United States Patent [19]

Raskin

[11] **3,771,338**

[45] **Nov. 13, 1973**

[54] **OFFICE MACHINE ANTI-THEFT LOCKING APPARATUS**

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[73] Assignee: **Componentry Research and Development Enterprises, Inc.,** Great Neck, N.Y.

[22] Filed: **May 22, 1972**

[21] Appl. No.: **255,624**

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 73,881, Sept. 21, 1970, Pat. No. 3,664,616.

[52] **U.S. Cl.** **70/58,** 70/DIG. 57

[51] **Int. Cl.** **E05b 73/00**

[58] **Field of Search** ..... 70/15, 14, 16, 18, 70/30, 49, 57, 58, 59, 19, 60, 61, 62, DIG. 57, 234, 256; 248/203; 211/4

[56] **References Cited**

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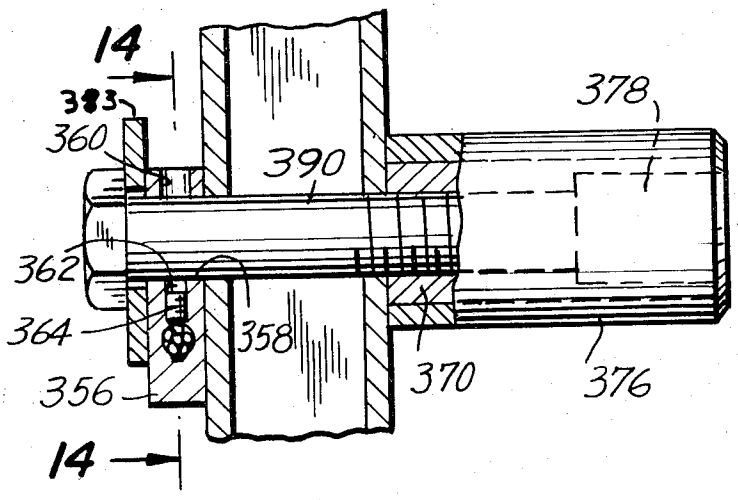
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Primary Examiner—Robert L. Wolfe
Attorney—Morris Kirschstein et al.

[57] **ABSTRACT**

Office machine anti-theft locking apparatus for preventing the illicit removal of an office machine such as a typewriter or an adding machine. The apparatus includes means to which the office machine is secured by bolts with said means being designed so that there is no access to the bolts which secure the office machine.

14 Claims, 20 Drawing Figures



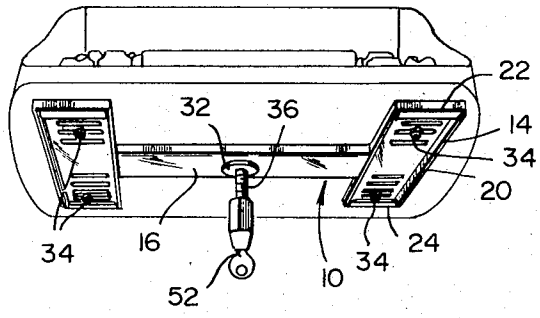


FIG. 1

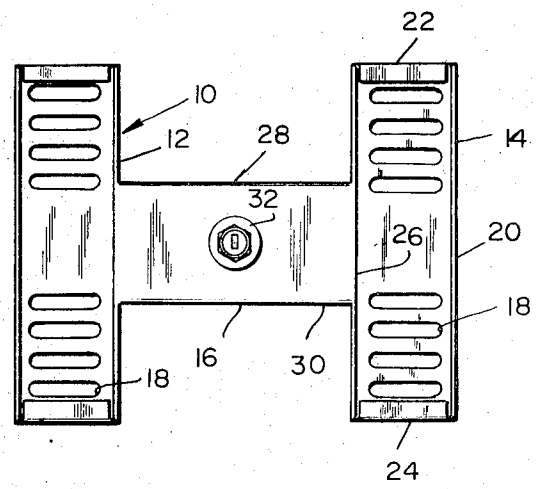


FIG. 3

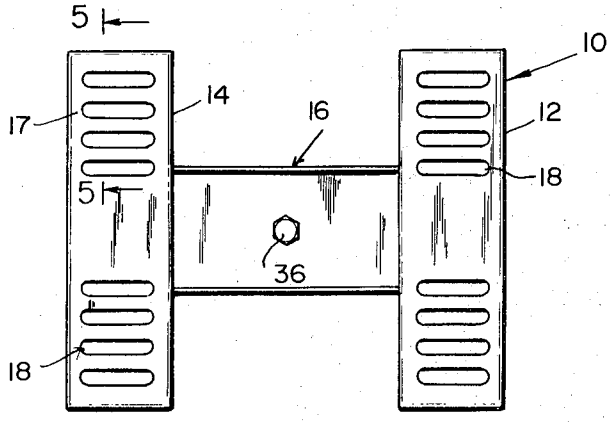
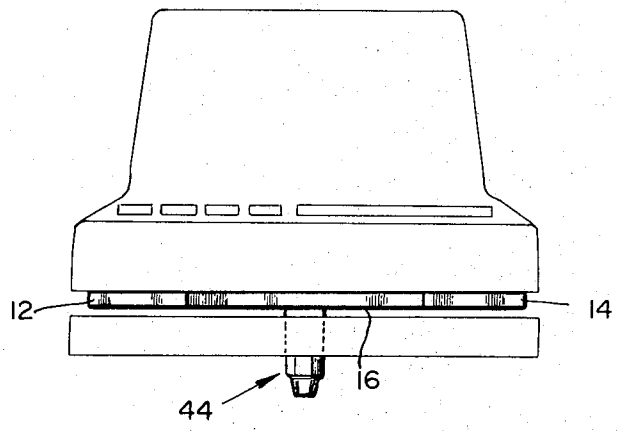


FIG. 2

FIG. 4



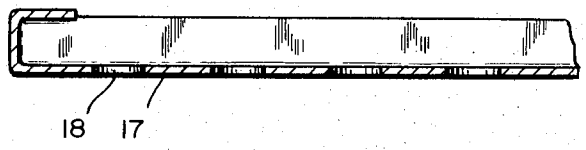
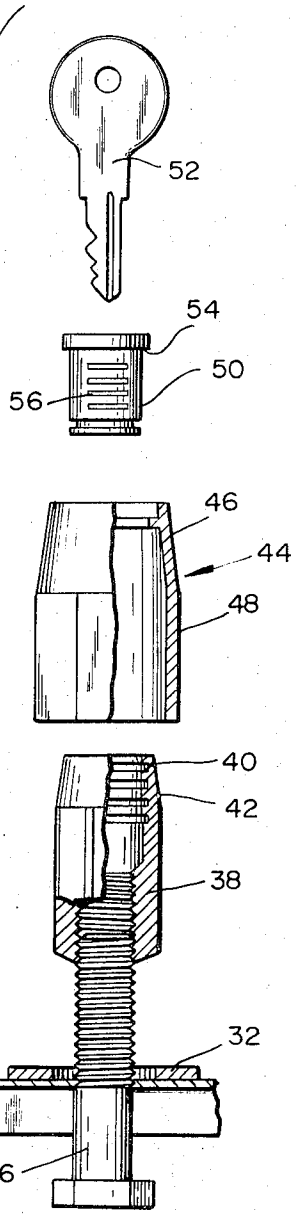


FIG. 5



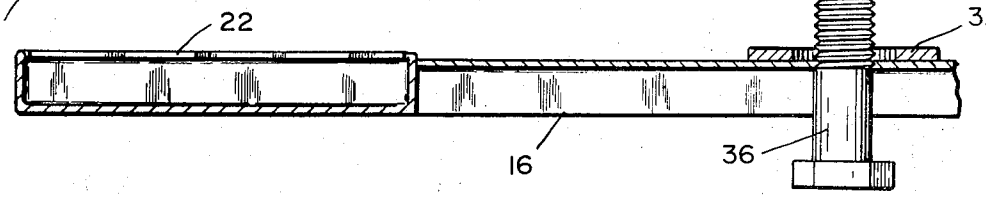


FIG. 6

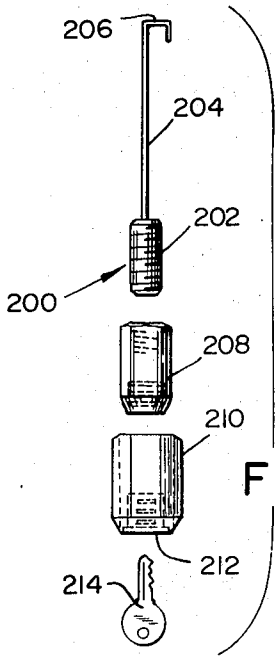


FIG. 7

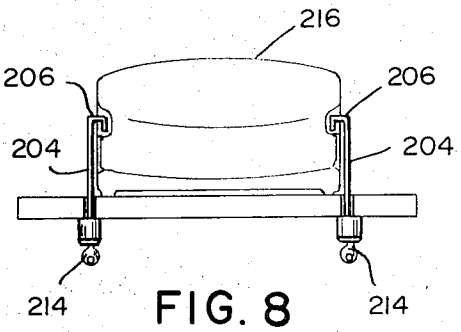


FIG. 8

FIG. 9

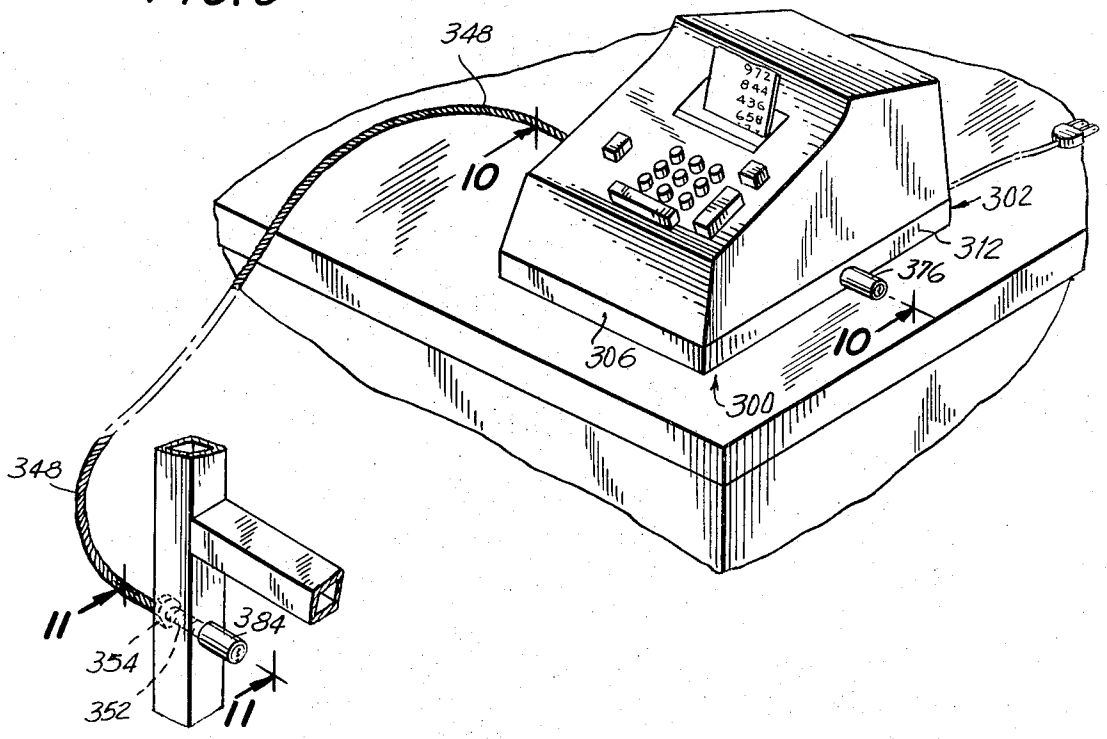


FIG. 10

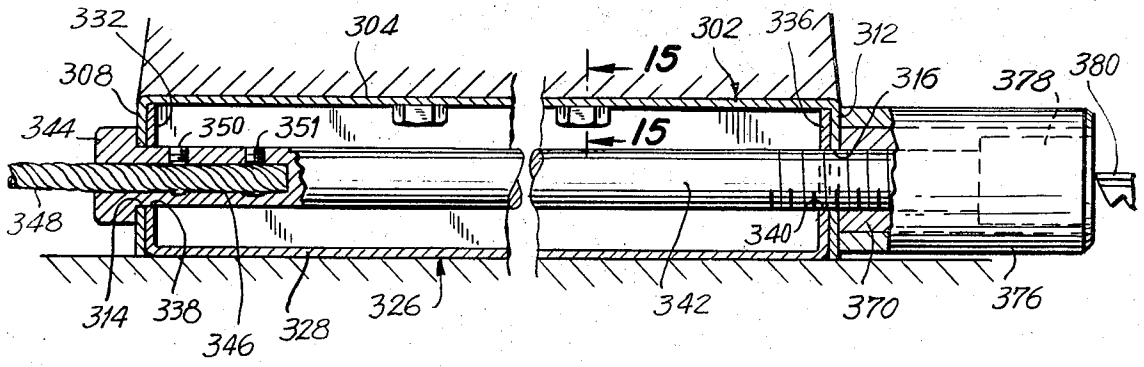


FIG. 11

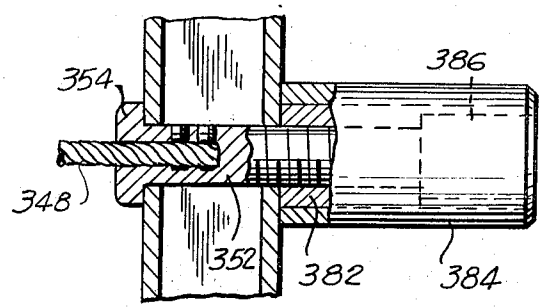


FIG. 12

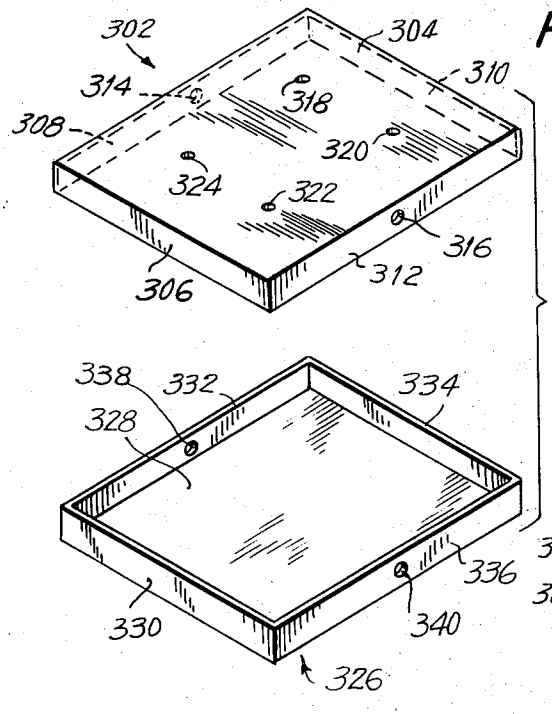


FIG. 13

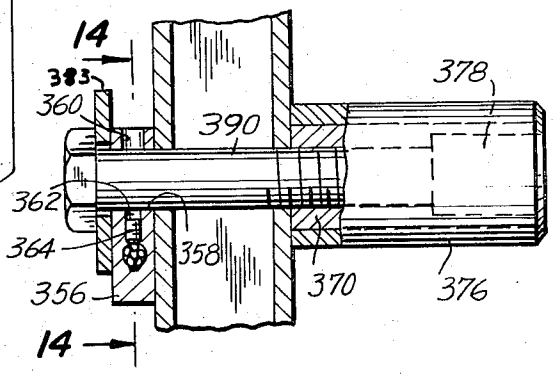


FIG. 15

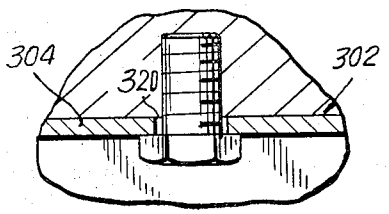


FIG. 14

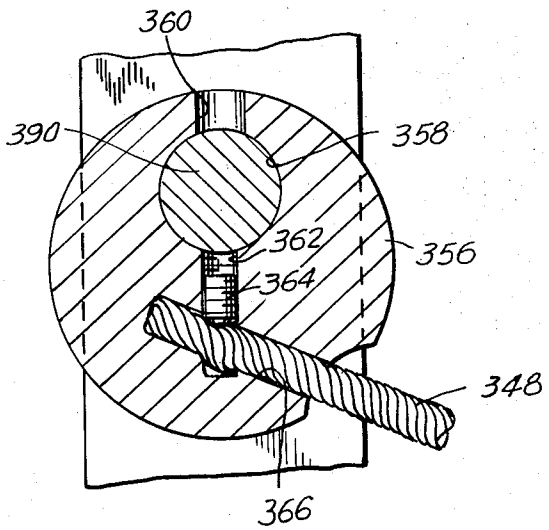
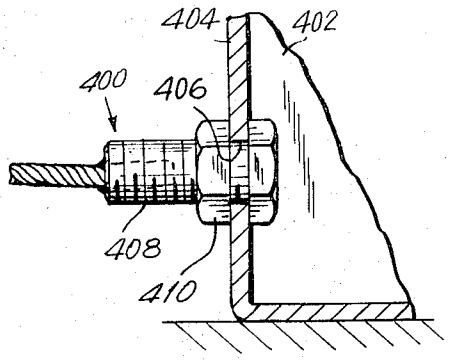


FIG. 16



OFFICE MACHINE ANTI-THEFT LOCKING APPARATUS

CROSS REFERENCE TO RELATED PATENT APPLICATIONS

This application is a continuation-in-part of my co-pending application entitled "OFFICE MACHINE ANTI-THEFT LOCKING APPARATUS," filed Sept. 21, 1970 and bearing Ser. No. 73,881 and now U.S. Pat. No. 3,664,616.

BACKGROUND OF THE INVENTION

1. Field of the Invention

Office machine anti-theft securing apparatus.

2. Description of the Prior Art

With the recent upsurge of lawlessness, there has been a great deal of pilferage of office equipment. More specifically, typewriters, cash registers, comptometers, calculators, billing machines, etc., have been taken from many offices during the evening hours. As these machines are costly, this pilferage can be very expensive for a particular office over a given period of time.

Many different devices have been designed to prevent such pilferage but most have not been satisfactory. Some of these prior art devices utilize means for securing an office machine to a surface. As an example, one type of prior art locking device was utilized to secure a typewriter to a desk surface. However, many of these prior art locking devices were not strong enough to withstand the determined efforts of a thief utilizing implements such as a crowbar. A further drawback of many of these prior art devices was that they were not suitable for securing the wide variety of office machines described above and were time-consuming to install. An additional drawback of some of the prior art locking devices was that they did not allow the office machine they were securing to be moved within a limited area, such as along a desk top, so that maximum use could be made of the office machine.

SUMMARY OF THE INVENTION

Purposes of the Invention

It is, therefore, an object of the present invention to provide an improved office machine anti-theft locking means.

More specifically, it is an object of the present invention to provide an improved office machine anti-theft locking means which is tamper proof and pry proof.

A still further object of the present invention is to provide an anti-theft locking means for securing an office machine to a furniture surface and which can be readily placed in operation.

Yet another object of the present invention is to provide an anti-theft locking means for securing an office machine to furniture wherein the office machine can move within limited confines relative to the furniture.

A further object of the present invention is to provide an anti-theft locking means for securing an office machine to furniture which can be utilized with a variety of different types of office machines.

Still another object of the present inventio is to provide an anti-theft locking means capable of achieving the above and other objects and which is economical to make and reliable in operation.

Brief Description of the Invention

In one aspect of the present invention an anti-theft locking apparatus is provided which consists of an H-shaped member. Located on the parallel legs of the H-shaped member are a series of slots and when the member is placed on a surface flanges on the legs contact the surface preventing access to the bottoms of the slots. A bolt is secured to tee cross piece of the member and projects downwardly therefrom. A nut can be placed in engagement with the bolt and locking means are provided for preventing removal of the nut from the bolt.

In normal operation, the H-shaped member is secured to the bottom of an office machine. This is done by having the shanks of bolts extend through the slots in the member legs and threadly engage tapped openings in the bottom of the office machine. The H-shaped member is then placed on a furniture surface with the flanges which depend from the legs in contact with the surface and preventing access to the heads of the bolts which secure the office machine. The bolt which depends from the cross piece extends through the surface and is secured by a nut below said surface and locking means are secured to the nut to prevent removal of the nut from the bolt and the H-shaped member and the office machine from the surface.

In a second embodiment of the present invention office machine anti-theft locking apparatus consists of two box-shaped members. The first box-shaped member includes a flat section and four flanges which extend perpendicularly downwardly therefrom. Locking holes extend through the first member flat section. The second box member includes a flat section and four flanges which extend perpendicularly upwardly therefrom. The flanges of the second box member are arranged so as to be telescopically received within the flanges of the first box member.

Bolt holes extend through opposed flanges of the first and second box members and when the box members telescope with each other, the bolt holes are in registry with each other.

A bolt is provided of sufficient length to extend through the registered bolt holes in the flanges of the first and second box members when said members telescope. A steel cable is secured to the head of the bolt. A nut is provided for securing the free end of the bolt and locking means prevent unauthorized removal of the nut from the bolt.

In using the second embodiment of the present invention bolts are placed so as to extend through the locking holes in the first member flat section and are threaded into the tapped openings on the bottom of an office machine. The box members are then placed in telescopic relation with each other and the bolt having the cable secured thereto is passed through the registered bolt holes in the flanges. The nut secures the free end of the bolt and the locking means prevents removal of the nut. The remaining end of the cable is secured to the leg of a desk or some other secure portion of office furniture.

Other embodiments of the invention are described hereinafter.

The invention accordingly consists in the features of construction, combination of elements and arrangement of parts which will be exemplified in the office machine anti-theft locking apparatus hereinafter and of which the scope of application will be indicated in the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a bottom perspective view showing how an embodiment of the present invention may be utilized;

FIG. 2 is a top plan view of the embodiment of the invention shown in FIG. 1;

FIG. 3 is a bottom plan view of the embodiment of the invention shown in FIG. 1;

FIG. 4 is a front plan view illustrating how the embodiment of the invention shown in FIG. 1 may be used;

FIG. 5 is a sectional view taken substantially along the lines 5—5 of FIG. 1;

FIG. 6 is an exploded view of the means for securing the embodiment of the present invention to a furniture surface;

FIG. 7 is a perspective view of a further embodiment of the present invention;

FIG. 8 is a sectional view illustrating how the embodiment of the invention of FIG. 7 may be utilized;

FIG. 9 is an exploded view of a still further embodiment of the present invention;

FIG. 10 is a view illustrating how the embodiment of the present invention shown in FIG. 9 may be utilized;

FIG. 11 is an exploded view of still another embodiment of the present invention;

FIG. 12 illustrates an application of the embodiment of the present invention shown in FIG. 11;

FIG. 13 is a perspective view of a still further embodiment of the present invention;

FIG. 14 is an enlarged sectional view taken substantially along the line 14—14 of FIG. 13;

FIG. 15 is an enlarged sectional view taken substantially along the line 15—15 of FIG. 13;

FIG. 16 is an exploded view of the box members of the embodiment of the invention shown in FIGS. 13 and 14;

FIG. 17 is a sectional view of a locking ring according to the present invention;

FIG. 18 is an enlarged sectional view taken substantially along the line 18—18 of FIG. 17;

FIG. 19 is an enlarged sectional view taken substantially along the line 19—19 of FIG. 14; and

FIG. 20 is a sectional view showing a still further embodiment of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

In FIGS. 1, 2 and 3 of the drawings, an anti-theft office machine locking device according to the present invention is illustrated and includes an H-frame 10. H-frame 10 includes parallel legs 12 and 14 which are separated from each other by a cross piece 16. The different legs of H-frame 10 are identical to each other, are in registry with each other and together with cross piece 16 are made from cold rolled steel. Since the legs are identical to each other a description of one leg will suffice for an understanding of the present invention with like parts on the legs having the same reference numerals.

As can be seen in FIG. 2, leg 14 includes flat surface 17 having a plurality of slots 18. While four slots are shown in the drawings at the opposed portions of leg 14, it is to be understood that this is for illustrative purposes only and the number of slots on each leg can be varied without departing from the scope of the present invention. As can be seen from the FIGS., the slots are parallel to each other, perpendicular to the major axis of the legs of the H-frame and parallel to the cross piece.

Flange 20 depends perpendicularly away from surface 17 at one edge of the leg. Turned down flanges 22 and 24 extend from the narrow edges of leg 14 and each includes portions which are parallel to surface 17. A flange 26 depends perpendicularly away from the remaining edge of surface 17 and is parallel to flange 20. The flanges which depend from the different edges of surface 17 all are perpendicular thereto and all extend the same distance away therefrom with the turned over portions of flanges 22 and 24 being the same vertical distance away from surface 17 as are the free edges of flanges 20 and 26.

Flanges 28 and 30 depend perpendicularly away from the opposed free edges of cross piece 16 in the opposite directions as the flanges which depend from the legs of H-frame 10 (FIG. 2). An opening extends symmetrically through cross piece 16 and a washer 32 can be secured to the bottom of said cross piece as shown in FIG. 3 about the opening.

In normal use, an office machine such as a calculator, comptometer, typewriter, etc., is secured to H-frame 10 as shown in FIGS. 1 and 4. It is to be understood that while a typewriter is shown in the figures and reference is made to a typewriter hereinafter, this is for illustrative purposes only and is not intended in any way to limit the scope of the invention. The H-frame is selected so that slots are located beneath the four threaded (tapped) openings which are beneath the bottom of conventional electric typewriters. Bolts 34 project through slots 18 on legs 12 and 14 into the threaded openings on the bottom of the typewriter and are engaged therewith. The bolts are tightened until their heads contact the bottom of legs 12 and 14 (FIG. 1).

A bolt 36 extends through the aperture in the center of cross piece 16, and through the desk or table surface "S" (FIG. 4) to which the office machine is to be secured and has its head on the top of the cross piece. A nut 38 (FIG. 6) is in engagement with the threads of bolt 36 and the nut is tightened so that the bolt pulls the H-frame tightly against the surface. Nut 38 includes conventional threads which are in engagement with the threads of bolt 36 as well as parallel grooves 40 at its uppermost portion. Preferably, nut 38 is hexagonally shaped and includes a taper 42 which surrounds grooves 40.

A locking barrel 44 which includes an upper tapered portion 46 and a lower hexagonally shaped portion 48 surrounds the nut 38 with the hexagonal portion of the locking barrel encompassing the hexagonal portion of the nut and tapered portion of the locking barrel encompassing the tapered portion of the nut. A lock 50 having a key 52 and a rim 54 is normally positioned within locking barrel 44 and when the key is rotated and removed, locking pins 56 engage grooves 40. As a result, rotation of locking barrel 44 does not result in rotation of nut 36 so as to move axially relative to bolt 36. Further, since the locking barrel encompasses nut 38 and may not be removed therefrom by virtue of rim 54 engaging the top of barrel 44 there is no way to rotate nut 38 to remove bolt 36 from the H-frame. With bolt 36 extending through a surface and secured as just described, it is impossible to illicitly remove the nut therefrom and the H-frame from the surface. The

flanges which surround the legs of the H-frame prevent access to the bolt heads which secure the typewriter and thus it is impossible to manipulate these bolts and illicitly remove the typewriter from the H-frame. Similarly, flanges **28** and **30** prevent access to the head of bolt **36**. If desired, the H-frame may be swivelled about bolt **36** as required.

In FIGS. **9** and **10** of the drawings a further embodiment of the invention is shown and includes a locking structure **200** having a bolt **202**. Extending from one end of the bolt **202** is an extension **204** with a hook **206** being located at the upper end thereof. A nut **208**, similar to nut **38**, and a locking barrel **210**, similar to barrel **44**, are provided. In a still similar fashion, a lock **212** similar to lock **50** and a key **214** are provided.

The embodiment of the invention just described is particularly suited for office machines having openings on their opposed sides, as is quite conventional, and can be used to secure said machines to a table or desk surface. As can be seen in FIG. **10**, a piece of office machinery **216** is shown and includes openings on its opposed sides. Hooks **206** or two locking structures extend into said openings and the extensions thereof project through openings in the member to which the office machine is to be secured to the bolts are below the member. The member is shown in FIG. **10** as being a table top. Nuts, locking barrels and locks secure the bolts in the same manner as described in FIG. **1** and thus the office machine is secured from illicit removal since the use of locking barrels prevents access to the nuts to free the bolts. The hooks are drawn sharply against the openings in the office machinery and cannot be removed therefrom unless the bolts are released from the nuts.

In the embodiment of the invention shown in FIGS. **13** through **19** there is disclosed apparatus **300** for securing an office machine such as an adding machine, comptometer, etc. Apparatus **300** includes a first box member **302** having a flat section **304** which is rectangular in plan. Depending downwardly and perpendicularly from each of the edges of flat section **304** are flanges **306, 308, 310** and **312**. The flanges are of the same height with flanges **308** and **312** being parallel to each other, the same configuration and in registry with each other. Additionally, flanges **308** and **312** are perpendicular to flanges **306** and **310**. Flanges **306** and **310** have the same configuration, are parallel and in registry with each other while being perpendicular to flanges **308** and **312**.

A bolt hole **314** extends through flange **308** and is preferably symmetrically positioned with respect to flanges **306** and **310**. A further bolt hole **316** is located on flange **312** and is the same size as bolt hole **314** while being in registry therewith. Four bolt holes **318, 320, 322** and **324** extend through flat section **304**. It is to be appreciated that while bolt holes **318, 320, 322** and **324** are shown having a particular location on box member **302** that the location of the bolt holes is determined by the location of the tapped openings in the bottom of an office machine, such as an adding machine, a comptometer, etc.

A second box member **326** is provided and includes a flat section **328** which is rectangular in plan. Flat section **328** is slightly smaller in both length and width than flat section **304** for a reason which will soon be readily apparent. Extending upwardly from flat section **328** are flanges **330, 332, 334** and **336**. The flanges are all the same height, with flanges **330** and **334** being identical in plan and parallel and in registry with each other. In addition, flanges **330** and **334** are perpendicular to both flanges **332** and **336**.

Flanges **332** and **336** have the same configuration, are parallel to each other and in registry with each other while being perpendicular to flanges **330** and **334**. Box member **326** is of a configuration so that it can be telescopically received in box member **302** with the flanges of box member **302** outside the corresponding flanges of box member **326**. It is to be appreciated that the height of the different flanges of each of the box member is approximately the same.

A bolt hole **338** extends through flange **332** and is symmetrically positioned with respect to flanges **330** and **334**. In a similar fashion, a bolt hole **340** extends through flange **336** and is in registry with bolt hole **338**. When box member **326** is telescopically received in box member **302**, bolt holes **314, 338, 340** and **316** are in registry with each other.

A bolt **342** is provided and includes a head **344**. A central opening **346** is drilled from head **344** to the interior of the shank of bolt **342**. A cable **348** extends through central opening **346**. Lock screws **350** and **351** are provided and extend to central opening **346** which includes depressions beneath the lock screws. The lock screws are tightened and force the cable into the depressions so as to securely hold the cable relative to bolt **342**.

The remaining end of cable **348** is secured to a bolt **352** having a head **354** and the means of securing said bolt to said cable can be the same as is used to secure the cable to bolt **342**.

An elongated nut **370** is provided to engage the threads on bolt **342**. Nut **370** is identical to nut **38** which is described above, supra. A locking barrel **376** identical to locking barrel **44** is provided for cooperation with nut **370**. A lock **378** identical to lock **50** is provided with a key **380** being supplied for operation of the lock.

A nut **382**, a locking barrel **384** and a lock **386** are provided to cooperate with bolt **352**. Nut **382** is identical to nut **38**, locking barrel **384** is identical to locking barrel **44** and lock **386** is identical to lock **50**.

In utilizing apparatus **300** bolts having heads below the bottom of flat section **304** of box member **302** have their shanks project through openings **318, 320, 322** and **324**. The free ends of the bolts are threaded into the tapped openings at the bottom of the office machine which is to be secured (see FIGS. **14** and **19**). Box member **326** is then telescoped into box member **302** so that the flanges of box member **302** surround the flanges of box member **326**.

Bolt **342** is passed through bolt holes **314, 338, 340** and **316**. Nut **370** is placed in engagement with the free end of bolt **342** and locking barrel **376** is placed thereover. Locking barrel **376** cooperates with lock **378** as described in the first embodiment of the present invention to prevent removal of nut **370**. Lock screws **350** and **351** are within box members **302** and **326** to prevent removal of cable **348**.

Bolt **352** is passed through a bolt opening in a desk leg (FIG. **15**) or the leg of the piece of furniture upon which the office machine is secured. The end of bolt **352** which extends through the desk leg is secured by nut **382**, barrel **384** and lock **386** as previously described so that head **354** is flush against the leg. Conse-

quently, apparatus **300** is secured to the leg and the office machine attached thereto cannot be illicitly removed. The set screws for the cable are inside the furniture and thus cannot be reached.

A locking ring **356** (FIGS. **17** and **18**) is provided and includes an opening **358** large enough to receive a bolt **390.** Opening **358** is assymmetrically positioned with respect to the periphery of locking ring **356.** A screwdriver bore **360** extends through the periphery of locking ring **356** and is in communication with opening **358.** Bore **360** need not be threaded as will soon be readily apparent. Extending from the interior of locking ring **356** to the periphery of the opening **358** is tapped opening **362.** A set screw **364** is located therein and opening **362** is in registry with bore **360.** It is noted that opening **362** does not extend to the periphery of locking ring **356.** Extending inwardly from the periphery of locking ring **356** is a cable bore **366.** Cable bore **366** extends to opening **362** and slightly therepast. It is to be appreciated that the angle formed between the axis of cable bore **366** and the axis of opening **362** can be varied from the approximately 120° shown in the drawings. The portion of cable bore **366** directly beneath set screw opening **362** includes a slight depression for a reason that will soon be readily apparent.

Instead of using nut **382,** barrel **384** and lock **386,** the end of cable **348** not secured to bolt **342** can be passed through cable bore **366.** A screwdriver can be passed through bore **360** to rotate lock screw **364** to secure cable **348** in bore **366.** By having a depression located at the bottom of cable bore **366** lock screw **364** will urge a portion of the cable upon being rotated into said depression to firmly hold the cable.

Locking ring **356** is utilized as shown in FIG. **17** with bolt **390** passing through opening **358** and the leg of the desk. The locking ring can be located on the same side of the desk leg as the bolt head provided the head of the bolt is larger than opening **358** or on the opposite side. A washer **383** is shown in FIG. **17** and can be utilized as desired. The free end of the bolt can be secured by a nut, a locking barrel and a lock as previously described. By using the locking ring as just described, it is impossible to remove the cable from cable bore **366.** This is because the bolt which passes through opening **358** prevents access to lock screw **364.** In this embodiment cable **348** is not permanently attached to a bolt which may sometimes be undesirable.

In a third embodiment of the present invention apparatus **400** is disclosed for securing an office machine **402** to a piece of furniture. The office machine **402** includes a housing **404** having an opening **406.** A bolt **408** has its shank passed through opening **406** and the bolt head is in contact with the inside surface of housing **404.** A central bore is drilled through the shank and head of bolt **408** and a cable extends therethrough. The cable is brazed or welded while inside the bore of bolt **408** to the bolt. A nut **410** is tightened about the threads of bolt **406** which are external of housing **404** to prevent bolt **408** from freely moving about. The other end of the cable is secured to the leg of a piece of furniture by using the locking ring, nut, barrel and lock arrangement hereinbefore described. Alternatively, the cable can be secured to a bolt which is welded as previously described.

The third embodiment of the present invention is particularly useful when the office machine does not include tapped openings on its bottom.

While I have disclosed utilizing a desk leg for my invention, it is, of course, to be appreciated that other portions of furniture could be used.

It thus will be seen that there are provided an office machine anti-theft locking apparatus which achieves the various objects of the invention and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiments above set forth, it is to be understood that all matter herein described or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

Having thus described the invention there is claimed as new and desired to be secured by Letters Patent:

1. A system for preventing an office machine from being illicitly removed from a horizontal surface, said office machine including a plurality of tapped openings extending through its bottom, a generally horizontal support element having opposed first and second surfaces, the bottom of said office machine being in close proximity to said element first surface, a steel locking member having a plurality of openings, said member including opposed first and second surfaces with said first surface of said member adjacent said element first surface, said office machine resting on said member second surface and said member openings arranged so that at least certain of said member openings are directly beneath certain of the tapped openings extending through the bottom of the office machine, a plurality of bolts with each bolt including an enlarged head, each bolt extending through a different member opening and into a different tapped opening on the bottom of the office machine with said bolt heads adjacent said member first surface, means integral with said member for preventing access to each of the bolt heads so as to prevent the bolts from being rotated and said office machine being illicitly removed, a fastening means secured to said member and extending through the element and past said element second surface, and locking means adjacent the element second surface for selectively engaging said fastening means to hold the member tight against the element first surface to prevent said member and the office machine secured thereto from being illicitly removed.

2. Office machine anti-theft locking apparatus comprising a first member, said first member including a flat section having a plurality of locking holes, first means depending away from said flat section and including first and second registered bolt holes, a second member, said second member having a surface, second means depending away from said surface and including first and second registered bolt holes, said first and second members mateable with each other with said flat section, said surface and first and second means defining enclosed volume with said members' bolt holes being in registry with each other, a first bolt with two ends and having an elongated shank of a sufficient length to extend through said registered bolt holes of said first and second members when said members mate, means for securing and locking the second end of the bolt when the bolt extends through the register bolt holes of the mated numbers, a cable having two ends with one end secured to said first bolt first end and means for securing the second end of the cable to a piece of furniture.

3. Apparatus according to claim 2 wherein said first means includes a plurality of flanges extending perpendicularly away from said flat section, said second means including a plurality of flanges extending perpendicularly away from said second member surface, said flanges of one member being telescopically received within said other member flanges when said first and second members mate with each other.

4. Apparatus according to claim 3 wherein said first member flat section is rectangular in plan and four flanges depend from the edges thereof, said second member surface being a flat surface rectangular in plan and four flanges depending perpendicularly away therefrom and telescopically received within said first member flanges.

5. Apparatus according to claim 2 wherein said cable securing means includes a second bolt, said cable attached to said second bolt, and locking means for said second bolt to prevent said bolt from being illicitly removed after extending through a piece of furniture.

6. Apparatus according to claim 5 wherein said locking means includes a nut engageable with said bolt, a locking barrel for said nut and a lock for said locking barrel.

7. Apparatus according to claim 4 wherein said securing means includes a second bolt, a locking element, said locking element including an opening through which the second bolt is adapted extend, a first bore extending from the periphery of said locking element to said opening, a second bore extending from the interior of said locking element to said opening and in registry with said first bore, a cable bore extending from the periphery of said locking element to said second bore, the second end of said cable extending through said cable bore and means in said second bore for securing the second end of said cable.

8. Apparatus according to claim 7 wherein the securing means in said second bore includes a lock screw and a depression in said cable bore immediately beneath said lock screw for receiving a portion of said cable as said lock screw is rotated to move towards said cable bore to lock and cable therein.

9. Apparatus for fixing the range of movement of an office machine relative to a piece of furniture comprising an office machine having a housing, said housing having an opening, a first bolt extending through said opening with the head adjacent the inside surface thereof, a cable having two ends with one end secured to said first bolt, and means for securing the second end of said cable to furniture.

10. Apparatus according to claim 9 wherein said securing means includes a second bolt adapted to extend through a segment of furniture, and means for preventing said second bolt from moving relative to the segment of furniture.

11. Apparatus according to claim 10 wherein said preventing means includes a nut for said second bolt, a locking barrel for said nut and a lock for said locking barrel.

12. Apparatus according to claim 9 wherein said securing means includes a locking element having an opening, a second bolt adapted to extend through said opening and through a segment of furniture, a first bore extending from the periphery of said locking element to said opening, a second bore extending from the interior of said locking ring to said opening and in registry with said firt bore, a third bore extending from the periphery of said locking element to said second bore with the second end of said cable extending therethrough and locking means in said second bore for maintaining the second end of said cable in said third bore.

13. Apparatus according to claim 12 wherein said locking means includes a set screw, a depression located in said third bore in registry with said second bore for receiving a portion of said second end of said cable as said set screw is rotated to move towards said third bore.

14. Apparatus for securing an end of a cable comprising a locking element having an opening, a first bore extending from the periphery of said locking element to said opening; a second bore extending from the interior of said locking element to said opening and in registry with said first bore, a third bore extending from the periphery of said locking element to said second bore for receiving an end of a cable and locking means in the second bore for maintaining a cable end in said third bore.

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