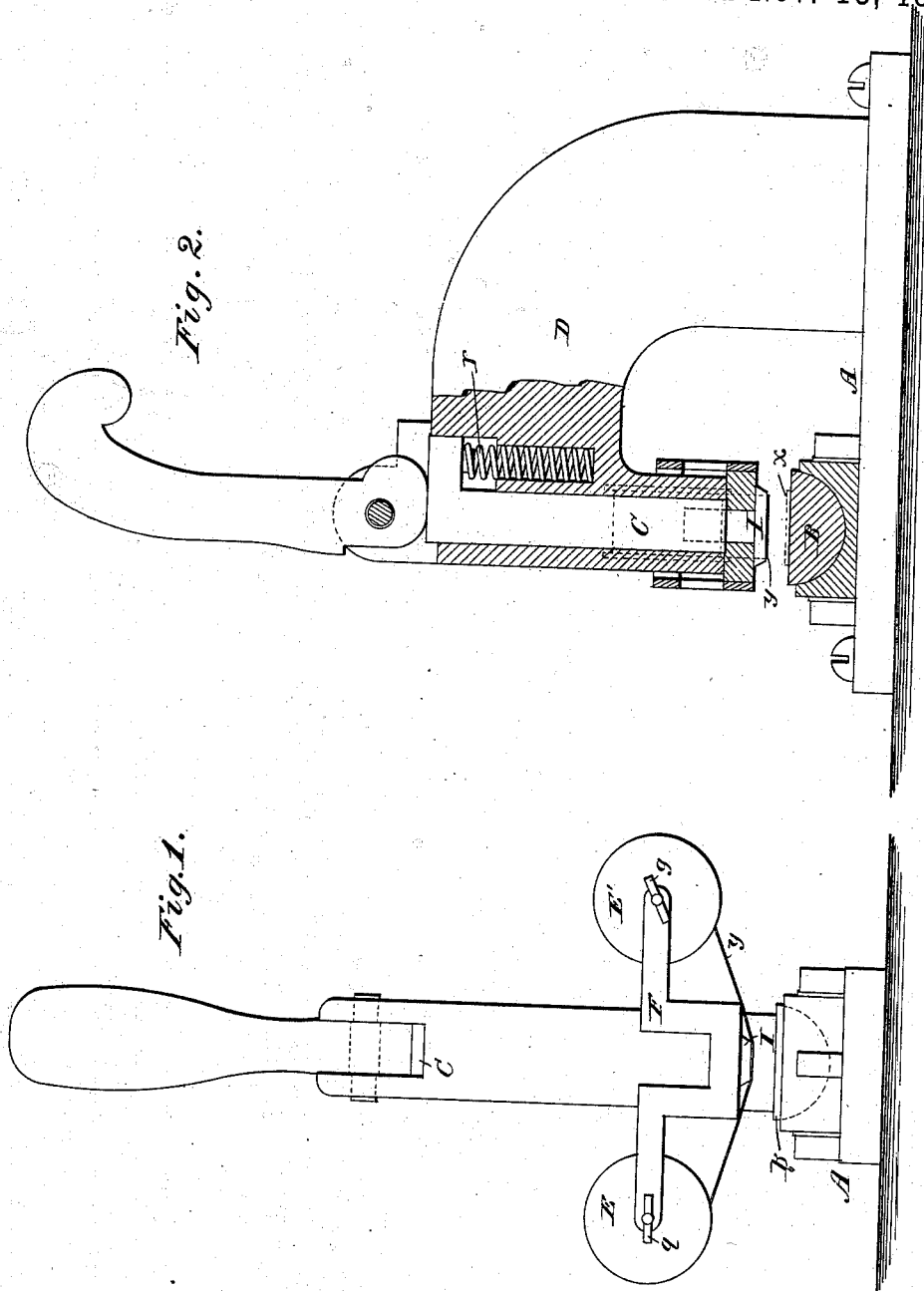


(No Model.)

M. SCHWEIZER.
MARKING KNIFE BLADES.

No. 288,369.

Patented Nov. 13, 1883.



Attest:
Count A. Cooper.
H. C. Hansmann.

M. Schweizer
By Inventor:
Jester & Greiman
his attys

UNITED STATES PATENT OFFICE.

MAXIMILIAN SCHWEIZER, OF NAUBUC, CONNECTICUT.

MARKING KNIFE-BLADES.

SPECIFICATION forming part of Letters Patent No. 288,369, dated November 13, 1883.

Application filed May 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, MAXIMILIAN SCHWEIZER, of Naubuc, Hartford county, Connecticut, have invented certain Improvements in Marking-Knife-Blades, &c., of which the following is a specification.

My invention consists in a mode of marking knife-blades, plates, and other articles, and in apparatus therefor, whereby I am enabled to operate with greater certainty and rapidity, secure a sharper impression, and avoid the necessity of frequently replacing the dies.

In the drawings, Figure 1 is a front elevation of an improved press used in carrying out my invention, and Fig. 2 is a sectional elevation.

In carrying out my invention the knife-blade or other plate to be marked is first coated with varnish, and then by pressing a stamp of the desired configuration on a fabric upon the varnished surface the parts of such varnish corresponding to the design are removed, exposing the metal, which is then etched in the usual manner. Thus a steel stamp, I, above the blade *x*, coated with a suitable varnish, is brought upon an intervening tissue, *y*, of silk, muslin, paper, or other suitable fabric, and presses the same firmly upon the varnished surface of the blade, when the varnish will be caused to adhere to the absorbent material wherever the latter has been brought forcibly in contact therewith, so that on lifting the die and removing the fabric the latter will carry with it so much of the coating as corresponds to the face of the die, thereby exposing the design upon the plate, which can be at once etched.

It will be apparent that different forms of machines may be used in carrying out this mode of marking the plates, and that it is necessary to employ a varnish capable of being affixed to the ribbon by pressure, but not adhering thereto by mere contact, and which will resist the acid and permit deep etching.

A machine which has proved to be effective is shown in the drawings, consisting of a base, A, supporting an anvil, B, in the form of a semi-sphere, the rounded portion fitting a cor-

responding socket in the base, so that the anvil will accommodate itself readily to the form of the plate to be marked, that the upper face of the latter may be brought absolutely parallel with the face of the die I. The die is secured to a plunger, C, sliding in the end of an overhanging arm, D, secured to the base, and the strip *y* extends, in the form of a ribbon, beneath the die to rollers E E', supported by a frame, F, carried by the movable plunger, and clamped by thumb-nuts *g*. A lever, G, or other suitable device, serves to depress the plunger to bring the die upon the ribbon and upon the plate. A spring, *r*, raises the plunger when pressure is removed.

I am aware of the ordinary marking-presses carrying a ribbon and die. The combination above described differs from such devices in the fact that the ribbon which I employ is not coated with a marking composition, but is used to secure the adhesion of the coating placed upon the article to be marked, and I use means for holding the ribbon firmly, so that it will rise with the die. As the ribbon becomes clogged with varnish it is moved to bring new surfaces below the die.

I claim—

1. The mode of marking metal plates, consisting in coating the same with a varnish, and in then removing the latter to correspond with the desired design by pressing a strip of fabric with a die upon the varnished face, removing the strip with the adhering coating, and then etching the surface thus exposed, as set forth.

2. The combination, in a machine for preparing plates for etching, of an anvil or rest, a movable die-holder and die, and supports holding between the die and rest a strip of fabric, substantially as described, adapted to carry with it so much of the varnish as corresponds to the face of the die, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MAXIMILIAN SCHWEIZER.

Witnesses:

THEODORE TRIEBEL,
WM. SCHIEDING.