June 17, 1941. T. T. SOSSNER 2,245,879

MONOGRAM ENGRAVING MACHINE

Filed Jan. 20, 1940

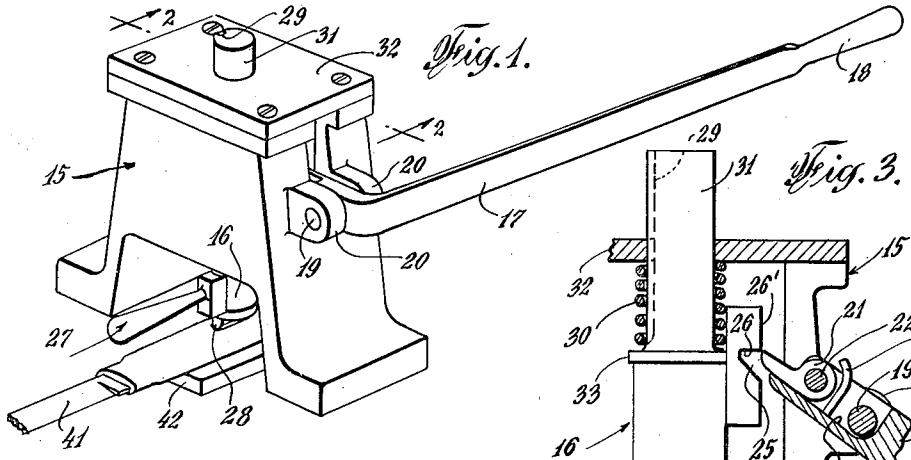


Fig. 1.

Fig. 3.

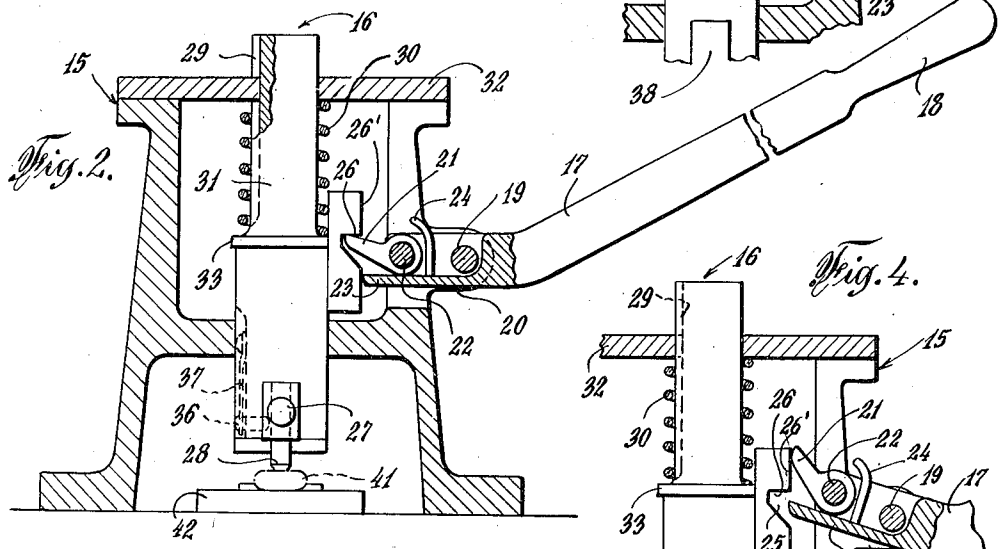


Fig. 2.

Fig. 4.

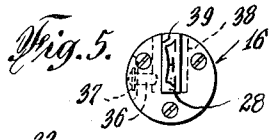


Fig. 5.

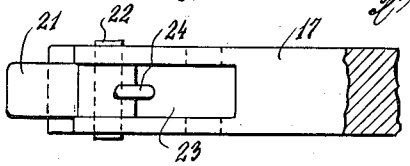


Fig. 6.

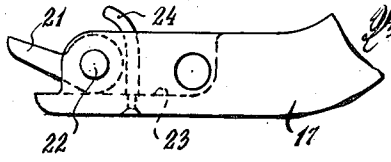


Fig. 7.

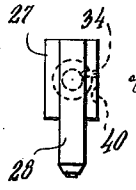


Fig. 9.

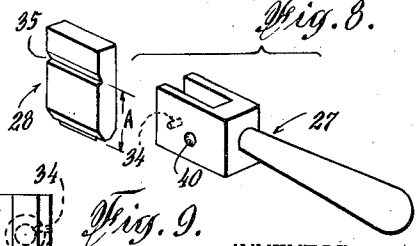


Fig. 8.

INVENTOR
Theodore T. Sossner
BY
ATTORNEY

Patented June 17, 1941 2,245,879

UNITED STATES PATENT OFFICE

2,245,879

MONOGRAM ENGRAVING MACHINE

Theodore T. Sossner, New York, N. Y.

Application January 20, 1940, Serial No. 314,782

1 Claim. (Cl. 101—3)

The present invention relates to monogram engraving machines and more particularly to the type operated by hand.

An object of this invention is to provide a machine of the type mentioned, of novel and improved construction, for marking monograms or other symbolic characters on the handles of silverware, cutlery, letter openers, umbrellas and on other articles of various materials; those specifically mentioned, being mere examples.

Another object hereof is to provide a novel and improved machine of the character described, in which the marking characters or tools are securely and correctly held, easily changed, and effectively impinged onto the surface to be marked.

A further object of the invention is to provide a novel and improved machine of the nature set forth, which is simple in construction, easy to use, requiring no special skill on the part of the operator, and which is efficient in carrying out the purposes for which it is designed.

Other objects and advantages will become manifest as the following disclosure proceeds.

In the accompanying drawing forming part of this application, similar characters of reference indicate corresponding parts in all the views.

Fig. 1 is a perspective view of a machine embodying the teachings of this invention.

Fig. 2 is a section taken at line 2—2 in Fig. 1.

Fig. 3 is a portion of Fig. 2, showing the position of the plunger member included in said embodiment, and of all the other parts in relation thereto, at the moment immediately preceding release of said plunger.

Fig. 4 is a similar view showing the position assumed by a pawl member included in said embodiment, as the handle is restored to initial operating position.

Fig. 5 is a bottom view of the plunger.

Fig. 6 is a fragmentary plan view of the pawl end of the operating lever included in said machine.

Fig. 7 is a front view of Fig. 6.

Fig. 8 is an "exploded" view in perspective, showing a marking tool and its holder.

Fig. 9 shows an end view of the parts illustrated in Fig. 8, in assembled position, ready to be associated with the plunger aforesaid.

In the drawing, the numeral 15 designates generally a frame of any suitable shape, on which there can be slidably mounted the plunger member indicated generally by the numeral 16, preferably, though not necessarily adapted for movement along the vertical, and also a relatively long lever 17, terminating in a handle 18 at one end, and pivotally mounted near its other end on a pin 19 positioned through the bosses 20 of said frame 15.

A pawl 21, which extends beyond the end of the shorter portion of said lever 17, is pivotally mounted thereon at 22, is limited to swing between the channel floor 23 and the pin 24, which serve as stops therefor, and said pawl is adapted to engage the plunger member 16, in the acute angled notch 25, particularly identified by the substantially horizontal step or tooth 26.

The lower end of the plunger member 16, securely carries a demountable handled, bifurcated marking tool holder, designated generally by the numeral 27, between the prongs of which, is removeably mounted the monogram marking tool or other steel stamp 28. The plunger 16, is slide-fit keyed in keyway 29, to maintain said plunger against axial rotation, while a relatively strong coil spring 30, is carried about the shank 31 of plunger 16, between frame part 32, and the collar 33, which latter is an integral part of said plunger 16.

A pin 34, extending slightly from the inside face of one of the prongs of the tool holder 27, is adapted to lie within the groove 35, upon insertion of the monogram stamp 28; thus mounting said stamp against vertical movement within its holder 27 in its normal position in the machine, while pin 36 acted against by the blade spring 37 mounted on the plunger 16, acts to lock the tool holder 27 in true position within the socket 38 in said plunger 16; said socket having an open bottom slot 39 of such size as to permit the monogram stamp 28 to protrude downwardly therefrom, pin 36 being adapted to engage in socket 40.

Normally, at rest, the set up is as is illustrated in Fig. 2, where the handle 18 is in raised position and the plunger 16, is in its lowest position. In operation, said handle end of the lever 17, is lowered slightly, whereupon pawl 21, resting against and therefore restrained by the channel floor 23, engages the step or tooth 26, and the plunger 16 is moved upward a little to permit placing an article, as for instance the handle end of a knife 41 on plate or positioning jig 42 which the latter might be. Now maintaining the knife 41 in its required setting, the manual pulling down of the handle end of the lever 17 is continued, whereupon the plunger 16 will be raised and the coil spring 30 will be stressed. This raising of the plunger 16 will continue until pawl 21 passes the free edge of the step 26, where-

upon the plunger will be released from said pawl, and then due to action of the spring **30**, will be forced downward, causing the tool **28** to impinge forcefully onto the surface of the article **41**, whereby the latter will become marked cut with a replica of the character appearing on the steel stamp or marking tool **28**. The handle **18**, is now raised, whereupon pawl **21** will swing about its axis **22** a little arcual distance and slide against wall **26'** until the tip end of said pawl passes the free edge of said step **26**. Now the pawl will fall to its original position against stop or channel floor **23** in this instance, ready to again engage step **26** for slight raising of the plunger **16** to permit withdrawal of article **41** which was monogrammed, and to be replaced with the next article to be so treated. This completes the cycle of operation of the machine, and it is in condition to repeat its function.

Stop pin **24** is provided to prevent pawl **21** from swinging too far, so that upon raising the handle **18**, said pawl will surely be in position to fall against wall **26'**, and then to initial operating position. It is also evident that a slight pull on its handle, will release the tool holder **27** from the plunger member **16**, whereupon other monogram or character stamp **28** may be easily mounted therein. Uniform operating result is effected by having the distance indicated by the letter A identical on all stamps **28** utilized.

The present invention is capable of numerous forms and various applications without departing from the features and teachings herein disclosed. It is therefore intended and desired that the embodiment set forth herein be deemed illustrative and not restrictive and that the patent shall cover whatever patentable novelty is herein disclosed; reference being had to the following claim rather than to the foregoing specific description to indicate the scope of the invention.

I claim:

In a machine of the character described, a frame, a plunger moveably mounted on the frame, having a tooth thereon; said tooth having a substantially horizontal edge and a substantially vertical edge; said plunger being adapted to carry a marking tool thereon, a lever pivotally mounted nearer one of its ends onto the frame, a pawl pivotally mounted on the shorter portion of the lever, adapted to engage the horizontal edge of said tooth, whereby upon lowering the longer portion of the lever, the plunger is raised; a stop element on the lever adapted to limit the downward swing of the pawl, a spring in contact with the frame adapted to become stressed upon upward movement of the plunger, said pawl being adapted to become released from the tooth upon the lowering of the longer portion of the lever a predetermined distance, whereby the plunger is forced downward by action of the stressed spring, and upon raising the longer portion of the lever a predetermined amount, said pawl being adapted to be swung upwardly with respect to the stop element by the vertical edge of the tooth, during the interval said pawl comes in contact with said vertical edge, and then to fall by action of gravity onto said stop element, whereby said pawl is returned in position to engage the horizontal edge of said tooth.

THEODORE T. SOSSNER.