No. 613,721. Patented Nov. 8, 1898.

G. A. RENTSCHLER.

HAND STAMP.

(Application filed Dec. 8, 1897.)

(No Model.)

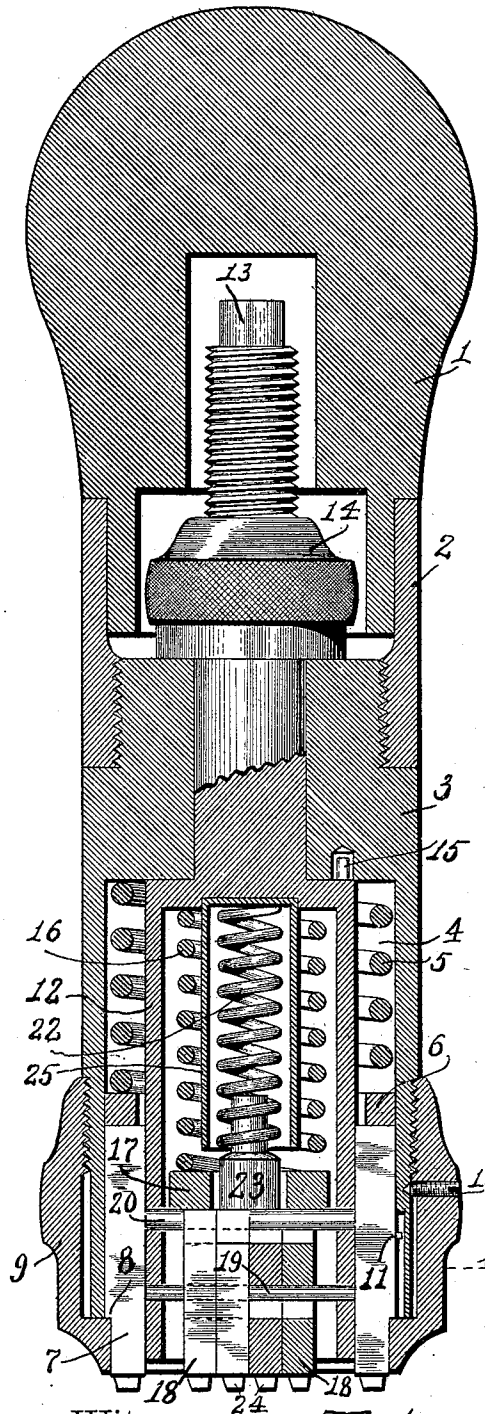


FIG. 1.

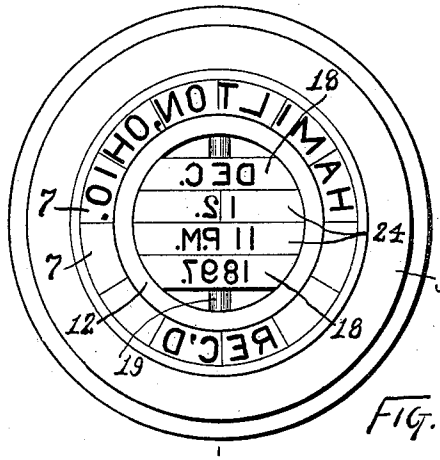


FIG. 2.

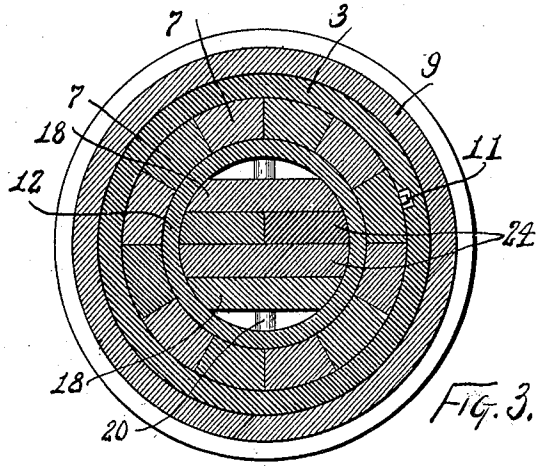


FIG. 3.

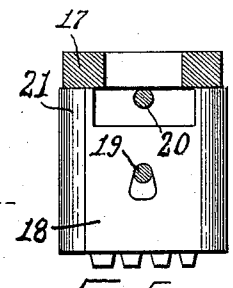


FIG. 5.

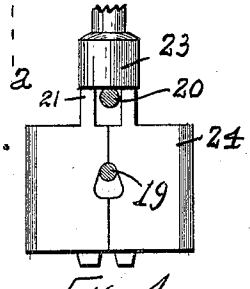


FIG. 4.

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UNITED STATES PATENT OFFICE.

GEORGE ADAM RENTSCHLER, OF HAMILTON, OHIO, ASSIGNOR OF ONE-HALF TO CORDY FLETCHER COUSINS, OF SAME PLACE.

HAND-STAMP.

SPECIFICATION forming part of Letters Patent No. 613,721, dated November 8, 1898.

Application filed December 8, 1897. Serial No. 661,181. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ADAM RENTSCHLER, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Hand-Stamps, of which the following is a specification.

This invention pertains to improvements in hand-stamps—such as are used, for instance, for mail-canceling purposes.

The improvements will be readily understood from the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a vertical section of a hand-stamp exemplifying my invention, the section being taken in the plane of line *a* of Figs. 2 and 3; Fig. 2, a view of the lower or type end of the stamp; Fig. 3, a horizontal section in the plane of line *b*; Fig. 4, a side elevation of one of the inside date-types, and Fig. 5 a similar view of one of the outside date-types.

In the drawings, 1 indicates the handle; 2, a ferrule thereon; 3, the head-piece of the stamp, the same being removably screwed into the ferrule; 4, a deep cylindrical bore in the lower end of the head-piece; 5, a helical spring disposed within this bore and abutting against its roof; 6, a washer disposed loosely in the bore of the head-piece and bearing against the lower end of spring 5; 7, a circumferential series of type, each of segmental cross-section, this series of type forming a sectional hollow cylinder fitting within the bore of the head-piece below washer 6, the upper end of the types bearing against the washer and the lower ends of the types bearing the printing characters, of which characters there may be one or more on each of the segmental types, the exemplification showing each of the segmental types as bearing two characters, except as to the blank spaces represented by quads of segmental section, it being understood, however, that all of the segmental types may bear characters if the extent of the reading matter requires it; 8, a downwardly-presenting shoulder at the lower end of each of the segmental types 7; 9, a keeper-nut screwed onto the lower end of head-piece 3 and having at its lower end a flange surrounding the lower ends of the segmental types 7 and engaging upwardly against shoulders 8, whereby all the segmental types are held with their faces in a common plane, spring 5 pressing the types down as far as shoulders 8 will permit; 10, a set-screw serving as a lock for nut 9 to keep it from unscrewing from the head-piece; 11, a dowel-pin projecting from the outer surface of one of segmental types 7 into loose engagement with a keyway in the bore of the head-piece, this dowel-pin preventing the rotation of the circular series of types within the head-piece; 12, a hollow cylinder disposed concentrically within the series of segmental types 7 and open at its lower end; 13, a shank projecting from this cylinder up through the roof of the head-piece; 14, a nut screwed upon shank 13 and serving to hold hollow cylinder 12 firmly in the head-piece; 15, a pin doweling hollow cylinder 12 against rotation within the head-piece; 16, a helical spring disposed just within the wall of hollow cylinder 12 and abutting against the roof of the bore of the hollow cylinder; 17, a washer loosely disposed within the bore of the hollow cylinder and bearing against the lower end of spring 16; 18, date-types fitting loosely within the lower end of the bore of hollow cylinder 12, at opposite sides of the cylinder-bore, these date-types being herein termed the "outside" date-types; 19, a pin removably inserted diametrically through the walls of hollow cylinder 12, near the lower end of the cylinder, and passing through holes in date-types 18, the holes for the pin being vertical slots wider at their lower ends, as seen in Fig. 5, the upper ends of the slots being in position to bear down on pin 19 when the faces of the date-types are in the same plane as the faces of segmental types 7; 20, a pin disposed diametrically across the bore of hollow cylinder 12, under washer 17, and limiting the descent of that washer under the influence of spring 16; 21, Fig. 5, prongs formed upon the upper edge of outside date-types 18, at the side extremities of those date-types, these prongs straddling pin 20 and bearing upwardly against washer 17, the prongs being of such length as to always bear against washer 17 and permit the date-types to rise somewhat

in hollow cylinder 12 and push washer 17 upwardly against the resistance of spring 16; 22, a second helical spring disposed within hollow cylinder 12, inside of spring 16; 23, a plug loosely disposed within washer 17 and bearing upwardly against spring 22, spring 22 thus holding the plug down upon pin 20; 24, date-types disposed within hollow cylinder 12, between outside date-types 18, and having similar slotted holes engaging pin 19, the date-types 24 being herein termed the "inside" date-types, which inside date-types are similarly provided with prongs 21, Fig. 4, straddling pin 20 and reaching up into contact with plug 23, the prongs upon the inside date-types being disposed inwardly, so as to pass freely within washer 17, so that the inside date-types can rise, against the resistance of spring 22, independently of washer 17 and the outside date-types; and 25, a thin cylindrical sleeve disposed loosely around spring 22 to prevent that spring becoming entangled with spring 16.

Segmental types 7 fit and fill the bore of the head-piece around hollow cylinder 12, but so loosely as to permit of the types sliding freely endwise with reference to each other. Spring 5 permits these types, or any one or more of them, to yield upwardly, the result being that the types are adapted to take a fairly even bearing on an uneven surface. The segmental types are thus adapted to give an improved character of impression upon surfaces formed of overlapping papers, as in the case of envelop-flaps on letters, postage-stamps on letters, &c., and to compensate for inequalities of surface due to the character or position of the contents of an envelop—as, for instance, where a folded letter within an envelop does not fill the envelop—thus requiring an impression to be made upon the surface backed in part by two envelop thicknesses only, while in other parts it is backed by those two thicknesses plus the thickness of a folded letter or perhaps of cards or other comparatively small matters inclosed with the letter.

In hand-stamps for postal purposes the reading matter (represented by the circular series of segmental types 7) will generally be retained unchanged; but if it be desired to change this reading matter it is only necessary to unscrew nut 9 and take out type 7 and substitute a new circle of types with the desired characters.

While the circle of types 7 is composed of types of segmental cross-section, the date-types 18 and 24 are flat and are held in the hollow cylinder 12 by the pin 19. These types may require frequent changing, which changing is to be effected by unscrewing handle 1 and then unscrewing nut 14 far enough to allow hollow cylinder 12 to come out of the head-piece far enough to permit the withdrawal of pin 19, thus allowing the date-types to be removed and new ones placed in position. If desired, nut 14 may be entirely removed from the stem of the hollow cylinder, thus allowing the hollow cylinder to be bodily removed from the head-piece for convenience in changing the date-types. The date-types are to fit the hollow cylinder so loosely as to be capable of free vertical play therein with reference to the hollow cylinder and to each other, and it is also desirable that the date-types fit the hollow cylinder edgewise so loosely as to permit them to partake of some rocking motion. The result of this is that the date-types may move upwardly a trifle against the resistance of their springs and also rock somewhat, thus permitting these date-types to also accommodate themselves to uneven surfaces on which they are to make impressions. Each of the date-types may be in a single piece, or, if desired, each date-type may be formed in two pieces, as in Fig. 4, in which latter case each half of each date-type is capable of independent vertical yielding. The slots in the date-types are narrow in their upper portions, as seen in Figs. 4 and 5, so that normally they fit down fairly upon pin 19; but being wider at their lower portions there is some slight capacity for side motion and rocking when the types shall have moved upward with reference to the pin.

It is obvious that the segmental types and their holding devices may be omitted and the date-types used alone, or that, on the other hand, the date-types and their holding devices may be omitted and the circular series of types used alone. It is also obvious that by unscrewing nut 14 the central portion of the stamp may be removed and replaced by another central portion bearing a different impression device, the system thus providing a very convenient means for readily changing the entire central portion of a stamp.

I claim as my invention—

1. In a hand-stamp, the combination, substantially as set forth, of a head-piece having a cylindrical bore in its lower end and having a handle at its upper end, a circular series of types of segmental cross-section fitting within the lower end of said cylindrical bore, a keeper engaging said head-piece and types to prevent downward displacement of the types in said bore, and a spring disposed in the head-piece over said types and pressing them yieldingly downward.

2. In a hand-stamp, the combination, substantially as set forth, of a head-piece having a cylindrical bore in its lower end and having a handle at its upper end, a circular series of types of segmental cross-section fitting within the lower end of said cylindrical bore and adapted for independent upward motion therein, a keeper to limit the downward motion of the types in said bore, and a cushioning device disposed within said head-piece above said types, whereby said segmental types normally occupy a given downward position in said bore but may independently retreat upwardly thereinto.

3. In a hand-stamp, the combination, substantially as set forth, of a head-piece having

a cylindrical bore in its lower end and having a handle at its upper end, a circular series of types of segmental cross-section fitting the lower end of said recess, a keeper engaging said head-piece and types and serving to limit the downward motion of the types, and a helical spring disposed within said bore over said types and serving to hold the types downward while permitting them to yield upward independently.

4. In a hand-stamp, the combination, substantially as set forth, of a head-piece bearing a series of printing characters at its lower end and having a recess within said series of characters, a handle at the upper end of the head-piece, a cylinder fitting within said recess and having a socket in its lower end, types secured removably within said socket, and devices for removably securing said cylinder within said recess.

5. In a hand-stamp, the combination, substantially as set forth, of a cylinder having a socket in its lower end, a series of flat types disposed side by side in said socket, a keeper to limit the downward motion of the types in the socket, a washer disposed within the socket over said washer, a plug disposed loosely within said washer, a helical spring disposed within the socket over said plug, the upper portions of the outside type of the series engaging said washer, and the upper portion of the inside type of the series engaging said plug.

6. In a hand-stamp, the combination, substantially as set forth, of a cylinder having a socket in its lower end, a washer disposed within said socket, a plug disposed within the washer, a spring over the washer, a spring over the plug, a pin crossing the socket and limiting the downward motion of the plug and washer, a series of flat types disposed side by side within the socket below the plug and washer, a keeper to limit the downward motion of the types, and prongs projecting upwardly from the types and straddling said pin, the prongs of the outside types of the series engaging under said washer and the prongs of the inside types engaging under said plug.

7. In a hand-stamp, the combination, substantially as set forth, of a cylinder having a socket in its lower end, a washer within the socket, a plug within the washer, a spring over the washer, a spring over the plug, outside flat types disposed within said socket and engaging upwardly against said washer and provided with perforations, inside flat types disposed between the outside types and engaging upwardly against said plug and having perforations and a removable pin crossing said socket and passing through the perforations of said types and serving to limit the downward motion of the types.

8. In a hand-stamp, the combination, substantially as set forth, of a head-piece having a circular bore in its lower end and having a handle at its upper end, a circular series of types of segmental cross-section fitting the lower end of said bore, a keeper engaging said head-piece and types and serving to limit the downward movement of the types, a spring within said bore over said types, a hollow cylinder removably secured within said bore and within said circular series of types, a series of flat types removably secured within the lower end of said hollow cylinder, a keeper engaging said hollow cylinder and flat types to limit the downward movement of said flat types and hold their impression-faces normally in the same plane with the impression-faces of the circular series of types, and springs disposed within said hollow cylinder above said flat types to hold them yieldingly downward.

9. In a hand-stamp, the combination, substantially as set forth, of a head-piece bearing a circular series of impression characters at its lower end and having a recess formed within said series of characters, a cylinder disposed within said recess and bearing impression characters at its lower end, a shank formed upon said cylinder and projecting upwardly through said head-piece, a nut upon said shank over the head-piece, and a handle screwing upon the upper end of the head-piece and capping over said shank and nut.

10. In a hand-stamp, the combination, substantially as set forth, of a cylinder having a socket in its lower end, a series of flat types fitting the lower end of said socket, a keeper to limit the downward motion of said types, a helical spring disposed within said socket and adapted to exert downward pressure upon the outside types of said series, a helical spring disposed within said first-mentioned spring and adapted to press downwardly upon the inside types of the series, and a sleeve disposed in said socket within the first-mentioned spring and exterior to the second spring.

GEORGE ADAM RENTSCHLER.

Witnesses:
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J. W. SEE.