

Feb. 23, 1971

A. B. BENNETT

3,564,879

BUSINESS MACHINE LOCKING DEVICE

Filed April 17, 1969

3 Sheets-Sheet 1

FIG. 1

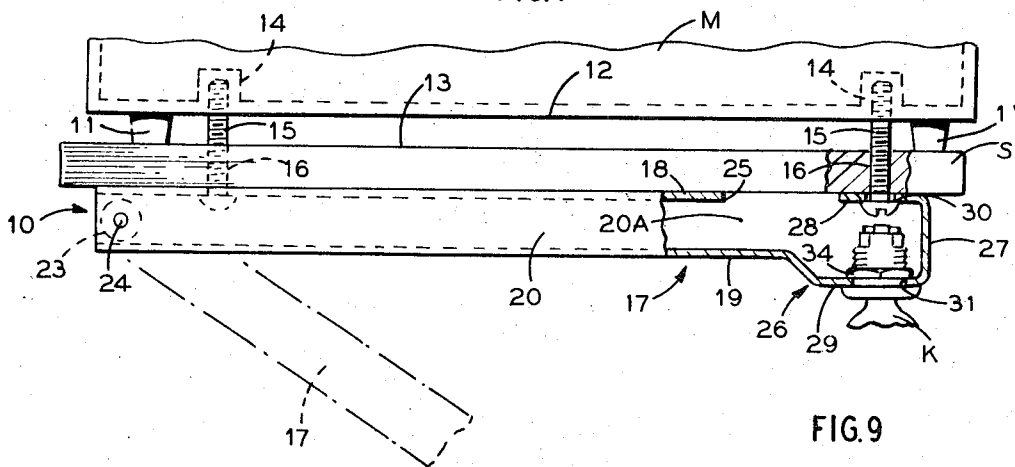


FIG. 9

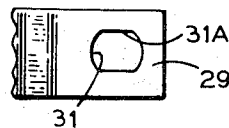


FIG. 2

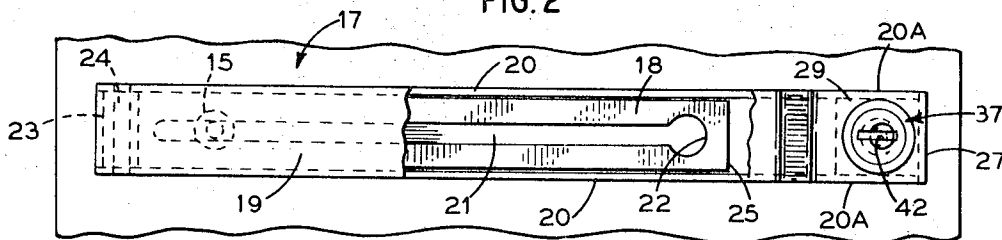


FIG. 3

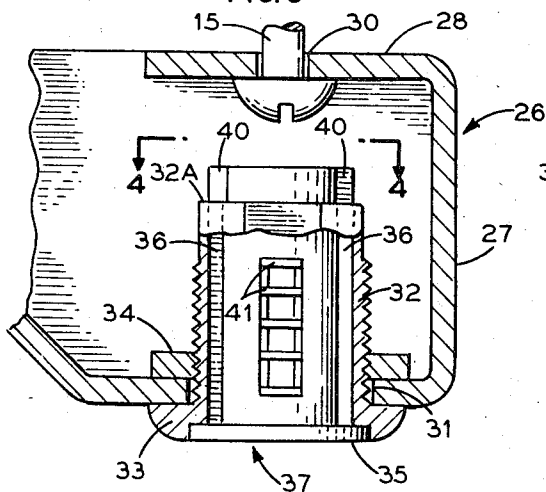
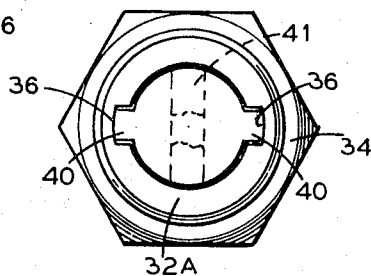


FIG. 4



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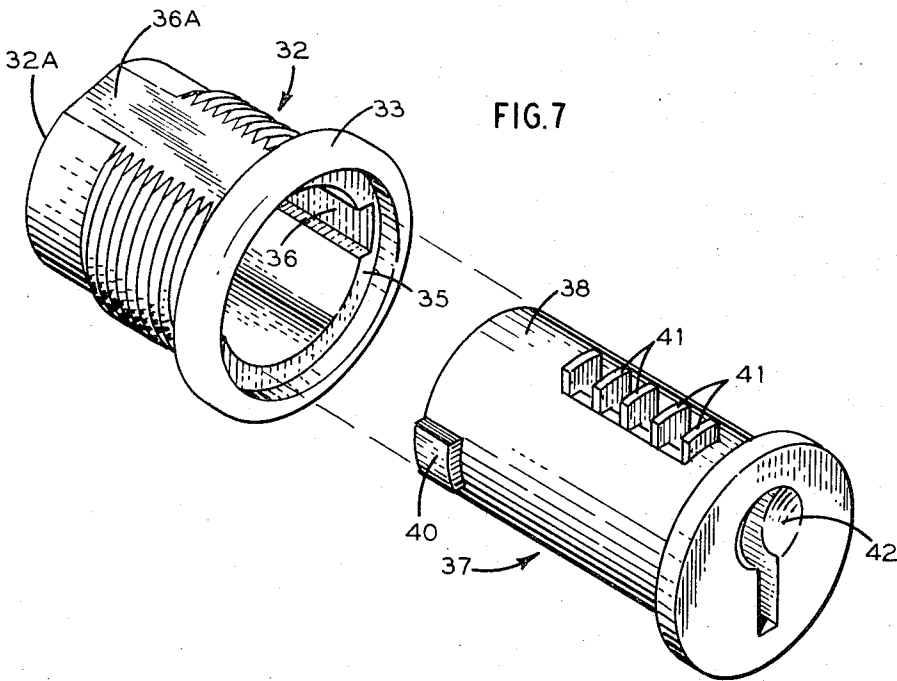
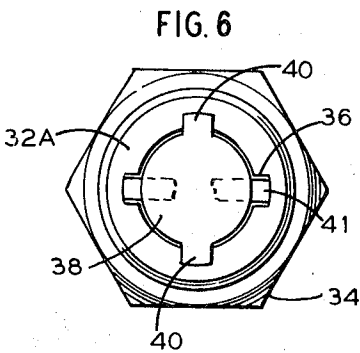
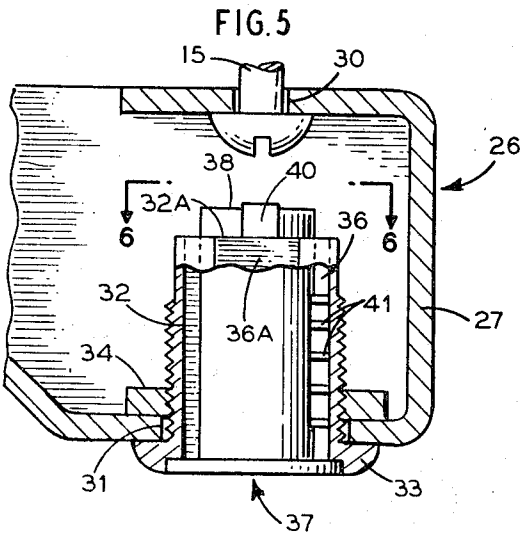
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3 Sheets-Sheet 2



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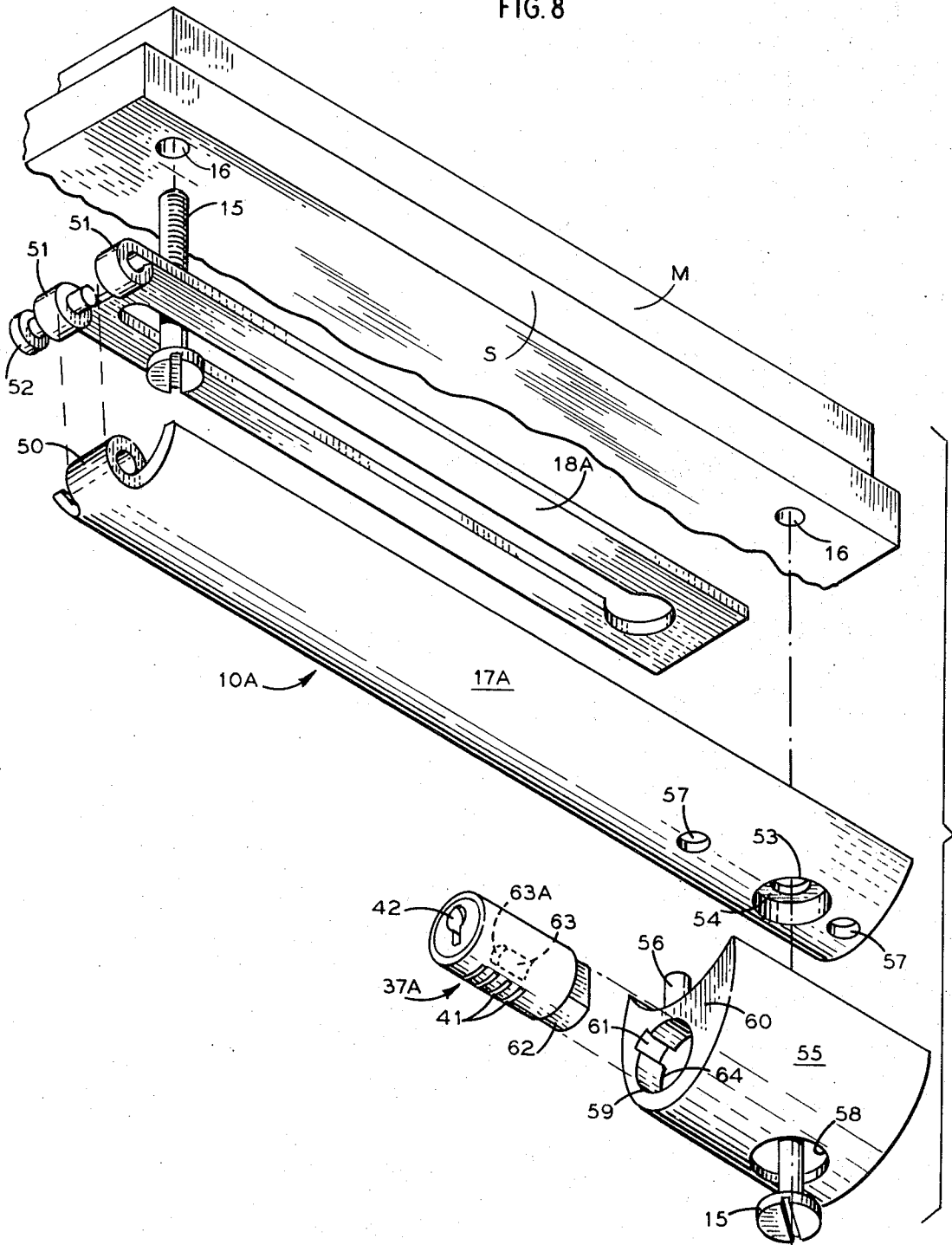
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BUSINESS MACHINE LOCKING DEVICE

Filed April 17, 1969

3 Sheets-Sheet 3

FIG. 8



1

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3,564,879

BUSINESS MACHINE LOCKING DEVICE

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8 Claims

ABSTRACT OF THE DISCLOSURE

Locking devices for securing business machines, such as typewriters and the like, to a rigid base such as a desk or the like, to prevent unauthorized removal of such machines.

BACKGROUND OF THE INVENTION

It has been suggested that typewriters and other business machines be secured to desk tops or the like, in a manner to thwart unauthorized removal of such machines.

However, known locking devices of this type have been found to be cumbersome; difficult to install and manipulate; and particularly, presenting problems in unlocking the device for removal of the machine.

Accordingly, an object of this invention is to provide an improved locking device for securing business machines against unauthorized removal, which is compact, easy to install and manipulate; and readily unlock to permit removal of the machine.

Another object of this invention is to provide an improved locking device of the character described, which is of relative simple construction, is readily fabricated in an economical manner and may be used with a minimum amount of instruction.

Other objects of this invention are in part obvious and in part hereinafter pointed out.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side elevational view, with parts in section and parts broken away, showing the locking device of the instant invention, in operative condition;

FIG. 2 is a bottom plan view, with parts broken away;

FIG. 3 is an enlarged elevational view in section, showing the tumbler lock in one position thereof;

FIG. 4 is a sectional view taken on the line 4—4 of FIG. 3;

FIG. 5 is a sectional view similar to that of FIG. 3, showing the tumbler lock in another position thereof;

FIG. 6 is a sectional view taken on the line 6—6 of FIG. 5;

FIG. 7 is a perspective view, in exploded form, showing the tumbler lock;

FIG. 8 is an exploded perspective view showing another embodiment of the invention; and

FIG. 9 is a partial plan view showing a detail of the device.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring in detail to the drawings, and particularly to FIGS. 1-7; M designates a typewriter or other business machine, which is to be locked to a support S which may be the top wall of a desk, table or the like, by means of one form of locking device embodying the invention and generally indicated at 10.

Machine M includes the usual foot members 11 projecting from the underside 12 thereof, for mounting said machine on support S in slightly raised relation to the top surface 13 of support S. The machine M is provided with the usual internally threaded bushings 14 for receiving screws 15 passing through laterally spaced openings 16 formed in support S, for the purpose.

Obviously, with the heads of screws 15 exposed, unauthorized removal of machine M from support S requires only a screw driver. Accordingly, locking device 10 is adapted to be mounted on the underside of support S in a manner to conceal and render inaccessible the heads of screws 15.

To this end, locking device 10 comprises essentially a pair of elongated, rigid metal members 17, 18 which are interconnected at one end thereof for relative hinged movement. The member 17 is of channel cross section, comprising a web portion 19 and opposed flange portions 20. The member 18 is essentially a flat metal strip formed with a longitudinal slot 21 terminating just short of the opposite ends thereof, the slot 21 terminating at one end thereof in an enlarged circular opening 22 communicating therewith to freely pass the head of a screw 15; the screw head straddling the slot 21.

The members 17, 18 are hinged together at their left hand ends, looking at FIG. 1, by means of a bushing 23 welded transversely to one end of member 18 and a pin 24 passing through bushing 23 with its opposite ends secured in appropriate openings formed at one end of flanges 20 of member 17, the outer ends of pin 24 being upset to retain the same in place.

The member 17 includes at its right hand end, looking at FIG. 1, an integral cavity portion 26 which projects beyond the free right hand end 25 of member 18. Cavity portion 26 is defined by side wall portions 20A which merge with flanges 20, and end wall 27, a top wall 28 and a bottom wall 29. Wall 28 is formed with an opening 30 to pass screw 15 with the head thereof abutting said wall. Wall 29 is formed with an opening 31 coaxially related to opening 30 for freely admitting screw 15 and to receive a removable lock for concealing and rendering inaccessible screw 15 at the right hand end of device 10, looking at FIG. 1.

An externally threaded bushing 32 with a collar 33 at one end thereof is seated in opening 31, a nut 34 locking the bushing 32 in place. The bushing 32 is formed with an annular seat 35 in collar 33 and a pair of diametrically opposed slots 36 on the inner surface thereof.

A latching lock 37 of conventional design is removably mounted in bushing 32 for concealing the head of the right hand screw 15 and thus preventing access thereto. Lock 37 comprises the usual barrel 38 with a cross member 39 fixed to the outer end thereof to provide shallow oppositely directed projections 40. Within the barrel 38 are the usual spring pressed latches 41 projecting radially therefrom and normally in their projected positions; the latches 41 being located in a position which is displaced 90° with respect to projections 40. A key, not shown, upon insertion into keyhole 42 in barrel 38 is adapted to retract the latches 41, all in a manner known in the art.

In applying device 10 to its screw concealing position on the underside of support S, one screw 15 is inserted in slot 21 of member 18 with the head thereof straddling the slot and then moved to a left hand position, looking at FIG. 1, to be threaded into the left hand bushing 14 of machine M.

The right hand screw 15 is dropped through bushing 32 to pass through opening 30 in wall 28 and to seat thereon. The slot 21 in member 18 allows for adjustment of the two screws 15 in accordance with the distance between the bushings 14 on machine M; the left hand screw 15 being located while member 17 is in its downwardly tilted position, as indicated in dot-dash lines, in FIG. 1; the member 17 being swung up to engage the underside of support S to allow the right hand screw 15 to be located and threaded into the right hand bushing 14 on machine M. Thus, only the right hand screw 15 is still exposed and accessible by way of bushing 32.

The lock 37 with its key inserted in keyhole 42 to re-

3

tract latches 41, is now inserted in bushing 32, with projections 40 passing through slots 36 and to thus bring said projections 40 just past the inner edge 32A of the bushing 32. The lock 37 is now rotated 90° to bring projections 40 in abutting relation to bushing edge 32A and to allow latches 41 to be spring pressed into one of the slot 36, upon removal of the key, not shown. Thus, lock 37 is secured in place and effectively conceals the right hand screw 15, to prevent either of the screws 15 from being engaged by a screw driver to remove the same.

To release the machine M, it is only necessary to insert the key, not shown, in keyhole 42 to thereby retract latches 41, and upon a 90° turn, the lock 37 to be removed, thereby exposing the right hand screw 15 for removal, thereafter swinging member 17 downwardly to expose the left hand screw 15 for easy removal.

An alternative embodiment of the invention is shown in FIG. 8, wherein a latching lock 37A somewhat similar to lock 37, previously described, is disposed at right angles to screw 15 to conceal the same. To this end, members 17A, 18A corresponding to members 17, 18 respectively, are hingedly connected together at one end thereof by rolled hinge portion 50 on member 17A fitting between ears 51 on member 18A and an inserted hinge pin 52.

Member 17A is of an arcuate cross section with an opening 53 formed in the right hand end thereof, looking at FIG. 8, together with a seat portion 54 for receiving the head of the right hand screw 15. A chambered lock receiving member 55 is seated on the outer surface of member 17A and is suitably secured thereto, being located by pins 56 received in openings 57 in member 17A. Member 55 is formed with an enlarged opening 58 to pass the screw 15.

Member 55 is further formed with an opening 59 in end wall 60 thereof and a longitudinal slot 61. A lock 37A, similar to lock 37, includes a longitudinally projecting portion 62 extending from the outer end thereof. The lock 37A, with a key inserted in keyhole 42 to retract the latches 41, a previously described, may be inserted into member 55 by way of opening 59, the projection 63 on a side portion thereof moving in slot 61.

With lock 37A fully inserted, the same may be rotated, as previously described, to bring edge 63A of the projection 63 into abutting relation to edge 64 of wall 60. The latches 41 will now project into slot 61 upon removal of the key, to retain the lock 37A in a position wherein projection 62 will overlie and conceal the head of the right hand screw 15. Thus, a tool can not be used to remove said screw 15. It follows that machine M can be secured to support S in a manner to avoid unauthorized removal of the same.

To secure bushing 32 in opening 30 against rotation, said bushing is formed with flats 36A extending longitudinally on the outer surface thereof; said flats 36A abutting flattened edge portions 31A of opening 31. Thus, attempts to remove the assembly of bushing 32 and lock 37 by gripping and rotating the assembly, are thwarted.

What is claimed is:

1. In combination with a support, a mechanism disposed on said support, and a pair of screw means for securing said mechanism to said support, locking means for concealing and rendering inaccessible each of said screw means to prevent unauthorized removal of said mechanism

4

from its support, said locking means comprising a pair of elongated rigid members, means hingedly connecting said elongated members at one end thereof to allow one of said members to be moved toward and away from the other member, one of said elongated members being formed with an opening to pass one of said screw means, the other of said elongated members including a portion overlying the opening in said one member to conceal the first mentioned screw means, the other of said elongated members including a portion formed with an opening, the other of said screw means passing through the opening in the other of said elongated members, and removable lock means mounted on the other of said elongated members in opposed relation to the opening therein to conceal the second mentioned screw means.

2. The combination as in claim 1 wherein the opening in said one elongated member is an elongated slot to allow for adjustment for the lateral spacing between said pair of screw means.

3. The combination as in claim 2, wherein said slot terminates at one end thereof in an enlarged opening to pass the head of said screw means.

4. The combination as in claim 1 wherein said other elongated member includes a pair of opposed wall portions one of said wall portions being formed with an opening to pass and seat the other screw means, the other of said wall portions being formed with an opening aligned with the opening in said one wall portion for receiving and seating said removable lock means.

5. The combination as in claim 4 wherein a bushing is mounted in the opening in the other of said wall portions, said bushing being formed with a pair of opposed slots on the inner surface thereof, said lock means including a barrel portion having laterally projecting portions receivable in said slots, and a set of spring pressed latches angularly displaced relative to said projecting portions for reception in one of said slots upon rotation of said lock means through a determined angle.

6. The combination as in claim 1 wherein said one elongated member is a flat strap member, the other of said elongated member being of channel cross section for enclosing said one elongated member when said members are moved together.

7. The combination as in claim 1 wherein the longitudinal axis of said lock means is longitudinally aligned relation to the opening in said other elongated member.

8. The combination as in claim 1 wherein the longitudinal axis of said lock means is transversely disposed with respect to the opening in said other elongated member.

References Cited

UNITED STATES PATENTS

1,274,203	7/1918	Sager	211—4
1,285,093	11/1918	Fishel	70—237
1,957,557	5/1934	Schwahn	70—232
3,131,985	5/1964	Blonder	339—37
3,434,312	3/1969	Buchman	70—58

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U.S. Cl. X.R.

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