(No Model.) 2 Sheets—Sheet 1.

R. H. SMITH.

SELF INKING PRINTING STAMP.

No. 288,674. Patented Nov. 20, 1883.

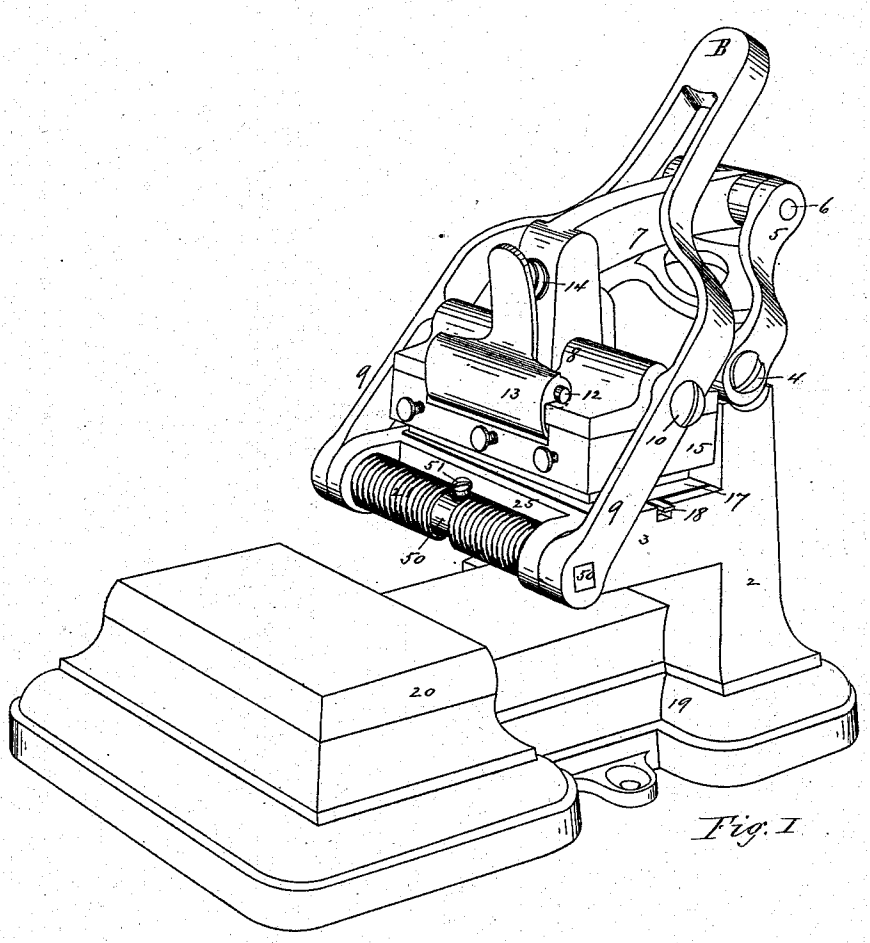


Fig. 1

Witnesses.
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(No Model.) 2 Sheets—Sheet 2.

R. H. SMITH.

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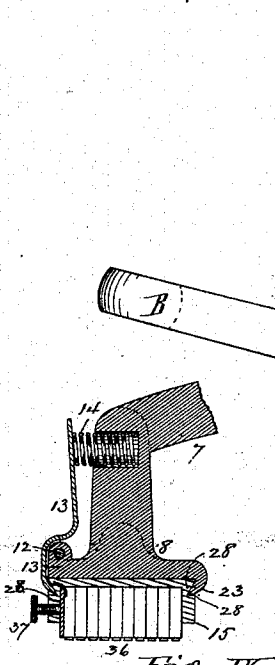


Fig. IV

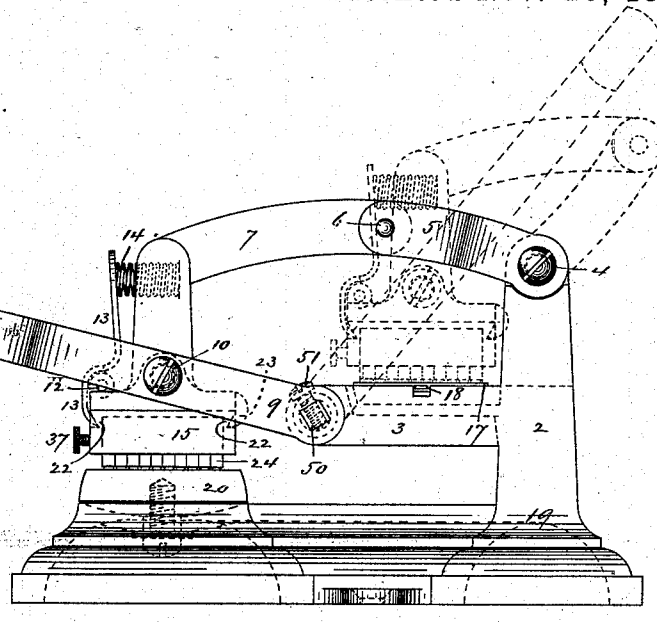


Fig. II

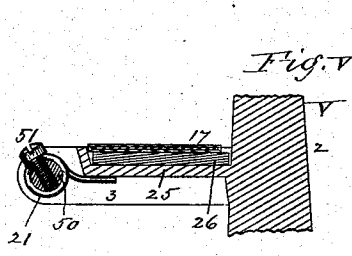


Fig. V

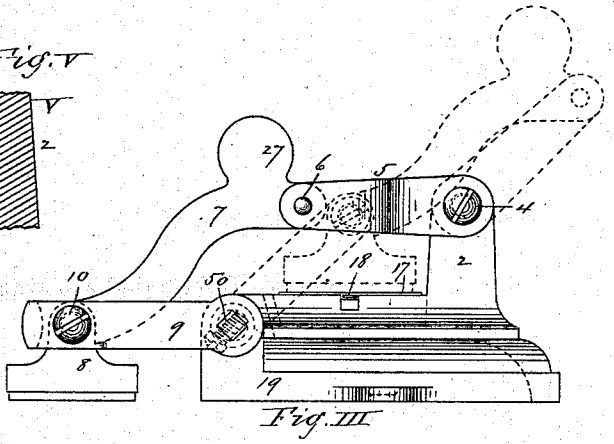


Fig. III

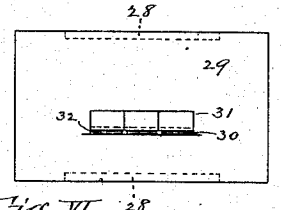


Fig. VI

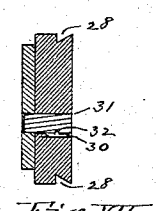


Fig. VII

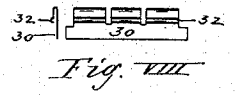


Fig. VIII

Witnesses.

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UNITED STATES PATENT OFFICE.

R. HALE SMITH, OF SPRINGFIELD, MASSACHUSETTS.

SELF-INKING PRINTING-STAMP.

SPECIFICATION forming part of Letters Patent No. 288,674, dated November 20, 1883.

Application filed April 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, R. HALE SMITH, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Self-Inking Printing-Stamps, of which the following is a description and specification.

The object of my invention is to provide a self-inking printing-stamp, from which impressions may be made rapidly, and whose successive impressions will register correctly, or will all be made in exactly the same relative position on different sheets of paper, if desired, and whose printing-face is always held in the same plane or parallel planes during all its movements; and I accomplish this by the mechanism substantially as hereinafter described, and illustrated in the accompanying drawings, in which—

Figure I is a perspective view of a self-inking printing-stamp made according to my invention, showing the stamp in position on the inking-pad when not in use. Fig. II is a side elevation of the same, illustrating the position of the different parts of the stamp when being used in making an imprint. Fig. III is a modification, showing the stamp as adapted to print upon paper or other matter placed on the table or on the plane upon which the stamp is placed or fixed. Fig. IV is a transverse section through the stamp-head, die-holder, and die, on a vertical plane midway its length. Fig. V is a transverse section through the ink pad and reservoir, on a vertical plane midway its length. Fig. VI is a plan view of a die-block provided with a mortise or receptacle to contain type for dating or other purposes. Fig. VII is a transverse section of the same at a point midway its length. Fig. VIII is a side view of a spring adapted to be secured in the mortise in the die-block to hold the type in position therein.

In the drawings, 19 represents the base of the stamp, supporting an upright, 2, at the rear end, from which extend the horizontal arms 3—one at each end; and between these arms, and preferably cast solid therewith, is the ink-reservoir 25, (shown in section in Fig. V,) containing an ink-cushion, 26, which may be made of any suitable material—a felt fabric being quite suitable—and upon this cushion rests an ink-pad, 17, which consists of a metal or other plate having flat parallel sides, and covered with any textile fabric—such as silk, or other suitable material—on both its sides, so that this ink-pad may lie upon the cushion 26 with either side uppermost, upon which the stamp rests when not in use, and has a good and firm bearing thereon at all points. The base 19, together with the upright 2 and arms 3, forms what is known in the art as the "stand," the latter constituting all of the lower and immovable portion of the stamp.

Two arms, 5—one on each side—are pivoted or hinged at one end to the upper end of the upright 2, or to the upper rear portion of the stand, as at 4, and at the other end are pivoted at 6 to the bar 7, the latter being fixed to the stamp-head 8. This stamp-head is provided at its lower edge, on the back side, with a retaining-lug, 23, which is beveled or inclined on the inner side, and at the opposite or front edge is pivoted at 12 a detent, 13, whose lower edge or end extends inward and beneath the front edge of the stamp-head, and is held in that position by a spring, 14, secured to the front side of the stamp-head, and pressing outward against the detent, as shown in Figs. II and IV. This stamp-head 8 is adapted to receive a type-case, 15, which I make of rectangular form, and hollow or open from the lower side, so that a series of lines of type, 36, may be set up in this case, and be secured, preferably, by screws 37, to indicate or make an impression of any desired printed matter—such as business-cards, &c. A recess, 28, is made in each edge of this type-case, and the retaining-lug 23 is made to just fit said recess by pressing in the upper end of the detent 13, forcing out its lower end, placing the case in position, with the retaining-lug in its recess 28 in the edge of the case, and releasing the detent and allowing its lower end to enter the recess again. When thus inserted into place, it is held up firmly against the lower side of the stamp-head by the dove-tailed form of the lug 23 and detent 13 at its lower end, and is also prevented from moving longitudinally by the ends of the recess impinging against the ends of the lug 23 on one side or against the detent on the other.

The case 15, containing the type, may be easily and quickly removed at any time, and,

if desired, a portion or the whole of the type changed and the case quickly replaced by merely pressing in the detent 13.

I use, preferably, type having the body or shank made of metal, with the printing-face made of rubber and secured to the end of the body, as being well adapted to set up any desired printing-matter in the case 15. Instead of using the case, however, and setting the type up therein for printed matter, I may use a block, 29, made of wood, hard rubber, or any other suitable material, having similar recesses, 28, made in its edges as are made in the edges of the case 15, to receive the retaining-lug 23 on one edge and the lower end of the detent 13 on the other edge; and I make an elongated mortise, 31, through this block, as shown in Figs. VI and VII, with a spring, 30, secured therein, so that type to indicate any dating-matter may be inserted into this mortise and there held securely by the pressure of said spring against the type. This spring may have a rib or elongated projection, as at 32, to engage in the nick or cavity ordinarily made in the body of the type, to hold the latter more securely in place.

It is evident that a spring of any desired form may be used to secure the type in position; but by the use of that just above described it is easy to make any change of type desired, as, to remove either of the type and insert another, in changing the date, it is only necessary to remove the block from the stamp-head, and, with the type to be inserted, press against the top of the one to be removed, forcing out the latter and forcing in the other to take its place.

Any permanent die may be fixed to the lower face of the block, and a type-retaining spring be secured in the mortise, so that the movable type therein shall be held with their printing-faces in the same plane with the printing-faces of the characters on the permanent die.

The yoke 9 is pivoted or hinged at 50 to the ends of the horizontal arms 3, forming a portion of the stand, and is also hinged or pivoted at 10 to the stamp-head 8 at both ends of the latter, and I secure a spring, as 21, to the rod or pivot 50, which hinges the yoke to the front ends of the arms 3, by means of which spring the stamp-head is moved back from its position when making the imprint between the arms of the yoke to its position on the ink-pad 17, and is firmly held there.

The upper part of the yoke 9, at B in Figs. I and II, serves as a hand-piece by which to move the stamp-head in bringing it over into position upon the bed 20, or paper placed thereon, to make an imprint. This bed 20 is made upon a part of the base 19, which may extend forward for that purpose, and the upper face of this bed 20 is somewhat lower than the horizontal plane of the lower part of the arms 3, so that paper may be placed upon the bed and be moved beneath the arms and against the upright 2; and if it is desired to make a series of impressions each upon a separate paper and each imprint at the same relative position on its paper, gages may be attached so as to be adjusted to any desired distance from the bed at the side and end to control the position of the paper on the bed.

As the movement of the stamp-head 8, with the printing-characters attached, is exactly the same at each imprint made, it is evident that with gages secured as above described the successive impressions on a series of papers may all be made exactly alike, and each made in exactly the same relative position on the paper.

In the modification shown in Fig. III, I use the knob 27 as a hand-piece, and it will be seen that with this stamp a package or pile of papers may be laid on the table to which the stamp is secured, and in front of the latter, and the whole stamped in rapid succession, each one being quickly removed from the pile when stamped.

By providing different type-cases 15, or blocks, each having the recesses 28 therein, and each containing different printing-matter, any one of them may be quickly removed from the stamp-head by pressing on the detent 13, and another is as quickly inserted into place, and by using the metal-bodied type any desired printing-matter may be set up in the case 15 when the latter is removed from the stamp-head.

Inasmuch as the upright portion 2 with the arms 3 together serve the purpose of partially or wholly supporting all the essential and working parts of the stamp, and are stationary, I denominate this portion a "stand."

In the modification shown in Fig. III the yoke 9 is hinged at a point lower on the stand, because, as no impression-bed is required to be made on the base, both the yoke 9 and the arms 5 may be hinged at a point lower even than is shown in Fig. III, the yoke in that case being hinged lower than the arms 5.

In order to make the spring 21 most effective, I make one or both ends of the rod or shaft 50 prismatic in form, to fit a hole of corresponding form in the lower end of the yoke 9, as shown in Figs. I, II, and III, and bend the spring around a screw or pin, 51, fixed in said rod, as shown in Fig. V, so that when the spring is applied, and the shaft and yoke are in place, the ends of the spring have a bearing against the reservoir 25, or against any other convenient part of the stamp, and the tension of the spring operates to move the yoke into a position over the ink pad and reservoir.

It will be seen that the ink-pad 17, being made with both sides alike and parallel, and resting upon the saturating-cushion 26, is reversible, and may be used with either side uppermost to ink the printing-characters secured to the stamp-head. The cushion 26 may have any desired amount of ink applied thereto, and both sides of the ink-pad are applied to this cushion until the pad is sufficiently satu-

rated, and the latter may be used with one side uppermost as long as the printing-characters of the stamp are inked thereby sufficiently to make a good impression; and when this ceases to be the case, the ink-pad may, by its trunnions 18, one at each end, be reversed to bring the lower side uppermost, and this side used to ink with, and this operation may be repeated as often as may be required, the simple reversal of the pad serving to supply fresh ink.

Having thus described my invention, what I claim as new is—

1. In a self-inking printing-stamp, the combination, with the stand, of a yoke, 9, pivoted to said stand, a stamp-head adapted to hold a die-block containing printing-characters, and pivoted in said yoke to swing between its arms, a bar, 7, fixed at one end to said stamp-head and extending backward therefrom, and the bars 5, pivoted at their upper ends to the end of said bar 7, and pivoted at their lower ends to said stand, substantially as described.

2. In a self-inking printing-stamp, the combination of the open reservoir, the saturating-cushion contained within said reservoir, and the reversible inking-pad resting upon said cushion, substantially as described.

3. In a self-inking printing-stamp, the combination of a die-block adapted to contain printing-characters, and provided with a recess, 28, on two opposite edges thereof, and the stamp-head provided with a retaining-lug, 23, on one side, which is beveled on the inner side, and a spring-actuated detent, 13, whose lower end inclines inward, said retaining-lug and detent being adapted to fit the recesses in the die-block, substantially as described, and for the purpose set forth.

4. In a printing-stamp, a printing die-block having a vertical hole or mortise made entirely through it to permit printing-type to be passed through said mortise or hole from one side of the block to the other, in combination with a sheet-metal spring secured in the mortise and engaging in a cavity or recess made in each type-body, whereby said type are held in place in the mortise, substantially as described.

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Witnesses:
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CHAS. H. WOOD.