

May 9, 1939.

E. N. HOWELL

2,157,788

KEY-FILING DEVICE

Filed June 10, 1938

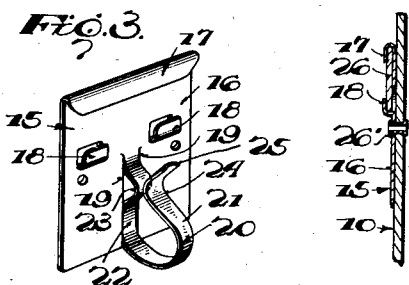
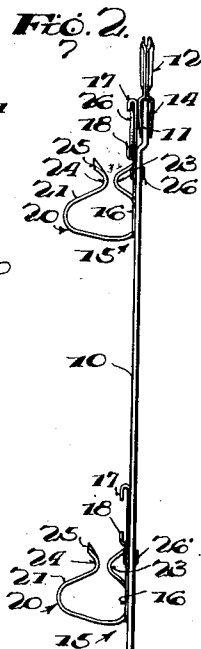
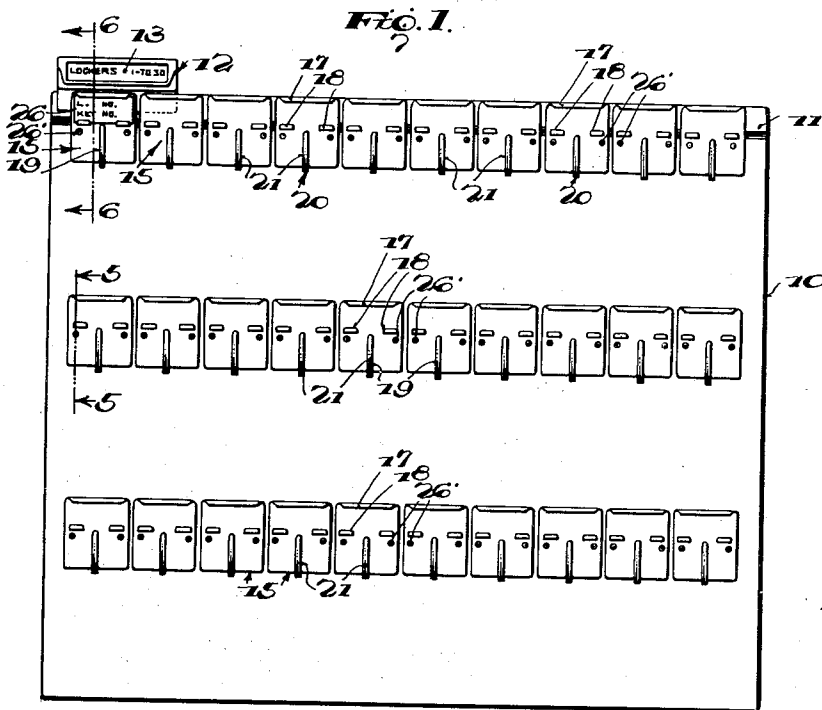


FIG. 5.

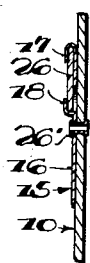


FIG. 4.

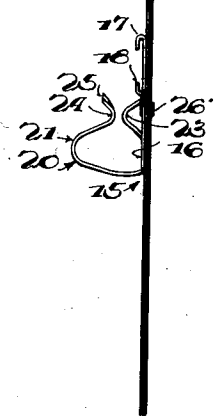
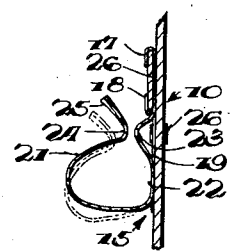
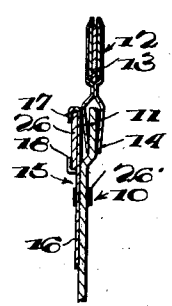


FIG. 6.



Inventor

E. N. Howell

By B. P. Williams

Attorney

UNITED STATES PATENT OFFICE

2,157,788

KEY-FILING DEVICE

Edward N. Howell, Swannanoa, N. C.

Application June 10, 1938, Serial No. 213,017

3 Claims. (Cl. 40—19.5)

My invention relates to filing devices for keys or the like.

An important object of the invention is to improve in general the key filing device shown in my prior Patent 1,742,542 issued to me on the date of January 7, 1930.

A further object of the invention is to provide a unitary slip or card holder and hook, to be mounted upon a supporting sheet or plate.

A further object of the invention is to provide a combined holder and hook, which may be stamped from sheet metal or the like thereby producing a simple and cheap construction.

A further object of the invention is to provide a device of the above mentioned character so constructed that an outward pull on the free end of the hook will exert an inward thrust on the loop of the hook.

A further object of the invention is to provide a device of the above mentioned character wherein the hook is provided near its free end with guide means for the key, when being inserted upon or being removed from the hook, such guide means being arranged in a plane sufficiently remote from the plane of the slip or card holder, that the slip or card holder will not be engaged by the key, in the normal use of the device.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawing forming a part of this application and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a side elevation of a key filing device embodying my invention,

Figure 2 is an enlarged edge elevation of the same,

Figure 3 is a perspective view of one of the combined unitary holder and hook,

Figure 4 is a central vertical longitudinal section through the same,

Figure 5 is a vertical section taken on line 5—5 of Figure 1, and,

Figure 6 is a similar view taken on line 6—6 of Figure 1.

In the drawing, wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 10 designates a supporting sheet or plate, formed of suitably stiff material, such as aluminum, fiber, cardboard or the like. The sheet 10 is provided at its top with a laterally offset marginal portion 11. The numeral 12 designates a metal tab, receiving and holding a slip or card 13, having thereon a designa-

tion for the sheet and embracing the designations of the key-receiving hooks, to be described. The sheet is shown as carrying thirty hooks to receive locker keys, and hence the slip or card 13 carries the designation "Lockers 1 to 30". The tab 12 is provided with a pair of resilient jaws 14, which engage upon opposite sides of the offset marginal upper end portion 11, Figures 1, 2 and 6. The jaw 14 of the tab next to the hook carrying face of the sheet 10, is flush with such face. The invention is not restricted to the use with the precise form of tab 12.

As shown in Figure 1, the sheet 10 is provided with three horizontal rows of combined slip or card holders and hooks, each of which is designated as a whole by the numeral 15. Each combined device includes a body portion 15, which is preferably formed of a flat section of sheet metal, having its upper horizontal edge bent forwardly upon itself to provide an upper retaining flange 17, while opposed retaining flanges 18 are stamped from the plate or body portion 15. The plate is slit vertically at 19 and these slits preferably extend to about the elevation of the flanges 18 and project downwardly to the lower edge of the plate 16. The numeral 20 designates a hook including a loop having outer and inner sides 21 and 22. This hook faces upwardly and projects downwardly and terminates at the lower end of the plate 16, as shown. The inner side 22 has an outwardly projecting hump 23, and the inner side 22 is preferably formed integral with the plate 16 and joins with this plate at the upper ends of the slits 19. The outer side 21 is inclined or bent inwardly toward the hump 23 and then outwardly, providing an inwardly facing hump 24 and an outwardly inclined portion 25, and this extension is preferably curved in cross-section. The extension 25 is not locally resilient, so that the free end of the hook is not locally resilient, while the loop of the hook is sufficiently resilient to permit of the hump 24, opposite the hump 23, to move away from the hump 23, for the passage of the key. The hook 20 is resilient and is substantially closed, that is, it is closed sufficiently to prevent the removal of the key without spreading the outer side of the hook.

A slip or card 26 is held to the plate 16, between the opposed flanges 17 and 18, and the slip or card will carry the designation for its key, such as "L. No. 1", meaning the locker number and "Key No. 214", meaning the serial number of the key. The slip or card may carry designations for rooms, etc. The other slips or cards properly designate the locker and key number, as is ob-

vious. The subject matter of the slips or cards may be varied, as desired.

Each plate 16 is attached to the sheet 10 by eyelets 28', as shown.

5 In view of the foregoing description, it is seen that the slip or card holder and hook is a unitary structure, adapted to be stamped from sheet metal or the like. By having the combined holders and hooks in units, and having the units separate, a larger adjustment and arrangement of 10 the units is possible. As shown in Figure 1 of the drawing, the upper row of units preferably have their upper flanges 17 level with the upper edge of the offset marginal end portion 11. The space 15 between the humps 23 and 24, is in a plane remote from the plane of the slips or cards 26, whereby there is very little, if any, liability of the key engaging with the slip or card, while it is being inserted upon or removed from the hook. 20 A peculiar advantage in my construction is the mode of action of the hook 21. When inserting the key upon the hook, or removing the same therefrom, the outer side 21 of the hook moves outwardly from the sheet 10, and the lower portion or loop of the hook rocks downwardly and 25 the inner side of such loop is forced against the sheet 10. This relieves the inner side from undue local strain, particularly at the point of union with the plate 16. 30 It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of my invention or the 35 scope of the subjoined claims.

Having thus described my invention, I claim:

40 1. A key filing device comprising a sheet, a plurality of individual unitary structures mounted upon the sheet, each structure comprising a plate and a single substantially closed resilient hook, the hook facing upwardly and projecting downwardly to the lower edge of the plate, the hook comprising inner and outer sides, the inner

side being adapted to engage with the sheet, the inner side having an outwardly projecting hump and the outer side having an inwardly projecting hump arranged opposite the first named hump, a force in an outward direction upon the free end 5 of the hook serving to press the lower portion of the inner side against the sheet.

2. A key filing device comprising a plate having its upper end bent forwardly upon itself to provide a flange, said plate having flanges stamped 10 outwardly therefrom at points spaced from the first named flange, said plate having vertical slits, an upwardly facing hook integral with the plate and having inner and outer sides, the inner side having its side edges separated from the plate 15 by the slits, the inner side having an outwardly projecting hump, the outer side having an inwardly projecting hump and continuing beyond its hump to provide an outwardly projecting extension, said extension being curved in cross 20 section to render the same stiff, an outwardly acting force upon the upper end of the outer side serving to press the inner side of the hook inwardly.

3. A key-filing device, comprising a relatively 25 stiff supporting plate, a unitary combined slip or card holder and hook device to be mounted upon the supporting plate, said combined holding device comprising a sheet, said sheet having means to hold a slip or card, a resilient hook 30 formed integral with the sheet and having its lower end closed and its upper end normally sufficiently closed to prevent of the accidental displacement of the key, said resilient hook including inner and outer arms, the inner arm being 35 secured to the sheet and extending downwardly below its point of attachment with the sheet, the arms being provided near their upper ends with inwardly projecting humps, the inner arm being arranged to bear against the relatively stiff 40 plate when the outer arm is shifted from such plate, and means to fixedly secure the sheet to the relatively stiff plate.

EDWARD N. HOWELL.