device consists in the rapidity with which the impression is taken after the material has been placed within the flask, as it is accomplished before the material has had time to harden. It will, moreover, be seen that the mold may be handled with great nicety and the pressure regulated, so that the material need not be broken while being manipulated against the type.

What I claim as my invention is—

1. The pivoted flask A, in combination with a press and type-case, arranged substantially as and for the purpose specified.

2. A flask, A, pivoted at *a*, and arranged to rest upon a bed-plate, B, in combination with

the pivoted case C, arranged substantially as and for the purpose specified.

3. The pivoted flask A, arranged to rest upon the pivoted case C, in combination with the springs J, arranged to support the pivot-points of the case C, substantially as and for the purpose specified.

4. A pivoted flask, A, arranged to rest upon the pivoted case C, supported by the springs J, in combination with the lever L, provided with a pivoted plate, M, substantially as and for the purpose specified.

5. The pivoted flask A, arranged to rest upon the bed-plate B, in combination with the follower D, pivoted on one of the standards E, and operated by the screw F, substantially as and for the purpose specified.

6. The pivoted flask A, resting upon the bed-plate B, in combination with the lamp O, arranged substantially as and for the purpose specified.

Toronto, February 1, 1886.

GEORGE J. B. RODWELL.

In presence of—

CHARLES C. BALDWIN,

J. M. JACKSON.