

B. B. HILL'S Improvement in Hand Stamps

2 Sheets--Sheet 1.

No. 121,286.

Patented Nov. 28, 1871.

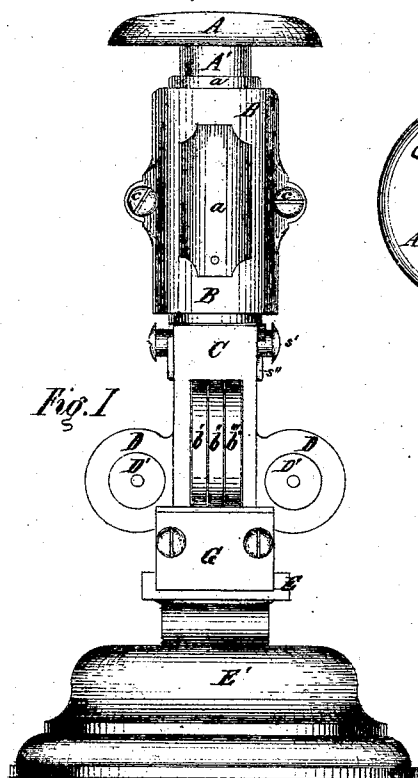


Fig. 1

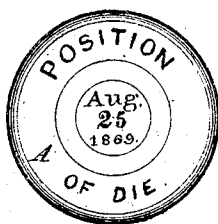


Fig. 2

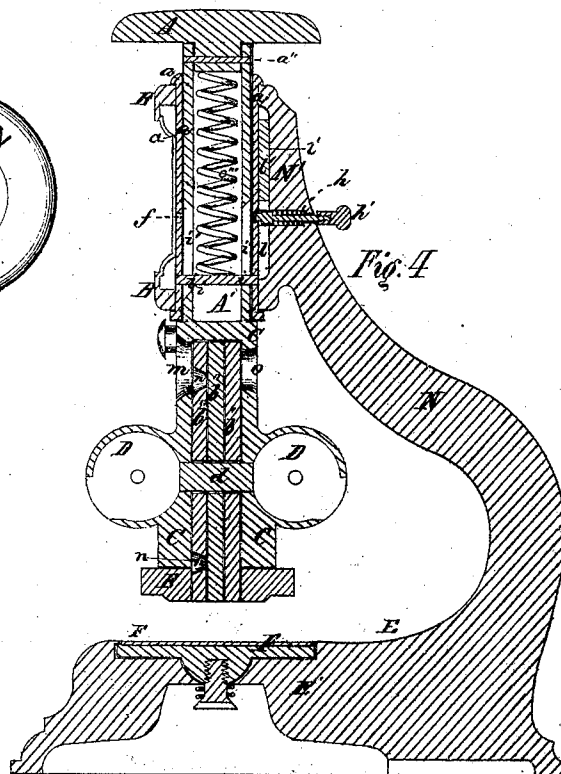


Fig. 4

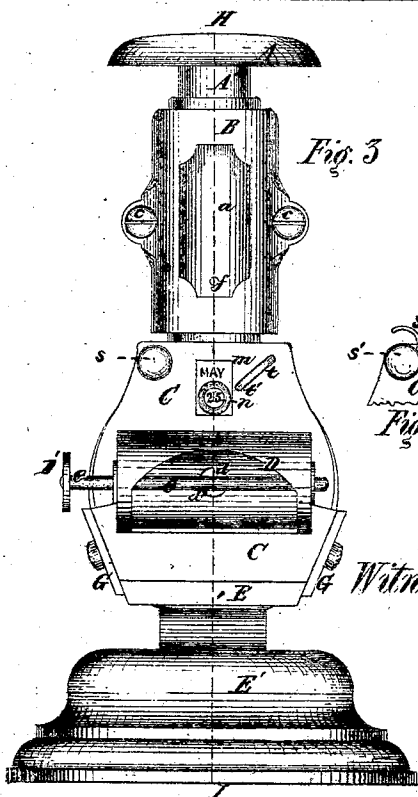


Fig. 3

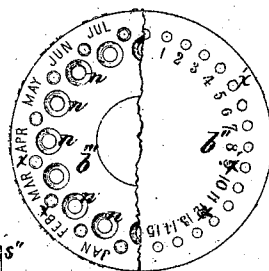


Fig. 5



Fig. 6

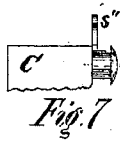


Fig. 7

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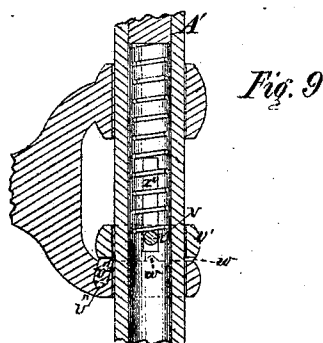
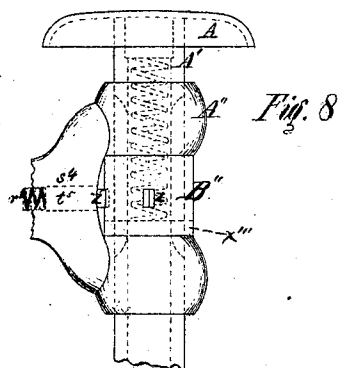
C. E. Buckland

B. B. Hill's Improvement in Hand Stamps.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN HAND-STAMPS.

Specification forming part of Letters Patent No. 121,286, dated November 28, 1871.

To all whom it may concern:

Be it known that I, BENJAMIN B. HILL, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Hand-Stamps; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description thereof, and which said drawing constitutes part of this specification and represents, in—

Figure 1, a front view of a stamp made according to my improvement, with the vibrating portion in one position. Fig. 2 is a plan view of the top of the hand-piece. Fig. 3 is a front view of a stamp made according to my invention with the vibrating portion in a different position from that shown in Fig. 1. Fig. 4 is a vertical section through line H I of Fig. 3. Fig. 5 is a half-plan or side view of the perforated type-wheel, through which the characters upon the center or middle wheel are seen. Fig. 6 is a front view of one of the detents and its latch, and Fig. 7 is a side view of the same.

My invention relates more particularly to that class of stamps known as canceling or date stamps, wherein the dates or the characters representing the dates are brought in rotation to the desired place for stamping, although certain parts of my invention may be applicable to other hand-stamps in which rotating type-wheels are not used; and it consists in such a construction of a hand-stamp as that the vibrating portion may have a free vibrating movement in a vertical direction while said portion may also have a rotary movement by simply seizing it with the hand and forcing it to rotate in either direction, and that without removing or changing any of the parts of the stamp; and it also consists in such construction as that the whole vibrating portion may be made in one piece, or at least so that the upright vibrating spindle and the stamp-head may be made in one piece; and it also consists in having one of the type-wheels perforated, or made in skeleton form, so that the characters upon the middle wheel may be seen through the perforations of the outer wheel; and it also consists in the application to some portion of the rotating part of the stamp of an indicating device whereby may be ascertained or known the true position of the printing-die; and it consists

of a check-latch used in connection with one of the detents, whereby said detent may be used to stop the rotary movement of either one or more than one of the type-wheels at one and the same time.

In the use of hand-stamps it is often desirable to stamp papers in different positions, or so that the printed impression shall occupy different positions upon the paper. For instance, it may be desirable to stamp one paper upon the upper part so that the top of the imprint shall be toward the top of the sheet, and it may be desirable to stamp another paper with the imprint at the lower part of the paper, and with either its top or bottom nearest the lower edge of the paper, while it may also be desirable to place the imprint at either side of the sheet and near the edge. It has not been convenient to do this with the stamps now in use, and one object of my invention is to overcome this difficulty, and, without removing or changing any of the parts of the stamps, to place the imprint just where it is desired upon the paper by simply seizing the hand-piece or vibrating portion of the stamp and rotating it to the desired position, which will be indicated by a fac-simile of the die or other indicating character upon the vibrating or rotating part of the stamp.

That others may be able to make and use my invention, I will proceed to describe its construction and the mode of its operation.

In the drawing, N represents the arm or support of the stamp, which, with the base and socket, resembles other stamps of the same class, except that the socket is made in two parts, one part being made in the arm or support, while the other part is made in a cap, which may be secured to the arm or support by screws, as shown in Figs. 1 and 3. This socket is made so that when the cap is secured to the arm the bore may be as nearly cylindrical as possible. In Figs. 1 and 3, B represents the cap and the front half of the socket secured to the rear half by means of the screws *c c* passing through ears made for that purpose. *a* represents the cylindrical collar, which is of such diameter from outside to outside as to fit snugly the socket when the cap B is properly secured to the arm, and is of such inner diameter as to fit well the spindle A', but sufficiently loose to allow the spindle to move freely in a vertical direction through the said

collar *a*. The collar has an annular flange or projection both at top and bottom to keep it in its proper position, and it may be placed upon the spindle *A'* before the hand-piece is attached. A small recess, *l*, is made behind the collar *a*, in which may be placed a piece of rubber, leather, or felt, so that when the cap is secured in place, with the collar inside, the substance *l'* (leather is preferable) shall produce sufficient friction by contact with the collar *a* to prevent said collar from moving in a rotary manner unless some force is used. The spindle *A'* has two vertical slots, *i'*, made therein, through which passes the pin *i*, which is secured in the collar *a*, and this device keeps the spindle *A'* and the collar *a* always in the same relative position, so that when the hand-piece *A* is grasped by the hand and rotated horizontally the arrangement of the said slot and projection causes the collar *a* to rotate, the whole turning within the socket, while the spindle *A'* is free to move or vibrate in a vertical direction, a blow upon the hand-piece *A* forcing the stamp-head *C* down while a spiral spring within the spindle *A'*, and resting upon the pin *i*, gives it an upward movement to its original position. The stamp-head *C* is perforated at *m* and *o*, and the two outer wheels have the same characters or figures upon the outside as is upon their printing face, the middle wheel being also similarly arranged. The outer wheel *b'''* is also perforated at *n n* so that the characters representing the days of the month upon the middle wheel may be seen through these said perforations *n*, and the middle wheel may thus receive its desired adjustment. The characters upon the outside wheel *b'* may be seen through the perforation *o*. The ends of the die-plate may be beveled to correspond with the inclination of the clamp-pieces *G*, so that by slightly loosening the screws *c* the die-plate *E* may be easily drawn out, if desirable. At *s'*, Fig. 6, is a detent passing through the stamp-head *C*, the small end of which detent may be seen at *t*, in Fig. 3, where it is bent downward, and the lower end at *t'* is bent inward again, extending in through one side of the stamp-head, and also through the holes *x* in the outer wheel *b'''* and into the holes *x'* made in the middle wheel *b''*. *s''* represents a latch, which is pivoted to the stamp-head so that it may be either thrown down to partially encircle the stem of the detent or be placed between the head *s'* of the detent and the stamp-head, or thrown up and out of the way entirely; and the length of the stem of the detent is such that when the latch *s''* is placed to intervene between the head *s'* of the detent and the stamp-head *C* and the detent is pushed in until the head *s'* comes in contact with the latch *s''* then the end *t'* is withdrawn from the indents or holes *x'* in the middle wheel *b''*; but if the latch *s''* be thrown up out of the way and the detent, or the head *s'* of the detent is pressed against the stamp-head *C*, then the small end *t'* is forced out of both the holes *x'* in the middle wheel *b''*, and also the holes *x* in the outer wheel *b'''*, so that both said wheels are then free to rotate.

Instead of retaining the vibrating portion of

the stamp in its desired position by means of friction, as hereinbefore described, I may accomplish the same result by different modifications of the device, all, however, producing friction, and being equivalents to that before described.

Figs. 8 and 9, Plate 2, represent different modifications of the device for retaining the spindle and other vibrating parts in their proper position, in which, in Fig. 8, *A'* is the spindle, operating in the socket *A''*, and *B''* is a collar, to which is secured a pin passing through slots in the spindle *A'* in precisely a similar manner to that shown in Fig. 4, Plate 1. A small hole, *s⁴*, is bored in the arm immediately behind the socket, into which is inserted a small bolt, *t⁵*, having a blunt wedged-shaped end. A spiral spring, *v³*, is placed in the hole behind the bolt to give it elasticity, and which forces the bolt against the collar, the wedge-shaped end of the bolt being outward and its edge standing in a vertical direction. Four small indentations, *z*, are made in the outer surface of the collar *B''*, said indentations being of a corresponding wedge shape to fit the outer end of the detent or bolt *z'* properly. These detents *z* are made at nearly equal distances apart and about one-fourth the circumference of the collar *B''* from each other, and are made opposite the end of the detent *z'*.

As the spindle and collar are rotated the detent or its wedge-shaped end is kept in constant contact with the collar by the action of the spring, and as one of the indents *z* comes opposite the detent *z'* it drops into the indent and stops somewhat the rotation of the spindle; but by using a little more force the wedge-shaped end of the detent will ride over the edge of the indent, so that the spindle may be rotated at pleasure, though being sufficiently firmly held in place by the detent *z'* while the stamp is being used.

A similar device is shown in Fig. 9, except that the detent *v''* is rigid, having no spring behind it, and the wedge-shaped indents are made in the lower edge of the collar *v'*, and the slots in the spindle are sufficiently long to allow the collar *v'* to rise slightly as the inclined sides of the indents ride over the wedge-shaped end of the rigid detent or stop *v''*, the collar dropping a little as the indent comes into place.

These modifications, it will be seen, are similar in the principle of their operation, and the spindle is retained in place by friction in each, and in rotating the spindle and other vibrating portions of the stamp it is only necessary to grasp the hand-piece *A*, or even the stamp-head *C*, and rotate it, without removing or changing any of the parts of the stamp, so that if it is desired to stamp a variety of papers in succession and upon different parts of the sheet it may be done easily and quickly.

I am aware that hand-stamps have heretofore been made and used in which the stamp-head was made to rotate in a horizontal direction, when desirable, by loosening it from the spindle, rotating it, and tightening it again; but never, to my knowledge, has a stamp been made in which

the spindle was made to rotate with the stamp-head.

If it is desirable to retain the spindle in a more positive manner I make four small indents, *f*, in the periphery of the collar *a*, as shown in Fig. 4, Plate 1; and in the upper part of the arm *N* I make a hole of sufficient size, and from the bottom of this hole, out of the rear side of the arm *N*, a still smaller hole. Into the large part of the hole I insert a small spiral spring, and then into the hole and through the spring I pass the indent *h*, near the inner end of which is an annular projection or a shoulder, and upon the outer end is made a screw-thread, upon which fits the small nut *h'*. When the nut *h'* is turned partially off the spring, one end of which bears against the shoulder near the bottom of the hole, the other end bearing against the shoulder near the end of the detent *h*, operates to keep the inner end of the detent constantly against the collar *a* on the horizontal line of the indents *f*, so that as they pass around in front of the detent *h* it drops into the indents and retains the spindle, as before. To rotate the spindle the small nut *h'* is seized and pulled out slightly, when, the detent being thus withdrawn, the spindle may be rotated as before.

An imprint or design of any convenient character, corresponding in its nature with the die of the stamp, may be made upon the top of the vibrating part of the stamp, and occupying the same relative position thereon as the die holds to the pad *F*—that is to say, the imprint may be a fac-simile of the die underneath, or of a similar shape but having different words; and if the top of the die in its reading should be nearest the arm *N*, then the top of the imprint or device used as the indicator upon the top of the hand-piece *A* should be located in the same way. By this means it can be seen at a glance what the position of the die beneath is, so that if it should be desired to stamp different papers with the die or imprint in different positions—that is, upon the top of a sheet, reading down, or upon either side, or upon the bottom of the sheet, all reading down—it may be done at once, with no delay and with no uncertainty in the operation; and this is a matter of great difficulty as stamps are at present constructed.

The advantage of making the socket with a cap, *B*, is very evident, as I am enabled thereby to make the spindle and the stamp-head all in

one piece or side, and am enabled also to put in the collar *a* in a better manner and with greater facility. It is also much more convenient to remove the spindle for any necessary repairs. This construction is also an advantage in regulating the amount of friction, for although the friction arrangement is entirely operative in itself, yet some might prefer to have the die turn quite hard, while others might choose to have it turn quite easily. Either object may be accomplished by tightening or loosening the screws that secure the two parts of the spindle-socket together.

I am aware that the devices herein described, when separately considered, are not new, and I only claim the same when applied to and used in the construction of a hand-stamp. I am also aware that indicating devices have heretofore been arranged in various ways for various purposes, and I do not claim the same in any broad sense; nor in any sense do I claim an indicating device irrespective of my application of it to the hand-stamp, as herein described; neither do I claim in any way any accidental peculiarity in the manufacture of the stamp as a screw-thread or hole.

Having, therefore, described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a hand-stamp the friction-bearing or stop, substantially as herein set forth, as a means of securing the revolving head *C* in the desired position for printing.

2. The combination of the latch *s''* with the detent *s'*, when applied to a hand-stamp, substantially in the manner and for the purpose specified.

3. The collar *a*, having a free rotary movement with the spindle *A'*, and having a pin or projection therein which engages with a guide-slot in the vibrating part of the stamp, and operating to keep said vibrating part and collar *a* always in the same relative position with each other.

4. In a hand-stamp the spindle-socket, constructed and arranged in two parts, *B* and *N'*, in combination with the collar *a*, and secured together substantially as and for the purposes specified.

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Witnesses:

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C. E. BUCKLAND.

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