Aug. 21, 1956 E. L. SCHLAGE 2,759,279

KEY BOW DEVICE

Filed July 21, 1953 2 Sheets-Sheet 1

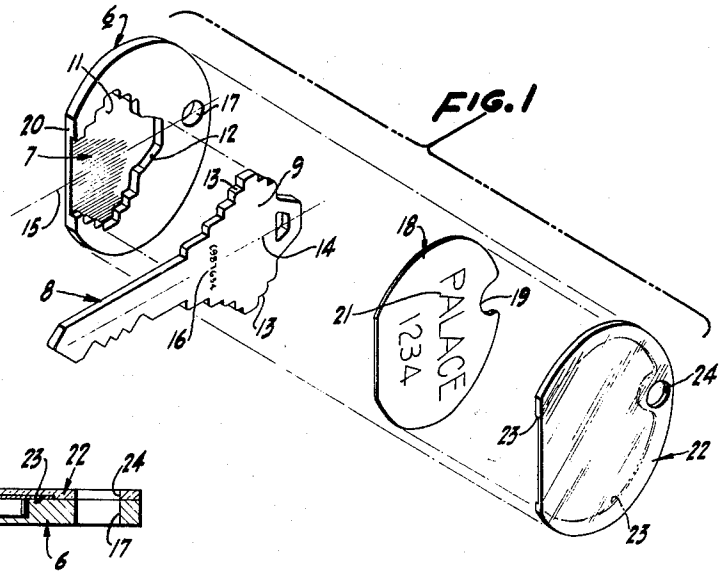


FIG. 1

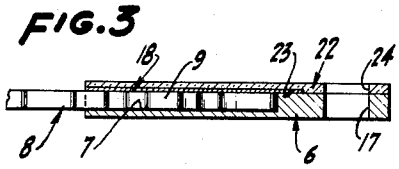


FIG. 3

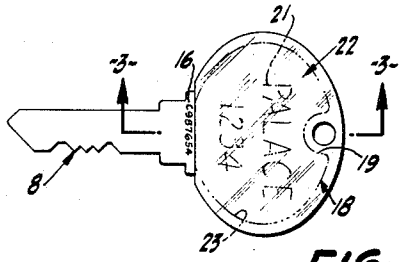


FIG. 2

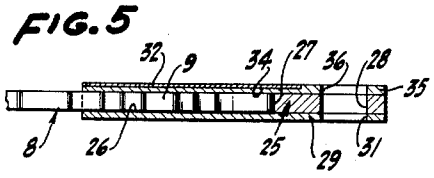


FIG. 5

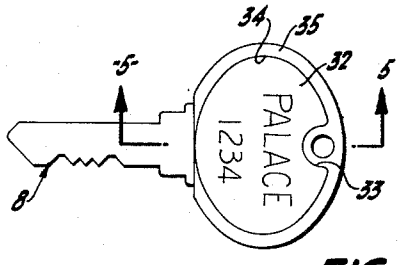


FIG. 4

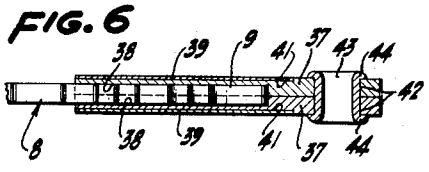


FIG. 6

INVENTOR.
ERNEST L. SCHLAGE

BY Marcus Lothrop

ATTORNEY

Aug. 21, 1956 E. L. SCHLAGE 2,759,279

KEY BOW DEVICE

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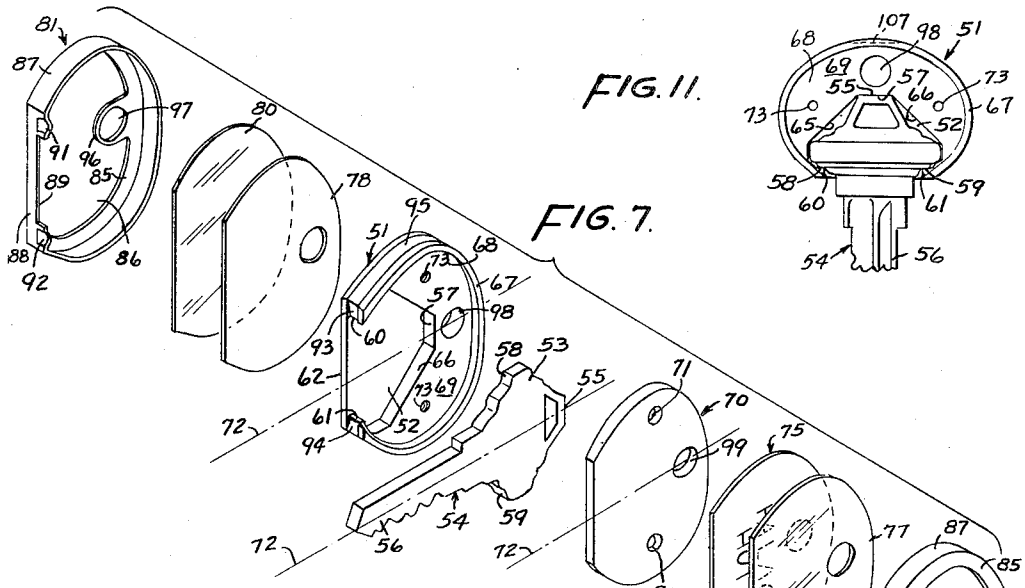


FIG. 7.

FIG. 11.

FIG. 9.

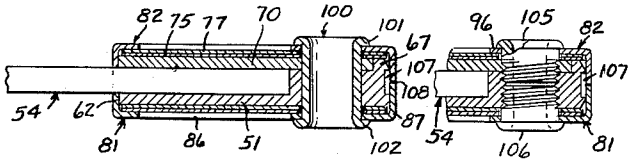


FIG. 12.

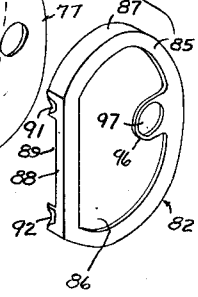


FIG. 10.

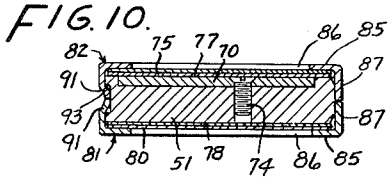


FIG. 13.

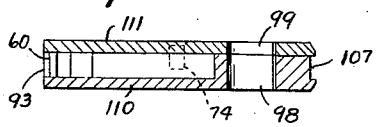
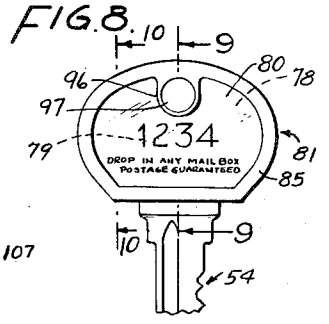


FIG. 8.



INVENTOR.
ERNEST L. SCHLAGE
BY
Boyken, Mobler & Beckley

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2,759,279

KEY BOW DEVICE

Ernest L. Schlage, Burlingame, Calif., assignor to Schlage Lock Company, a corporation

Application July 21, 1953, Serial No. 369,270

13 Claims. (Cl. 40—2)

This invention relates to devices for use in connection with keys for door locks and is particularly concerned with that portion of a key known as the bow.

It is an object of the invention to provide a key bow device which is capable of permitting variation in the shape and size of a key bow according to the needs or desires of the owner.

It is also an object of the invention to provide a key bow device which serves to distinguish a key provided with such device by feel as well as by appearance.

Another object of the invention is to provide a key bow device which allows the owner to characterize an ordinary key as belonging to such owner and as being the proper key for a particular lock.

A further object of the invention is to provide a key bow device which, when installed on a key of the usual kind, associates with that key various distinguishing markings, advertising matter or other desired information within the choice of the owner.

A still further object of the invention is to provide a key bow device of inexpensive construction and which avoids the need for individualized dies and manufacturing operations.

Another object of the invention is to provide a key bow device capable of providing for the user greater ease of lock turning and opening.

Another object of the invention is the provision of a key bow device which may be secured to the key bow in such a manner that it cannot be readily removed by ordinary tampering, but which may be speedily removed and replaced by authorized persons.

Yet another object of the invention is to provide a key bow device including a sheet adapted to carry certain identifying indicia and which device facilitates turning the key in a lock without transmitting any turning effort to such sheet.

Other objects of the invention, together with the foregoing, are attained in the embodiments of the invention, illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of a key bow device, constructed in accordance with the invention, showing the parts in spaced relation.

Fig. 2 is a plan view of the assembled key bow device of Fig. 1.

Fig. 3 is a cross section, the plane of which is indicated by the line 3—3 of the Fig. 2.

Fig. 4 is a plan view of a slightly different form of the invention.

Fig. 5 is a cross section, the plane of which is indicated by the line 5—5 of Fig. 4.

Fig. 6 is a cross section similar to Fig. 5 of another form of the invention.

Fig. 7 is a perspective view of a key bow device showing the parts in spaced relation and illustrating a somewhat different form of the invention which has certain advantages over the structures shown in Figs. 1–6.

Fig. 8 is a plan view of the assembled key bow device of Fig. 7.

Fig. 9 is an enlarged central cross section as taken along lines 9—9 of Fig. 8.

Fig. 10 is an enlarged cross sectional view as taken along lines 10—10 of Fig. 8 showing the interengaging elements on the frames and matrix plate.

Fig. 11 is a plan view of the matrix plate showing a key disposed with its bow in the recess of the matrix plate.

Fig. 12 is a cross sectional view similar to Fig. 10 through the central axis of a modified form of the invention.

Fig. 13 is a sectional view similar to Fig. 10 of still another form of the invention.

While the key bow device of the invention can be embodied in a wide number of variant forms, it has been successfully embodied in the forms shown herein.

One form of the device, as seen in Fig. 1, comprises a matrix plate **6** which may be constructed of any suitable material and in any shape as desired or needed. It has been found, however, that any thermo-setting plastic, molded to the shape illustrated, furnishes a very satisfactory matrix plate, having distinguishing characteristics useful, for example, in connection with keys for hotels, motels or with other publicly used keys.

Formed in the matrix plate **6** for at least a portion of its thickness is a recess **7** substantially equal in depth to the thickness of a customary key **8** having the usual enlarged area or bow **9**. The recess is defined at the bottom by a planar portion **11**, substantially parallel to the sides of the matrix plate **6**, and by a rim wall **12**, substantially perpendicular to the planar portion **11** and configured to match corresponding contours on the key bow edges **13**.

The matrix plate **6** may conveniently be made of an opaque material should it be desired to obscure indicia, such as the key manufacturer's name, appearing on that portion of the key bow **9** in contact with the planar portion **11**.

To give greater area for frictional holding contact and to prevent unseating of the key bow disposed in the recess **7**, owing to longitudinal motion of the key along a key axis **14** and a recess axis **15**, such axes coinciding when the key bow is assembled in the matrix plate recess, it has been found helpful to extend the recess wall **12** around and beyond the widest portion of the key bow so as to encompass considerably more than half the key bow perimeter. The recess walls thus describe, roughly, the shape of the letter **C**, the bow of the key fitting within the interior of the **C**.

Substantially perpendicular to the key axis **14** and the coincident recess axis **15**, the matrix plate is fashioned to a flat edge **20**. The flat edge **20** may be located at any convenient position with respect to the key and the recess but it has been found convenient, where the location of the manufacturer's key number **16** is substantially as shown, to locate the edge **20** so that the manufacturer's key number is visible.

A perforation **17** pierces the matrix plate and is centered on the axis **14** at a convenient point on the unrecessed portion of the plate. The perforation is large enough in size to accommodate an ordinary key ring, grommet or key hook.

While tight frictional engagement of the bow in the plate recess, with or without assistance by cementation along the interfaces, will give a key bow device having many desirable features, such as distinctiveness of size and shape, as well as provide a greater key turning moment arm, more of the objects of the invention can be attained by providing for distinguishing the device in other ways, for example, plates for markings of an identifying or advertising nature.

There is therefore provided a display plate **18** substan-

tially concentric in form with the matrix plate but somewhat smaller. The display plate has a notch **19** on one side large enough in size to prevent interference with the perforation **17** when the parts are in assembled positions. The display plate, which may be of paper, metal or other suitable material can be stamped, embossed or otherwise treated to show on the side visible in assembled position, various distinguishing marks **21**, letters or numbers such as the name and room number of a hotel.

A cover plate **22** of a suitable transparent material such as plastic is also provided having an outline substantially identical with the matrix plate. On one side of the cover plate, a recess **23** is formed having a thickness and an outline to receive, in tight engagement, the display plate **18**. A perforation **24** in the cover plate registers with the perforation **17** in the matrix plate in assembled position. The cover plate **22** is cemented to the matrix plate **6**, along the outer marginal area of the adjacent sides.

In the assembled position the key bow is in tight engagement with the encompassing matrix plate. The cover plate margins, being firmly joined to the margins of the matrix plate serve to confine not only the key bow but the display plate as well. Since the cover plate protects the display plate from direct, exposed contact, the display plate may be made of paper, for example.

Inasmuch as many hotels have printing equipment, for printing menus, etc., the fact that a display plate may be constructed of a material suitable for being printed upon is greatly to be desired. All the resources of the printing, decorating and advertising arts may thus be brought to bear upon the enlarged key bow, and upon a material such as paper, particularly adaptable to such uses. At the same time, the weakness of paper and its inability to withstand wear and grime, is overcome by means of the surrounding wear resisting parts.

Key owners, such as hotels, might prefer to have the display plate **18** constructed of a material such as metal. In fact, a number of hostelries have metal stamping dies for stamping the hotel name or room number etc., on metal keys or attached metal plates, in which case a metal display plate would be particularly desirable. Owing to the wear-resistant qualities of metal, a display plate of that material may be used with substantially equal effectiveness and ability to withstand wear whether the display plate **18** and cover plate **22**, in their assembled position are placed with the display plate in contact with the key and matrix plate as in Figs. 2 and 3, or whether the display plate is located on the outer, exposed side of the cover plate, as in Figs. 4 and 5.

Under many conditions of use, a display plate made from an opaque material would be desirable; to obscure, for example, the name of the manufacture or a former name of the hotel stamped on the key bow. The display plate performs an additional function, namely, to impart a stiffness to the entire assembled device. In assembled position, the display plate overlies not only the key bow, but a considerable portion of the matrix plate as well. The use of a stiff material, such as metal, in forming the display plate is particularly effective to transmit more uniformly to the key bow and thence to the key stem the turning moment exerted by the user of the device, in opening a door lock. Furthermore, the clamping effect exerted by the display plate entraps the key bow in its recess and assists in preventing the key bow from unseating from its assembled position in the matrix plate recess.

Figs. 4 and 5 indicate another form of the invention, in which a matrix plate **25** is provided with a generally C-shaped cavity **26** having rim walls **27** configured to receive, in close fit, the key bow edges **13**, and having a through perforation **28**. In this modification the thickness of the matrix plate is substantially the same as the thickness of the key.

On one side of the assembled matrix plate and key there

is provided a backing plate **29** having an outline substantially identical with the matrix plate outline including a registering perforation **31**. The backing plate **29** is fastened to the matrix plate by any convenient means such as a plastic cement. In a manner quite similar to the prior form of the invention described above, the backing plate may conveniently be formed from an opaque material should it be desired to obscure any indicia stamped on the key by the manufacturer or other person on the side of the key bow in contact with the backing plate.

On the opposite side of the matrix plate there is provided a display plate **32** having a notch **33**. The display plate **32** fits tightly in a corresponding recess **34** in a cover plate **35**. The cover plate **35** has a through perforation **36** adapted to register with the perforations **28** and **31**.

While the illustration shows the display plate in an upwardly facing or exposed condition, the invention is also intended to include an assembly in which the display plate-cover plate sub-asembly is turned over. In this latter position the display plate is protected from outside exposure and wear and so may be made of a less durable material than would be necessary should the sub-assembly be installed in the position illustrated.

A further modification is illustrated in Fig. 6. In this form, the key bow **9** is held between a pair of substantially identical cover plates **37** placed back to back in mirror symmetry. Each cover plate has an inner recess **38** encompassing a considerable portion of the key bow, quite similar to the recess shown for example in the matrix plate of Fig. 1. Each recess is, in depth, equal to substantially one half the key thickness so that in assembled position the key bow is snugly contained.

For key owners who might desire to indicate on one side of the device the name, say, of a hotel and the room number, and on the other side, for example, a notation to the effect that the hotel will assume mailing charges for the key if dropped in a mail box, there may be provided a pair of display plates **39** disposed within conforming outer recesses **41** in each cover plate **37**.

Registering through perforations **42** pierce each cover plate. Illustrated in Fig. 6, but equally applicable to the other forms shown and described, is a grommet **43** of some material, conveniently, more durable than the plates. The grommet is useful in exerting on the assembled parts a clamping effect and acts, as well, to reinforce the perforation against chafing by a key ring or key hook. The grommet exerts the clamping effect by means of grommet flanges **44** upstanding from the planar exposed surfaces of the display plate and contiguous cover plate. The flange portion serves the additional function of a spacer for propping up the grommet and of the key and thus reducing wear of the cover and display plates against a table top or key board, or as between adjacent keys on a key ring. That is, when the key, provided with the key bow device rests on a table top, for example, the projecting grommet, being greater in thickness than the thickness established by the display plates, holds the display plates substantially away from the table top.

Figs. 7–11 illustrate a form of the invention which is particularly rugged and adaptable for use by hotels and the like.

A matrix plate **51** (Fig. 7) is provided which is somewhat similar to matrix plate **6** (Fig. 1) and includes a recess **52** for receiving the key bow **53** of a key generally designated **54**. The depth of recess **52** is equal to the thickness of key bow **53**.

However, in this case, the outline of the recess is preferably simplified. The end edge **55** of the key bow remote from the key shank **56** engages the inner sidewall **57** of recess **52** and the shoulders **58**, **59** of the key bow **53** that are directed longitudinally of the key shank **56** engage a pair of lips **60**, **61** respectively (Fig. 11) that are integral with the matrix plate **51** and define the por-

tion of recess 52 adjacent the side edge 62 of matrix plate 51.

Between lips 60, 61 and the inner side 57 of recess 52 the opposed sidewalls 65, 66 are formed in conformity with the general contour of the key bow, but spaced slightly therefrom so that frictional engagement between the key bow and the sidewalls of the recess exists only at three spaced points corresponding to lips 60, 61 and the side 57 of recess 52. By this structure, the recess 52 may be economically formed and, in addition, a three point support for the key is provided which effectively secures the key in place and prevents twisting thereof relative to the matrix plate.

The spacing between inner side 57 of recess 52 and the inwardly directed faces of lips 60, 61 is preferably such that the key bow must be press fitted therein. In this connection, the shank 56 of key 54 facilitates insertion of the key bow into recess 52 and removal therefrom inasmuch as said shank may be used as a lever.

The matrix plate 51 is preferably provided with a peripherally outwardly extending projecting integral rim 67 on the same side of said matrix plate as the recess 52. This rim 67 extends up to and terminates at the side edge 62 of the matrix plate to form a relatively large C-shaped recess 68 which is adapted to receive a complementarily formed cover plate 70 (Figs. 7, 9, 10).

As best seen in Fig. 11, the extent of matrix plate 51 is considerably greater than that of the key bow 53 and recess 52 so as to form a planar margin 69 around said recess 52 extending to rim 67.

The cover plate 70 is provided with a pair of countersunk holes 71 which are spaced apart on opposite sides of a central longitudinally extending key axis 72 (Fig. 7). Similarly the marginal portion 69 of the matrix plate 51 is provided with a pair of tapped holes 73 in registration with countersunk holes 71 for receiving therein screws 74 (Fig. 10) which serve to secure cover plate 70 to matrix plate 51. It will be noted that when the key bow 53 is received in recess 52 and cover plate 70 is secured to matrix plate 51, the key is rigidly connected to the matrix plate and no relative movement between key and plate is possible. Furthermore, it is pertinent to note at this point that substantially greater leverage is provided by plates 51, 70 for turning the key in a lock. If the matrix plate were of substantially the same extent as the key bow such additional leverage would not be obtained.

When the cover plate is secured to matrix plate 51, as above described, a display plate 75, which is substantially coextensive in area with matrix plate 51 to rim 67, may be positioned over the cover plate 70. This display plate may be of paper or cardboard or any other inexpensive material on which indicia 76 may be printed indicating, for example, the name (and address) of the hotel or other hostelry to which the key 54 belongs.

Over display plate 75 there is preferably provided a thin sheet 77 of transparent plastic or the like through which the indicia 76 on display plate 75 may be viewed. Sheet 77 also serves to protect display plate 75 against soiling and marring. On the opposite side of matrix plate 51 there is provided a display plate 78 which is identical to display plate 75 except that it is provided with different indicia 79 (Fig. 8) indicating, for example, a room number and any other desired notation. A transparent sheet 80, identical to sheet 77 may be provided over the display plate 78.

For the purpose of holding the display plates 75, 78 and the transparent sheets 77, 80 in superposed relation relative to matrix plate 51 and cover plate 70, a pair of frames generally designated 81, 82 are provided on opposite sides of said matrix plate. These frames, which may be sheet metal stampings, are identical, and the same numerals will be applied to like parts of the same.

Each frame 81, 82 comprises a planar web portion 85

having a relatively large central opening 86 through which the adjacent display plate may be viewed.

At right angles to web portion 85 is a peripherally extending flange 87 which is substantially C-shaped to conform to the outer periphery of the C-shaped portion of matrix plate 51, and an integral straight flange 88 conforming to the side edge 62 of said matrix plate 51.

The flanges 88 of the frames 81, 82 are each provided with a rectangular notch 89 equal in depth to about one half the thickness of the key 54 so that the juncture between the key bow and the key shank is received within the opposedly opening notches 89 when the frames are secured to opposite sides of the matrix plate.

Adjacent opposite ends of notch 89, the straight flange 88 is provided with a pair of projections 91, 92 which are directed inwardly of the frames 81, 82.

Referring again to matrix plate 51 (Fig. 7) the side edge 62 of the same at the terminating ends of the curved portion 95 is slotted inwardly centrally of the same to form a pair of recesses 93, 94 for receiving the projections 91, 92 therein (Figs. 7, 10).

The inner side of flange 87 is a press fit with the outer periphery of matrix plate 51 so that the frames 81, 82 may be inserted on matrix 51 by first inserting the projections 91, 92 in recesses 93, 94 and then pressing the corresponding flanges 87 of frames 81, 82 over the periphery of the matrix plate 51 until the same are in meeting relationship (Fig. 10).

Integral with the web 85 of each frame at a point opposite the straight flange 88 is an ear 96 which extends longitudinally inwardly into opening 86 from said web relative to the axis 72 of key 54. This ear 96 is provided with a central aperture 97 which, when the various parts are assembled as above described is coaxial with similar apertures 98, 99 in the matrix plate 51 and cover plate 70 respectively. The display plates 75, 78 and the transparent sheets 77, 80 are similarly apertured as indicated (Fig. 7).

When the various parts are assembled as above described, a grommet 100 (Fig. 9) may be passed through the registering apertures and swaged over to form radially outwardly extending lips 101, 102 engaging the ears 96 of the frames 81, 82 respectively (Fig. 10), thus securing all of the parts together.

It will be understood that the interconnection between the frames 81, 82 by the projections 91, 92 and the recesses 93, 94 prevents movement of said frames outwardly away from the matrix plate 51 adjacent side edge 62 of the latter and disassembly of the device is impossible without removing grommet 100. This structure makes the device completely tamper proof although disassembly is readily effected when the grommet 100 is removed by suitable equipment.

In lieu of the particular structure of Fig. 9, the apertures 98, 99 respectively in matrix plate 51 and cover plate 70 may be screw threaded to receive a pair of hollow threaded ferrules 105, 106 (Fig. 12). In this case, it will be noted that the matrix plate 51 and the relatively thinner cover plate 70 may be secured together while the internal thread is cut so that ferrule 105, which is adjacent the cover plate 70, threadedly engages the matrix plate 51 by at least one or two threads. The outward appearance of the particular structure of Fig. 12 is exactly the same as that of Fig. 9 and if a reasonably tight fit is effected by the ferrules 105, 106 there is no chance of the ferrules accidentally backing off and very little likelihood of them being removed by tampering without the use of appropriate tools.

The assembled key and key bow device (Figs. 8, 9, 10) provide a very neat article which is convenient for carrying and easy to handle. It is also pertinent to note that the relatively larger extent of the key bow device in comparison with the key bow itself increases the torque which may be applied by the user when the key is inserted in a lock. In addition, it is apparent that the resisting torque

cannot be transferred to the relatively light display plates **75, 78**, transparent sheets **77, 80**, and frames **81, 82** because such torque is completely resisted by the matrix plate **51** and cover plate **70** which are secured together by screws **74** (Fig. 10).

To enable disassembly of the device, the curved side edge of matrix plate **51** that is opposite the flat side edge **62** is provided with a relatively shallow central groove **107** (Figs. 9, 11) to facilitate insertion of a sharp blade between the meeting edges of the flanges **87** of frames **81, 82** as indicated at **108** (Fig. 9). This structure is particularly useful when the frames **81, 82** are press fitted onto matrix plate **51** which is desirable.

Referring again to Figs. 7 and 10, it will be seen that the recesses **93, 94** on the side edge **62** of matrix plate **51** are formed in the material of the matrix plate itself. Thus the frames **81, 82** are firmly secured to the unitary matrix plate and are independent of the cover plate **70**. However, a more economical structure is shown in Fig. 13 for achieving a similar result, and which form lends itself more readily to die casting of the matrix plate and cover plate. In this case, a matrix plate **110** is provided which is identical in all respects with matrix **51** except that the peripherally extending rim **67** of Fig. 7 is omitted.

A cover plate **111** is provided which is coextensive with matrix plate **110**. Recesses **93, 94** are provided in matrix plate **110** in the same position as in matrix plate **51** for receiving the projections **91, 92** of frames **81, 82** (Figs. 7).

In the modified form of Fig. 13, it will be noted that the cover plate **111** is relied on to partially define recesses **93, 94** instead of the rim **67** of matrix plate **51**. In other words, the screws **74** are relied on to secure the cover plate in place and the cover plate, in turn, helps to hold the frame **82**.

In connection with the embodiments of the invention shown in Figs. 7–12, it will be seen that the inwardly directed projections **91, 92** of frames **81, 82** serve to secure the display plates and transparent sheets within the frames while the latter are being handled during the assembly operation.

I claim:

1. A key bow device for use with a key having a planar bow of predetermined edge outline comprising a planar matrix plate of substantially greater extent than said bow formed on one side with a laterally outwardly opening recess of substantially said outline disposed with said matrix plate embracing said planar bow in contact with one side of said bow and in contact with said edge thereof, a separable planar cover plate of the same extent as said matrix plate, and means effective at points spaced from said recess for securing said cover plate to said matrix plate in registry therewith and in contact with the other side of said bow.

2. A key bow device comprising a key having an enlarged bow; a matrix plate having a C-shaped planar recess encompassing at least a portion of said bow with said matrix plate being of substantially greater extent than said recess to form a margin outwardly of said recess, the depth of said recess being substantially the thickness of said bow, said matrix plate having also a through perforation in said margin; an opaque display plate having a notch therein, said display plate being smaller in extent than said matrix plate and larger in extent than said bow and having one side in overlying relationship with said bow for obscuring said bow, and having indicia on the other side; and a transparent cover plate conforming in outline to said matrix plate, having a recess configured to receive said display plate, and having a through perforation, said cover plate overlying said display plate; and means for fastening said cover plate to the margin of said matrix plate with said perforations of said matrix plate and said cover plate and said notch all being disposed in registry.

3. A key bow device comprising a backing plate; a matrix plate attached to said backing plate and having a C-shaped cavity opening laterally outwardly of both sides of said matrix plate; a key having a bow fitting in said cavity in close engagement with said matrix plate and having one side in abutment with said backing plate; a recessed cover plate of the same extent as said matrix plate and said backing plate; means for affixing said cover plate to said matrix plate in registry with said matrix plate and said backing plate and an opaque display plate in engagement with said recess of said cover plate for obscuring the other side of said key bow, said backing plate, matrix plate and cover plate being formed with aligned openings at a point spaced from said cavity for receiving a key ring or the like therethrough.

4. A key bow device comprising a first pair of plates fastened together in registry, each of said plates having an outer recess and an inner recess; a key having a bow disposed within said inner recesses; a second pair of plates, each of said second pair of plates being disposed within a corresponding one of said outer recesses and establishing the thickness of said key bow device, there being a perforation through said first pair of plates at a point spaced from said recess; and a grommet disposed in said perforation and extending beyond said thickness.

5. A key bow device comprising a matrix plate having a laterally outwardly opening recess on one side thereof of a shape substantially complementary to the shape of a flat key bow for receiving such key bow therein with the latter generally coplanar with said matrix plate, said recess extending to and opening outwardly of one edge of said matrix plate for receiving the juncture between the key bow and the key shank, the area of said matrix plate being substantially greater than the area of said key bow to provide a margin around the periphery of said recess except adjacent said one edge, a cover plate on said one side substantially coextensive with said matrix plate and overlying said margin and said recess, registering openings in said matrix plate and said cover plate at said margin, and a fastening element in said openings for securing said plates together.

6. A key bow device comprising a matrix plate having a laterally outwardly opening recess on one side thereof of a shape substantially complementary to the shape of a flat key bow for receiving such key bow therein with the latter generally coplanar with said matrix plate, said recess extending to and opening outwardly of one edge of said matrix plate for receiving the juncture of the key bow and the key shank, a frame overlying said one side of said matrix plate and adapted to secure a display sheet between said frame and said matrix plate, a flange in said frame adapted to lie alongside said one edge of said matrix plate, said matrix plate being formed along said one edge with a notch intermediate the opposite sides of said matrix plate, a projection on said flange adapted to be received in said notch and means adjacent the edge of said matrix plate opposite said one edge for releasably securing said frame to said matrix plate.

7. A key bow device comprising a matrix plate having a laterally outwardly opening recess on one side thereof of a shape substantially complementary to the shape of a flat key bow for receiving such key bow therein with the latter generally coplanar with said matrix plate, said recess extending to and opening outwardly of one edge of said matrix plate for receiving the juncture of the key bow and the key shank, a frame overlying said one side of said matrix plate and adapted to secure a display sheet between said frame and said matrix plate, a flange in said frame adapted to lie alongside said one edge of said matrix plate, said matrix plate being formed along said one edge with a notch intermediate its opposite sides, a projection on said flange adapted to be received in said notch and means adjacent the edge of said matrix plate opposite said one edge for releasably securing said frame to said matrix plate, said matrix

plate being of substantially greater extent than said recess to provide a margin around the latter except adjacent said one edge, a cover plate for holding said key bow in said recess, means for releasably securing said cover plate to said matrix plate at said margin.

8. A key bow device comprising a matrix plate having a laterally outwardly opening cavity of a shape substantially complementary to the shape of a flat key bow for receiving such key bow therein with the latter generally coplanar with said plate, said cavity extending to one edge of said plate for receiving the juncture between the key bow and the key shank, means for releasably securing said key bow in said cavity, a pair of similar frames respectively overlying opposite sides of said plate and adapted to secure a pair of display plates between said frames and said opposite sides, said frames being provided with peripheral flanges extending toward each other along the side edges of said matrix plate, a notch in said one edge of said matrix plate and integral projections on said flanges respectively extending into said notch, said matrix plate and frames being provided with aligned apertures at points opposite said cavity from said one edge for receiving a fastening element therethrough, whereby release of said frames from said matrix plate is permitted only when said element is removed.

9. A key bow device comprising a matrix plate having a laterally outwardly opening recess on one side thereof of a shape substantially complementary to the shape of a flat key bow for receiving such key bow therein with the latter generally coplanar with said matrix plate, said recess extending to and opening outwardly of one edge of said matrix plate for receiving the juncture of the key bow and the key shank, the area of said matrix plate being of substantially greater extent than the area of said key bow to provide a margin around the periphery of said recess except adjacent said one side, a rim integral with said matrix plate and extending around the periphery thereof except adjacent said one edge and projecting outwardly from said one side of said matrix plate, a cover plate for holding said key bow in said recess and positioned on said one side within the confines of said rim.

10. A key bow device comprising a matrix plate formed with a cavity therein opening laterally outwardly of said matrix plate and having a contour substantially complementary to the edge contour of a flat key bow for receiving such key bow therein, said cavity extending to and opening outwardly of one edge of said matrix plate for receiving the juncture between the key bow and the key shank, the area of said matrix plate being substantially greater than the area of said key bow to provide a margin outwardly of the periphery of said cavity except adjacent said one edge.

11. A key bow device comprising a matrix plate formed with a cavity therein opening laterally outwardly of said matrix plate and having a contour substantially complementary to the edge contour of a flat key bow for receiving such key bow therein, said cavity extending to and opening outwardly of one edge of said matrix plate for receiving the juncture between the key bow and the key shank, the area of said matrix plate being substantially greater than the area of said key bow to provide a margin outwardly of the periphery of said cavity except adjacent said one edge, an opening in said margin of said matrix plate and spaced outwardly from said cavity for receiving a key ring or the like therethrough.

12. A key bow device comprising a matrix plate formed with a cavity therein opening laterally outwardly of said matrix plate and having a contour substantially complementary to the edge contour of a flat key bow for receiving such key bow therein, said cavity extending to and opening outwardly of one edge of said matrix plate for receiving the juncture between the key bow and the key shank, the area of said matrix plate being substantially greater than the area of said key bow to provide a margin outwardly of the periphery of said cavity except adjacent said one edge, an opening in said margin of said matrix plate and spaced outwardly from said cavity for receiving a key ring or the like therethrough, a separable cover plate overlying one side of said matrix plate and provided with an aperture in registration with said opening in said matrix plate, means for securing said cover plate and said matrix plate together at said margin.

13. A key bow device comprising a matrix plate formed with a cavity therein opening laterally outwardly of the opposite sides of said matrix plate and having a contour substantially complementary to the edge contour of a flat key bow for receiving such key bow therein, said cavity extending to and opening outwardly of one edge of said matrix plate for receiving the juncture between the key bow and the key shank, the area of said matrix plate being substantially greater than the area of said key bow to provide a margin outwardly of the periphery of said cavity except adjacent said one edge, an opening in said margin of said matrix plate and spaced outwardly from said cavity for receiving a key ring or the like therethrough, the thickness of said matrix plate being substantially equal to the thickness of said key, a pair of separable cover plates overlying said opposite sides and provided with apertures registering with said opening in said matrix plate for receiving a key ring or the like therethrough when said plates are secured together.

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