No. 878,007. PATENTED FEB. 4, 1908.

E. A. KIRCHNER.

SELF ARIGHTING STAMP.

APPLICATION FILED MAR. 27, 1907.

Fig. 1

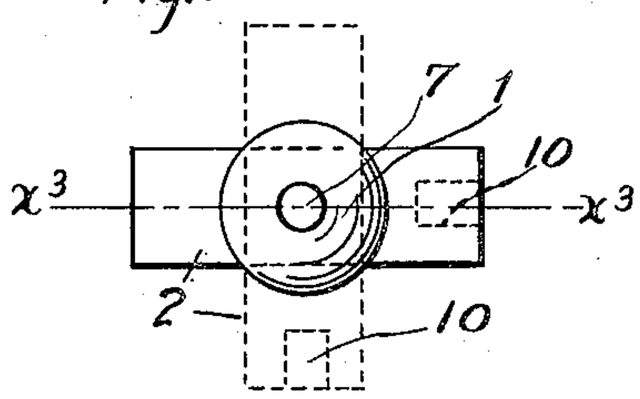


Fig. 5

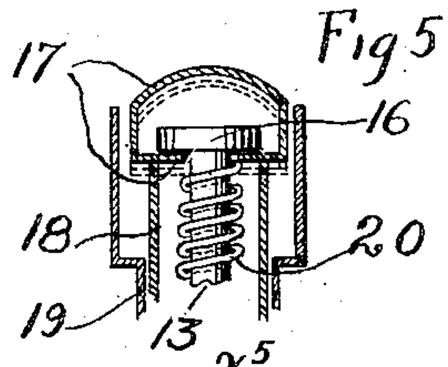
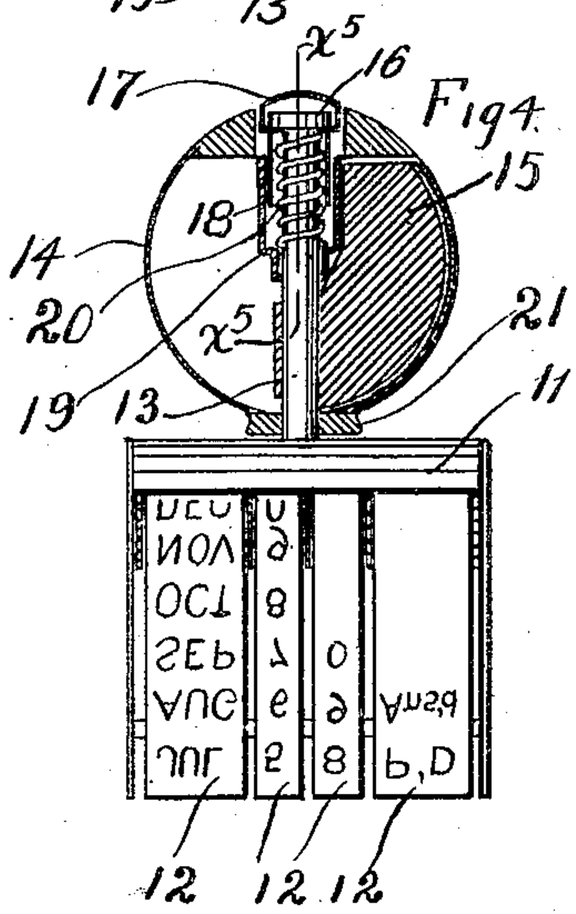


Fig. 4



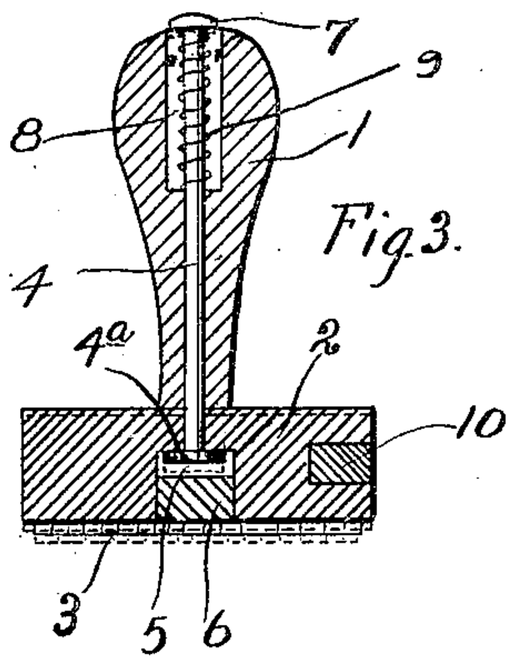
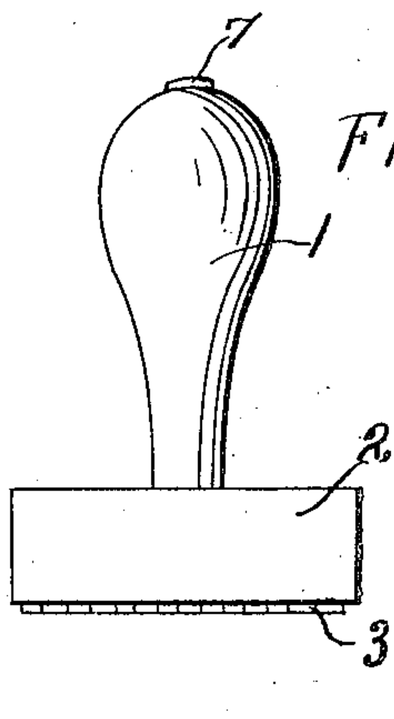


Fig. 3.

Fig. 2



Witnesses
Leon B. Losey.
H. L. Dalbreme

Inventor:
Ernst A. Kirchner.
By his Attorneys
Williamson & Merchant.

UNITED STATES PATENT OFFICE.

ERNST A. KIRCHNER, OF MINNEAPOLIS, MINNESOTA.

SELF-ARIGHTING STAMP.

No. 878,007. Specification of Letters Patent. Patented Feb. 4, 1908.

Application filed March 27, 1907. Serial No. 364,807.

To all whom it may concern:

Be it known that I, ERNST A. KIRCHNER, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Self-Arighting Stamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to hand operated stamps or printing devices wherein a handle and a printing head are employed, and has for its object to provide a simple and efficient device whereby the printing head will be automatically arighted so as to turn the type right side up.

To the above ends, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

The above stated general object of my invention I accomplish by pivotally connecting the so-called printing head to the handle, and in providing the said printing head with a weight which is located eccentric to the axis of its pivotal connection to the handle, and which weight may be secured either directly or indirectly to the said printing head. Also means is provided for clamping the printing head quite securely to the handle or for releasing the same at will, so that the head when released will be free to oscillate under the action of its weight, into an arighted position.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Referring to the drawings; Figure 1 is a plan view illustrating my invention as applied to a stamp of simple form. Fig. 2 is a side elevation of the said stamp. Fig. 3 is a vertical section taken on the line x^3 x^3 of Fig. 1. Fig. 4 is a view partly in elevation and partly in vertical section illustrating a modified form of the device; and Fig. 5 is a vertical section taken approximately on the line x^5 x^5 of Fig. 4, some parts being broken away.

Referring first to the construction illustrated in Figs. 1, 2 and 3, the numeral 1 indicates the handle and the numeral 2 the printing head of the stamp. The type 3 which, as shown, are rubber type, are secured to the under surface of the head 2. The said head 2 is pivotally connected to the handle 1 by a stem 4 that extends through the said handle, and the headed lower end of which is seated in a recess 5 formed in the head 2 at the longitudinal center thereof. The outer portion of the seat 5 is shown as closed by a plug 6. At its upper end the stem 4 is provided with a nut or head 7. The upper portion of the handle 1 is provided at its upper end with an enlarged annular recess 8. Surrounding the stem 4 within the recess 8 is a coiled spring 9 that is compressed between the upper head 7 of said stem and the bottom of the recess 8. Normally this spring 9 forces the headed lower end 4^a of the stem 4 against the printing head 5 and forces the latter against the lower end of the handle 1, thereby frictionally holding the said head 2 and handle 1 against rotation with respect to each other.

A lead plug or other weight 10 is countersunk into one end of the printing head 2, as shown in Fig. 3.

With the construction described, if the device be picked up by the handle 1 and turned toward the right, for instance, and the stem 4 be then pressed inward by placing a finger on the head 7 thereof, the printing head 2 will then be released and its weighted end will, of course, be swung downward. This manipulation, therefore, will serve to bring the printing head always to a predetermined position with respect to the person manipulating the stamp, and, of course, if the type on the said printing head be properly arranged, such movement of the printing head will always serve to aright the type or set the same so that the printed matter produced thereby will be right side up with respect to the person using the stamp.

In Figs. 4 and 5 I have shown my invention as applied to a stamp, the head 11 of which is provided with a multiplicity of adjustable type-faced printing belts 12. The stem 13 of this printing head 11 is pivotally mounted within an approximately spherical handle or hand piece 14, and within said hollow hand piece 14 the stem 13 is provided with an eccentric weight 15 which, in the function it performs, corresponds to the weight 10 of the device previously described. The stem 13, at its upper end, is shown as provided with a head 16 that is inclosed within a hollow cap 17 having a depending sleeve 18, which latter works telescopically within a sleeve 19 fixed to the upper portion

of the hand piece 14. A coiled spring 20 on the stem 13 is compressed between the cap 17 see Fig. 5 and the lower end portion of the sleeve 19. The spring 20 normally holds the top of the printing head 11 against a bottom hub 21 of the hand piece 14 under such friction that it will not rotate under the action of the weight 15. When, however, the tension of the spring 20 is overcome by pressure on the cap 17 thereby releasing the pressure on the head 16 of the stem 13, the printing head 11 is free to rotate into an arighted position under the action of its weight 15 in the same manner as described in the device illustrated in Figs. 1, 2 and 3.

In practice, the device described has been found very convenient for the purposes had in view. It is well known that considerable annoyance is caused in the use of the ordinary stamps by the frequent printing therewith when the type is turned upside down. My improved stamp may be very quickly arighted, and this, as is evident, is done simply by a slight movement of the stamp which, after a little practice, may be performed in the act of picking the same up and bringing the same into printing position.

One way of obtaining an eccentrically weighted printing head is to eccentrically pivot the said head to the handle, and this, of course, would be within the scope of my invention. It will also be understood that the term stamp is used in a broad sense to include any kind of a device producing prints marks or impressions.

What I claim is:—

1. In a hand operated stamp, the combination with a handle, of a printing head pivotally connected thereto, with its axis of rotation approximately coincident with the axis of said handle, and provided with an excess of weight on one side of its pivotal connection, substantially as described.

2. In a hand operated stamp, the combination with a handle, of a printing head pivotally connected thereto and provided with an excess of weight on one side of its pivotal connection, and means for clamping said head to said handle and for releasing the same for pivotal movement, substantially as described.

3. In a hand operated stamp, the combination with a handle, of a printing head pivotally connected thereto and provided with an eccentrically located weight for righting the same, and a finger operated spring pressed device normally clamping said printing head to said handle but movable to release the same for pivotal movements, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ERNST A. KIRCHNER.

Witnesses:

MALIE HOEL,

F. P. MERCHANT.