

UNITED STATES PATENT OFFICE.

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STAMP.

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To all whom it may concern:

Be it known that I, CHARLES H. SHAW, a citizen of the United States, residing at Brooklyn, Kings county, New York, have invented certain Improvements in Stamps, of which the following is a specification.

My invention belongs to the class of stamps which employ endless type-belts and which are commonly employed for printing dates, although it is immaterial, so far as the construction of the stamp is concerned, what legends or inscriptions are printed by the types on the belt or belts. In this class of stamps the type-belts, of which there are usually two or more, are mounted on wheels or drums, and the shifting of the belt is effected by means of a milled flange on the drum, which flange projects through a slit in the casing in order that it may be manipulated by the thumb and finger. In this class of stamps the type-belt must be strained quite tight in order to prevent it from shifting accidentally, and in consequence of this considerable effort is required to shift the belt for the purpose of changing the dates, &c., more especially when the belts have become hardened through age.

The object of my invention is, in part, to provide the type-belt with an elastically expandible and compressible support, whereby the belt will be held normally distended and tightly strained, but may be slackened, so as to shift readily, by a slight compression of the support between the thumb and finger in effecting the shifting, as will be more fully explained hereinafter.

Another object of my invention is to simplify the construction of the casing.

In the accompanying drawings, which serve to illustrate my invention, Figure 1 is a front elevation of a stamp embodying my invention. Fig. 2 is a vertical mid-section of the stamp, the plane of the section being indicated by the line 2 2 in Fig. 1 and the interior parts being shown in elevation. Fig. 3 is a vertical mid-section of the stamp, taken in a plane at right angles to that of the section Fig. 2. In this view the belts and exterior parts are in section. Fig. 3^a is a horizontal section taken in the plane indicated by line 3^a 3^a in Fig. 3. Figs. 4 to 8, inclusive, illustrate other forms of the support for the type-belt.

I will first describe the construction illustrated in the principal figures, wherein it is represented as embodied in a dating-stamp with three type-belts, one for the months, one for the days of the month, and one for the years.

a represents the casing, which will be made, by preference, of metal and in one piece. On this casing may be screwed a handle or knob *b*, of wood, of the usual kind. The casing *a* may be constructed at its base to receive the ordinary removable face-plate *c*, which is destined to form a base for rubber type. The plate *c* is a common feature in this class of stamps, and will need no further description herein.

The casing *a* is hollow or recessed from the base to receive the type-belts and their supports.

e is a plate, adapted to slide at its lower part in slight grooves or ways *d*, formed in the inner faces of the opposite walls of the recess or hollow in the casing. The prolonged central portion or stem *e'* of this plate extends up into the handle *b*, and is guided in a guideway extending through the screw-stem *a'* of the casing *a*. The plate is held in the casing in an adjustable manner by a screw *f*, which passes through a slot in the stem *a'* and screws into the stem *e'*.

g g' g'' are the three endless type-belts, which may be of rubber of the usual kind, and be constructed, respectively, to print the month, as "Jan.," "Feb.," &c., the number of the day of the month, as "1," "2," "3," &c., and the year, as "1890," "1891," &c. Each of these belts is mounted on an elastically expandible and compressible support secured to the plate *e*. As the middle belt *g'* for the days will be much longer than the other two it is mounted or may be mounted somewhat differently from them; but the belts *g* and *g''* may be mounted alike. On the opposite faces of the plate *e* are secured in pairs curved or bent springs *h*, made from sheet metal, of substantially the same width as the respective belts. The belts *g* and *g''* pass over these springs and under the lower edge of the plate *e*, which latter forms a backing for the type-belt at this point. The longer middle type-belt *g'* passes over the rounded top of the stem *e'*. The springs *h* of

each pair form a parti-circular hoop when seen from the side, as in Fig. 2. At their upper extremities these blades do not meet, and the ends are preferably bent downward, so as not to chafe the type-belt which embraces them.

The elastically-expandible support formed by the two blades *h* distends the type-belt and keeps it strained tightly over the lower edge of the plate *e*, so that it cannot shift with any ordinary usage; but when it is necessary to shift the belt for changing the dates it is only necessary to slightly compress the two sides of the belt where they project laterally through slots in the casing. The compressible support will then yield to an extent sufficient to slightly slacken the belt, and the shifting of the belt may be effected by manipulating it with the thumb and finger during such compression. In fact the necessary grip of the thumb and finger required to effect the manipulation of the belt may suffice to slacken the latter to the proper extent.

One characteristic feature of my stamp is the cutting away of the side of the casing to form an aperture or slot to uncover or make room for the type-belt, whereby the latter may be reached for shifting. This slot will be only a trifle wider than the belt, and the partition or partitions between adjacent slots serve as guides for the belts in their movements.

In the principal figures I have shown what I believe to be the most simple and effective form of the elastically-expandible support for the type-belt; but this support may be made in various other ways, some of which are illustrated in Figs. 4 to 8 inclusive. In Fig. 4 the support is composed of a single spring-blade *h'*, bent in a hoop-like form and secured to the plate *e* at one end only. In Fig. 5 this support is composed of a single spring *h*², bent in a hoop-like form and attached to the plate *e* at its middle, leaving both ends free. In Fig. 6 the support is composed of a single spring *h*, similar to those of the principal figures, mounted on the plate *e* at one side, and a roller *i*, mounted on the said plate at the other side. This roller forms a rolling but not yielding support for the type-belt on that side. In Fig. 7 the support for the type-belt is represented as composed of two rounded sections *j j*, hinged at their lower ends to the plate *e*, and provided with an expanding spring *k* between them. Fig. 8 represents a construction wherein the upper portion of plate *e* is enlarged and rounded to receive the type-belt, and provided with oppositely-arranged hinged sections *l* under the belt, and backed by springs *k*. All of these views show supports for single type-belts detached from the casing, but the same construction may be employed with any number of belts placed side by side, and varying both in width and in length.

The construction of the hollow casing *a* in one piece and the belt-supports comprising

the plate *e* and springs *h* all united together and capable of being inserted in the casing with the belts in place at the bottom of the latter simplifies and cheapens the construction very materially. Only two screws are required—namely, that in the stem *a'*, to secure the handle *b* on the casing, and the screw *f*, which holds the plate *e* in the casing and allows it to be adjusted up and down to a limited extent in the usual way. The springs *h* may be secured to the plate *e* by rivets, or in any convenient manner.

Having thus described my invention, I claim—

1. A hand stamp comprising a casing, a support for the endless type-belt, arranged within said casing, and the said endless type-belt, said casing having an aperture in its side which furnishes access to the belt for shifting it, and also having partitions at the sides of said belt to guide it in its movements, substantially as set forth.

2. In a hand-stamp, the combination, with a casing having a lateral opening or slot which furnishes access to the type-belt for shifting it, of an apertured face-plate secured to the base of said casing, through which the types on the type-belt project for printing, a support for the type-belt arranged within the hollow of the casing, and the said type-belt mounted on said support, substantially as and for the purposes set forth.

3. In a stamp, the combination, with a frame therefor, of an elastically-expanded and laterally-compressible support for the type-belt and the endless type-belt mounted on said support and projecting laterally from said frame, said support being adapted for compression with the fingers for slackening the belt, substantially as set forth, whereby said support may be compressed simultaneously with the manipulation of the belt for shifting, substantially as set forth.

4. In a stamp, the combination, with a slotted casing and a support for the endless type-belt, comprising a plate *e*, mounted adjustably in said casing, and the outwardly-curved springs *h*, secured thereto at one end, of the said type-belt, mounted on said support and embracing the said springs, and the lower face *e'* of the plate *e*, substantially as and for the purposes set forth.

5. In a hand-stamp, the combination, with the hollow slotted casing and the type-belts *g g' g''*, of the support for said belts, consisting of the plate *e*, with the stem *e'* mounted adjustably in said casing, and the three pairs of springs *h* secured to the said plate *e*, the longer belt *g'*, extending over the top of said stem *e'*, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

CHAS. H. SHAW.

Witnesses:

HENRY CONNETT,
J. D. CAPLINGER.