(No Model.) 2 Sheets—Sheet 1.

E. DAGUIN.

MACHINE FOR STAMPING AND OBLITERATING POSTAGE STAMPS.

No. 319,962. Patented June 16, 1885.

FIG. 2.

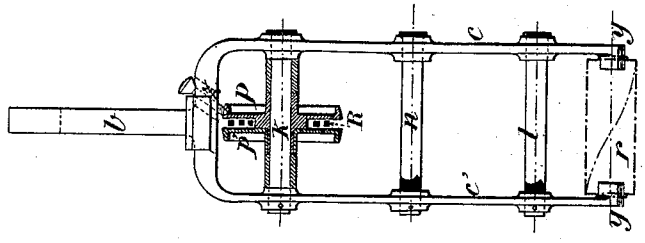


FIG. 1.

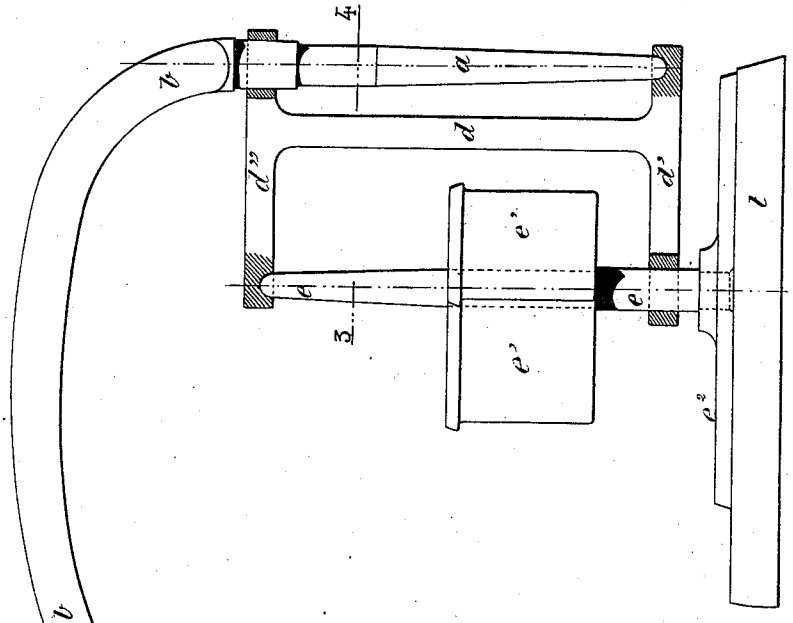


FIG. 1bis.

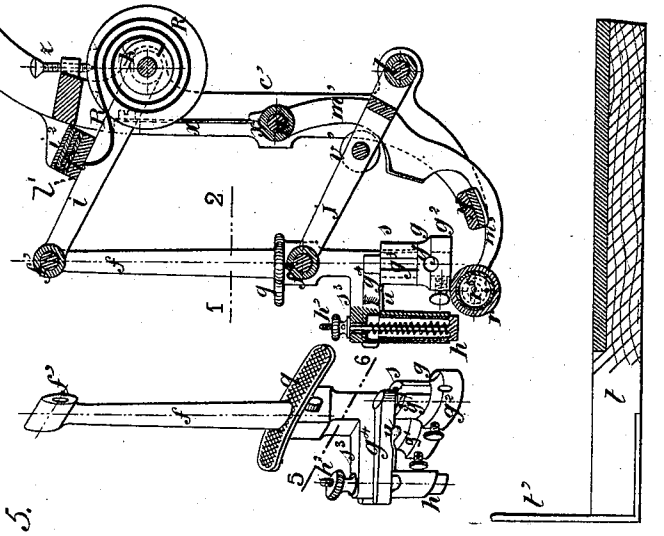
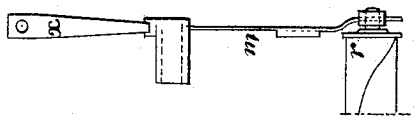


FIG. 5.



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

(No Model.) 2 Sheets—Sheet 2.

E. DAGUIN.

MACHINE FOR STAMPING AND OBLITERATING POSTAGE STAMPS.

No. 319,962. Patented June 16, 1885.

FIG. 4

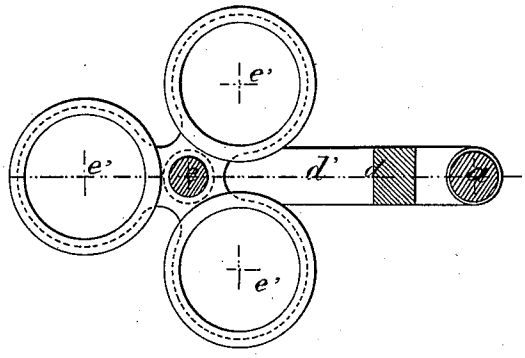


FIG. 6.

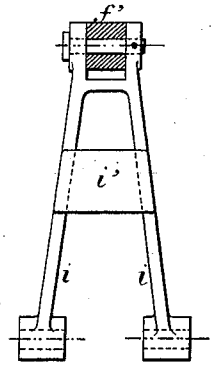


FIG. 7.

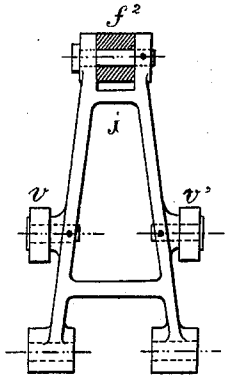


FIG. 3bis

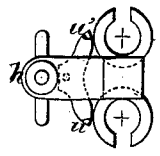


FIG. 3.

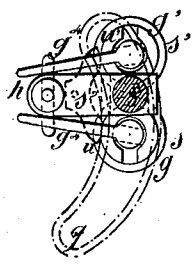


FIG. 9.

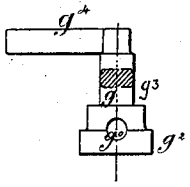


FIG. 8.

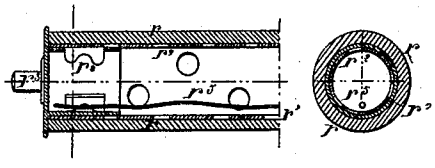
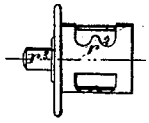


FIG. 8bis



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UNITED STATES PATENT OFFICE.

EUGÈNE DAGUIN, OF PARIS, FRANCE.

MACHINE FOR STAMPING AND OBLITERATING POSTAGE-STAMPS.

SPECIFICATION forming part of Letters Patent No. 319,962, dated June 16, 1885.

Application filed March 4, 1884. (No model.) Patented in France September 30, 1882, No. 151,332.

To all whom it may concern:

Be it known that I, EUGÈNE DAGUIN, a citizen of France, residing at Paris, France, civil engineer, have invented a new Machine for Stamping Letters and for Obliterating Postage-Stamps, and also applicable to other similar purposes, (for which I have obtained a patent in France for fifteen years, No. 151,332, bearing date September 30, 1882,) of which the following is a specification.

The apparatus forming the subject of the present invention is intended more especially for stamping letters and obliterating postage-stamps; but it is also applicable to other similar purposes. It is of simple construction, of low cost, in order to make it generally applicable to post-office use, and is operated in a manner which differs but little from the hand apparatus at present in use; but it possesses the advantage over the latter of causing less fatigue to the person using it by restricting the movements to what is absolutely necessary, and consequently of enabling the machine to produce much more perfect work, to work more rapidly, and to yield a greater production.

In principle the new or improved apparatus is composed of a kind of arm with a jointed pivot fixed on a table of any suitable kind, and of a special arched form to allow of the storing (on the side of the pivoted joint) of a large number of the letters to be stamped and obliterated, and carrying at the end presented to the user the mechanism intended for the operations of stamping and obliterating. This mechanism, which comprises a vertical stem furnished at its lower end with the required dies, and a simplified arrangement for inking the said dies, is actuated by one hand applied to the stem for the purpose of effecting its descent at the same time that it is directed to the right or left, as required, by the position of the postage-stamps on the letters, which letters are distributed or placed one by one under the dies by the other hand. The ascent of the stem is effected by a spiral spring of steel wire of great length, taking its point of support on the pivoting-arm and acting uniformly on the stem of the die-carrier to raise it and effect the inking of the said dies.

Figure 1 of the drawings hereto annexed shows a sectional elevation of the machine, the mechanism being represented at rest. Fig. 1^{bis} is a detail perspective view of part of the same. Fig. 2 is a partial end view. Fig. 3 is a horizontal section at line 1 2; Fig. 3^{bis}, a detail top view of the parts *h u u'*. Fig. 4 is a horizontal section at line 3 4. Figs. 6 and 7 show a plan of the two oscillating parallel-motion levers. Figs. 5, 8, and 8^{bis} are details of the inking-roller mechanism. Fig. 9 shows one of the die-carriers.

The pivoting-arm is a kind of crane, in one piece, of cast-iron, wrought-iron, or steel, comprising the pivot *a*, the arch *b*, and the front forked support, *c c'*, of the mechanism. The pivot *a* rests on the lower wing, *d'*, of a vibrating frame, *d*, which turns on a fixed pivot, *e*, which it embraces below by the other side of the wing *d'*, while it sustains the pivot *a* by its upper wing, *d''*. This new jointed arrangement, while it preserves to the crane the faculty of turning quite round its pivot *a*, procures for it the means of carrying the stamping mechanism at variable distances from the fixed pivot *e*, while allowing the movable pivot *a* to accomplish complete revolutions round the axis *e* as well in one direction as the other.

The axis *e*, which is fixed at bottom in a shoe, e^2, screwed on the table *t*, serves to support a case or frame, *e'*, the compartments of which are intended to receive bottles of ink, lubricating-oil, &c.

The arch *b* is a prolongation of the pivot *a*, and forks at the other end into two parallel branches, *c c'*, on which are taken the points of support, and pivoting of the parts of the stamping and inking mechanism. This mechanism comprises, first, the stem *f*, carrying the die-carriers *g g'*, and the downwardly-extending piston *h*, for stopping and holding the letters during the stamping, and for detaching the stamped letters from the stamp; second, the levers *i* and *j*, which oscillate on two fixed axes, *k* and *l*, crossing the branches *c c'*, and which are jointed at $f' f^2$ to the stem *f*, so as to form a parallelogram, *i f' f f² j l c c' k*; third, the inking-roller *r*, the journals of which take into the ends of two independent levers, *m m'*, oscillating on a common axis, *n*, which is parallel to the axes *k l*, and, like them, crosses the branches *c c'* of the crane; and, fourth, the spiral spring R, inclosed between the plates *p p'*, (see Fig. 2,) forming a kind of barrel,

said spring raising by its free end the lever *i*, the stem *f*, and the other lever, *j*. The edge of the plate *p* may be notched to furnish a sufficient hold to a binding-screw, *z*. The stem *f* between the joints *f' f²* is of such form that it can be conveniently held by the hand, serving as a handle; but it is also furnished above the joint *f²* with a small saddle, (sellette,) *q*, on which the fingers of the hand are placed astride the stem *f*, in order to exert on the latter the pressure necessary for its descent. Below the joint *f²* the stem *f* is shaped so as to present at *s s'*, to the right and left, the vertical sockets, into which the die-carriers *g g'* are fitted, and at *s²* the place for the piston *h*. This piston is mounted elastically with easy friction, and is regulated by means of the nut *h'*, in order that the external and lower face shall come in contact with the envelope to be stamped before the dies. These dies are mounted in the die-carriers *g g'*, both alike, and as shown in Fig. 9—that is to say, each die-carrier has a base, *g²*, to receive the stamp, a cylindrical part, *g³*, for fitting in the vertical hole of the same diameter with which each of the parts *s* and *s'* of the stem *f* is perforated, and, finally, a tail or appendage, *g⁴*, which has a double object. In the first place, it serves for locking the stamp-carrier in one or other of the parts *s s'*, which for that purpose are slotted from top to bottom externally in a plane perpendicular to the general axis of the crane. To fix the die-carrier to the stem *f*, spring-catches *u u'* engage under the tail-pieces *g⁴*, as indicated in Fig. 1bis. In the second place, these appendages *g⁴* are useful for stamping by hand in case of emergency, and when from some cause the machine cannot be used and it is required to stamp and obliterate one or more letters. The removal of the dies from the die-carriers is facilitated by pressure brought to bear on them by a pointed instrument introduced into the hole *g⁰*.

The upper lever, *i*, of the parallelogram has near the middle of its length a plate, *i'*, on which the lifting-spring R acts, which plate bears) at the extreme upper position of the die-carrier *f*) against a stop, *i²*, covered with leather or other substance, for deadening shock.

The lower lever, *j*, is furnished externally with two friction-rollers, *v v'*, which correspond to the two levers, *m m'*, carrying the inking-roller *r*. These levers are of a special form, which concur with the action of the die-carrier, to ink the latter and to leave the inker at rest during the time the stamping is taking place. Oscillating at *n*, the two levers *m m'* obey their respective springs *x*, which tend constantly to place the roller *r* in the extreme position shown in the drawings, which position is limited by the cross-stop *y* of the branches *c c'*. When the stem *f* is lowered, the friction-rollers *v v'* quickly reach the levers *m m'*, and force them (after the inking is effected) out of the way of the passage of the dies, and hold them steady while the impression is being made, and especially at the moment of the blow, the effect of which is, that the reaction of the blow has no effect on the inking apparatus, and consequently the rapid wear of the latter is avoided. These levers, after accomplishing inverse movements, return under the influence of the springs *x* into the position of rest, Fig. 1.

It may here be observed that the levers *m m'* have distinct springs *x x*, and that they thus allow of a certain irregularity in the uprightness of the dies, without thereby occasioning defective inking, from which arises the important result of being able to operate with a perfect inking by means of a single die, *g* or *g'*.

Finally, the lifting-spring R, fixed to the plate *p*, can be stretched more or less, according as the screw *z* stops the plate *p* at one or other position—that is to say, said screw, bearing against the plate *p*, holds the latter after it has been turned to wind the spring R more or less. The inking-roller is formed of the tubular ink-fountain *r'*, Figs. 5 and 8, pierced with holes lengthwise of its generatrices, and covered with a cloth or felt, *r*, cut obliquely, Fig. 2, to make a helicoidal joint without sewing, which retards wear very much—that is to say, the oblique cut is stitched at the ends only, where the roller does not ink. Its inking portion has no stitching, and yet the cut, being oblique, will not be forced open by the act of inking, which would be the case if the cut were parallel with the axis of the roller. The tube *r'* is closed at each end by a stopper, *r²*, which carries a gudgeon, *r³*. The stirring up of the ink is effected by the rotation of the roller at each inking, and by the arrangement in the interior of a heavy rod, *r⁵*, corrugated, if required, and placed loose therein, so as not to follow the roller in its rotary movements.

The inker *r* is placed in its supports *m m'* (which are of thin steel) by separating the ends to allow of the entrance of the journals *r³* of the said inker. It may also be observed that the stopper *r²* is furnished (in the part which fits into the tube *r'*) with openings having tongue-pieces, which can be set out when the plug works loose, to constitute elastic retaining-clips.

Action of the arrangement.—The action is as follows: The operator acts with one hand on the stem *f* to lower the dies, and with the other hand he brings the letters under the dies. These letters are held fixed on the table *t*, before and after the application of the dies, by the friction stopping piston *h*. All irregularity in the movements, trembling and vibration in the parts, are compensated for by this special steadiness of the crane and of the letter to be stamped, from which there results a clear and neat impression of the dies, in spite of inexperience of the operator. The stamped letters are piled up in front of the operator, and are retained by a flange, *t'*, with which the table *t* is furnished.

I claim—

1. In a stamping-machine, the crane or

arched arm *b*, having front forked support, *c c'*, and rear pivot, *a*, in combination with the pivoted frame *d*, having wings *d'* and *d''*, with the fixed pivot *e*, stem *f*, levers *i j*, movable crane *b c c'*, spring R, plate *p*, screw *z*, and one or more stamps, *g g'*, substantially as herein shown and described.

2. The die-carrier *g*, having stem g^3 and tail g^4, in combination with the socketed and slotted stem *f*, and with the retaining-spring *u*, substantially as herein shown and described.

3. The separate levers *m m'*, combined with the inking-roller, separate springs *x x*, lever *j*, roller *v'*, lever *i*, stamp *g*, and stamp-carrying stem *f*, substantially as and for the purpose specified.

4. The combination of the spiral spring R with the plate *p*, screw *z*, lever *i*, and stem *f*, substantially as and for the purpose herein shown and described.

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