July 28, 1931. H. H. FETTER 1,816,642

IDENTIFICATION SYSTEM FOR KEYS

Filed Feb. 20, 1931

FIG. 1

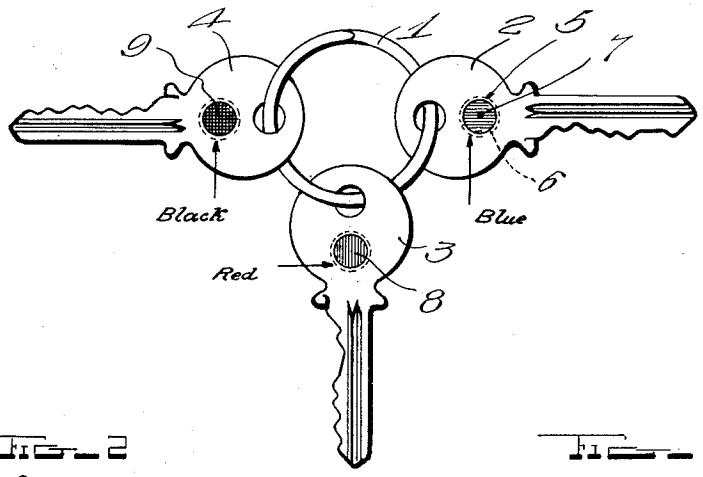


FIG. 2

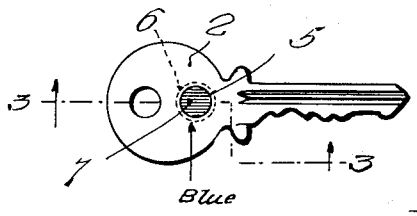


FIG. 3

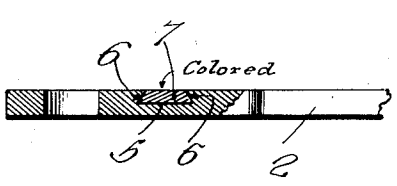


FIG. 4

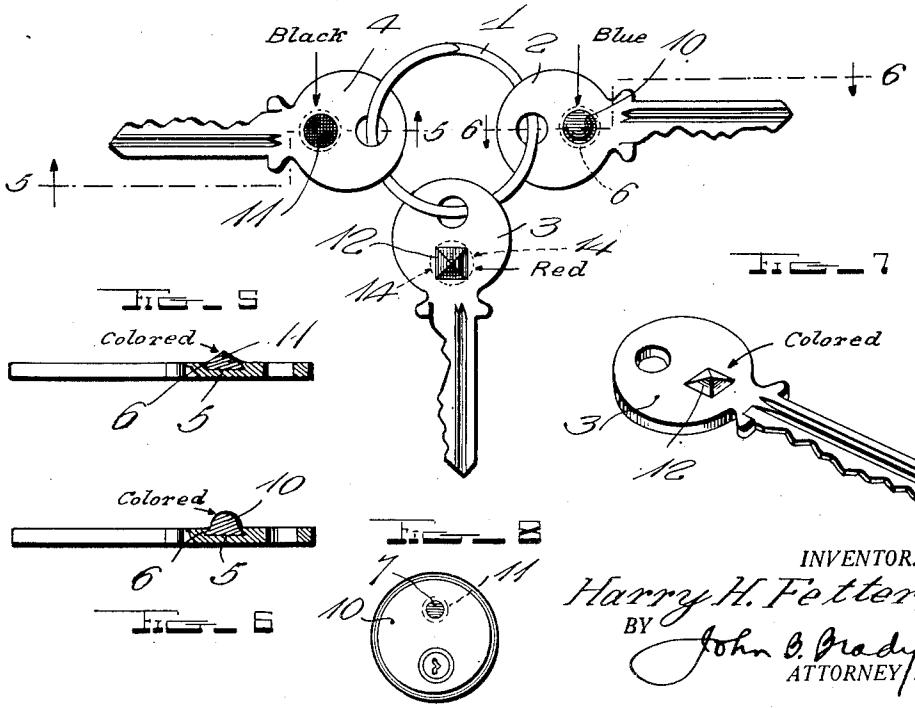


FIG. 5

FIG. 7

FIG. 6

FIG. 8

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Patented July 28, 1931 1,816,642

UNITED STATES PATENT OFFICE

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IDENTIFICATION SYSTEM FOR KEYS

Application filed February 20, 1931. Serial No. 517,357.

My invention relates broadly to keys and more particularly to a system for identifying particular keys of a group of keys which closely resemble each other.

One of the objects of my invention is to provide a system for identifying particular keys within a group of keys which bear a close resemblance to each other and which are difficult to distinguish one from another.

Another object of my invention is to provide a construction of key and identification devices of different contrasting colors adapted to readily distinguish selected keys within a group of keys.

Still another object of my invention is to provide identification devices for keys having different shapes and contours as well as distinguishing and contrasting colors by which a desired key may be readily identified from a group of keys closely resembling one another.

Other and further objects of my invention reside in the construction of keys as set forth more fully in the specification hereinafter following by reference to the accompanying drawings, in which:

Figure 1 is an elevational view showing a group of keys and the identification markers carried thereby in accordance with my invention; Fig. 2 is a plan view of a key showing a colored marker applied thereto according to my invention; Fig. 3 is a cross-sectional view taken through a portion of the key of Fig. 2 on line 3—3 thereof and indicating the position of a colored marker thereon; Fig. 4 is an elevational view of a group of keys provided with markers of contrasting colors where the markers also have contrasting shapes enabling the keys to be identified by a sense of touch; Fig. 5 is an edge view of one of the keys with a portion thereof shown in cross-section on line 5—5 of Fig. 4; Fig. 6 is an edge view of one of the keys with a portion thereof shown in cross-section on line 6—6 of Fig. 4; Fig. 7 is a perspective view of one of the keys showing the application of a marker of distinguishing shape and color to the key; and Fig. 8 represents a lock to which an identifying color may be applied to facilitate the matching of a particular key in a group of keys with the lock with which the selected key is intended to cooperate.

My invention is directed to a method of avoiding the confusion which exists in attempting to open a lock with a group of keys which closely resemble each other. I provide an identifying marker which may be inexpensively formed in the key, the marker bearing a striking color of contrast with respect to a marker in an associated key. I provide a recess in the key which may be filled with a colored enamel molded to a desired shape. The colored enamel may extend flush with the surface of the key or may project therefrom and have an identifying characteristic shape imparted thereto by a molding process in order that a particular key may be readily selected from a group of keys by sense of touch. It is customary to carry upon one key ring, keys which so closely resemble each other in shape that a selection of a particular key from a group of keys is time consuming and of great inconvenience. The colored identification markers provided by my invention are very readily remembered for particular locks, and even under conditions where it is necessary to search for the required key in darkness or insufficient light, the proper key may be selected by a sense of touch by employing a construction of key according to my invention.

Referring to the drawings in detail, reference character 1 designates a key ring on which I have shown for purposes of explaining my invention, three keys designated at 2, 3 and 4 where each of the keys bears a close resemblance one to another. As shown more clearly in Figs. 2 and 3, the key 2 is provided with a recess 5 which is stamped into the key 2 when the key is blanked. A milling tool is employed to undercut the recess 5 as shown at 6 thus providing a recess larger at its base interiorly of the key blank and tapering to a smaller diameter adjacent the surface of the key blank. This pocket thus formed in the key blank provides a cavity in which

enamel in paste-like form may be deposited and baked. The converging walls 6 of the recess 5 serve to retain the baked enamel in the key blank. Differently colored enamels are employed for the identification of different keys. For example, key 2 is provided with an enamel insert 7 of cobalt blue. Key 3 is provided with an insert of red enamel as designated at 8, while key 4 is provided with an insert of black enamel represented at 9. Various colors may be employed for identifying the particular keys. The lock with which a particular key is adapted to cooperate, such as shown at 10 in Fig. 8, may be provided with a similar recess 11 in which enamel of selected color is baked for facilitating the matching of the required key with the lock.

While the contrasting colors serve to distinguish the various keys, I may also employ an enamel insert of particular shape for enabling the key to be identified not only by a contrast of color but also by the sense of touch. This arrangement is shown in Fig. 4 where key 2 is provided with a blue enamel insert 10 which is semi-spherical in contour and is retained in the recess 5 by the converging walls 6. The semi-spherical blue protuberance from the key blank may be very readily identified both by the color and by the shape thereof as represented in Fig. 6. The key blank 4 may be provided with a baked enamel insert 11, black in color, and conical in shape as represented in Fig. 5 so that the protruding point of the enamel insert may be felt and the key promptly identified.

As illustrated in Fig. 7, the key blank 3 may be provided with a red enamel insert having a pyramidal shaped head 12. In each instance, the enamel insert is baked in the key and retained therein by the undercut portion 6 of the recess. In the key structure where a square recess is stamped in the key blank 3 to receive the pyramidal shaped insert 12, the cutting tool which mills out the undercut portion of the recess may provide pockets only in a circular path as designated in dotted lines 14 similar to the undercut portion 6 in the circular recesses in the other key blanks. However, the enamel seeps into the undercut portions of the recess and is retained in position against dislodgment.

In lieu of contrasting colors, I may employ a luminous paint for identifying a key. I may also desire to color the surface of the key with a distinctively colored paint which may cover any portion of the key. Colored enamel may be used and baked by heat treatment on the key for providing the contrasting color characteristics for identifying the different keys. I may also display trademarks on the key or some portion thereof in contrasting colors for securing an advertising effect as well as obtaining the desired identification.

I have found the identification marking system of my invention highly practical, and while I have described my invention in certain of its preferred embodiments, I desire that it be understood that modifications may be made and that no limitations upon my invention are intended other than are imposed by the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent of the United States is as follows:

1. A device of the class described comprising a key blank having a depression therein, said depression being undercut at its base and a mass of plastic material anchored in said depression, said material being molded in a predetermined identifying shape.

2. A device of the class described comprising a key blank having a depression therein, said depression being undercut at its base and a mass of plastic material anchored in said depression, said material being molded into a predetermined shape for identifying said key by sense of touch of said shaped material, said material differing in color from the key blank for identifying said key.

3. A device of the class described comprising a key blank having a polygonal shaped depression therein, an undercut recess at the base of said polygonal shaped depression within said key blank, and a mass of plastic material anchored in said depression and conforming with the shape of said recess and filling said recess for identifying said key.

4. A device of the class described comprising a key blank having a circular depression in the form of an undercut recess therein and a mass of colored plastic material forming a solid insert conforming with the shape of said circular depression for identifying said key.

In testimony whereof I affix my signature.

HARRY H. FETTER.