Sept. 5, 1939. R. J. McFARLAND 2,171,664

MACHINE LOCKING DEVICE

Filed June 8, 1936 2 Sheets-Sheet 1

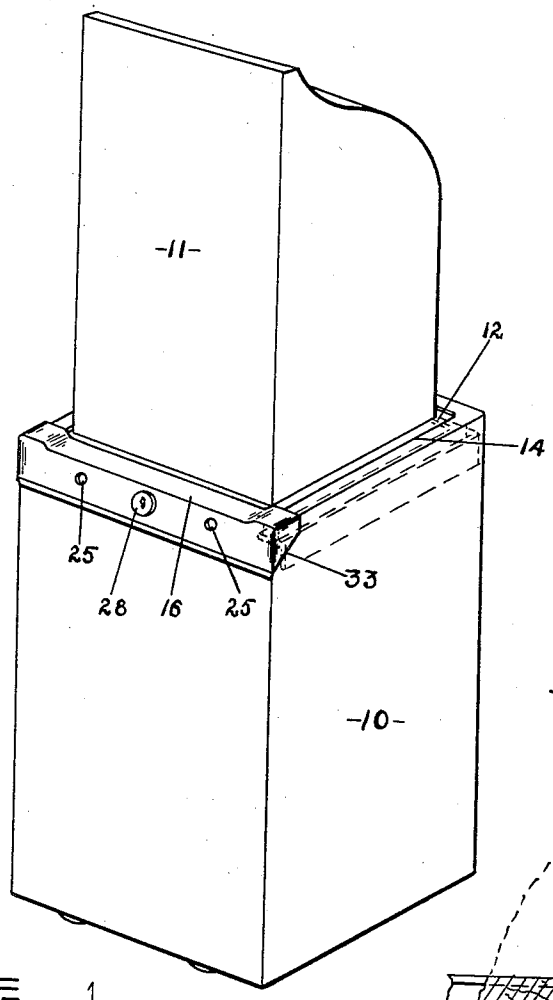


FIG - 1 -

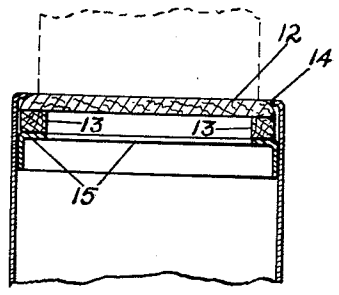


FIG - 3 -

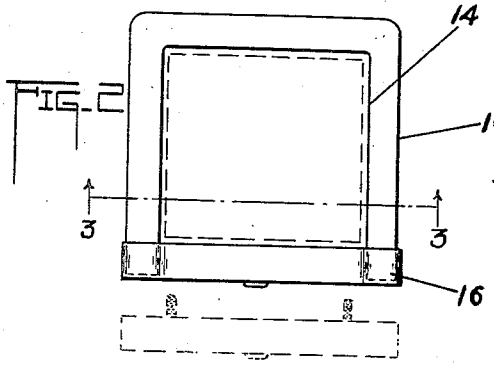


FIG - 2 -

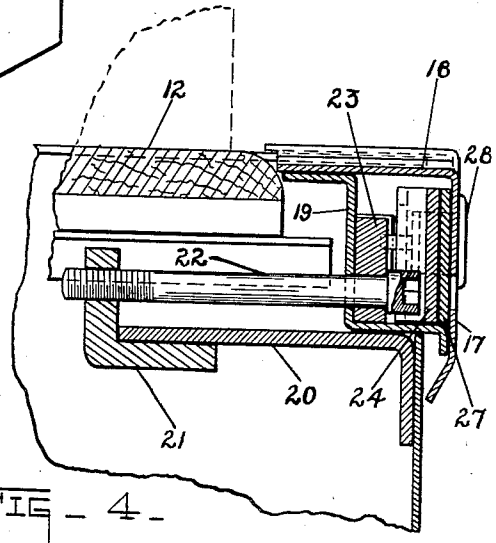


FIG - 4 -

INVENTOR
Rolla J. McFarland
BY
Jeffers Jeffers
ATTORNEYS

Sept. 5, 1939. R. J. McFARLAND 2,171,664

MACHINE LOCKING DEVICE

Filed June 8. 1936 2 Sheets-Sheet 2

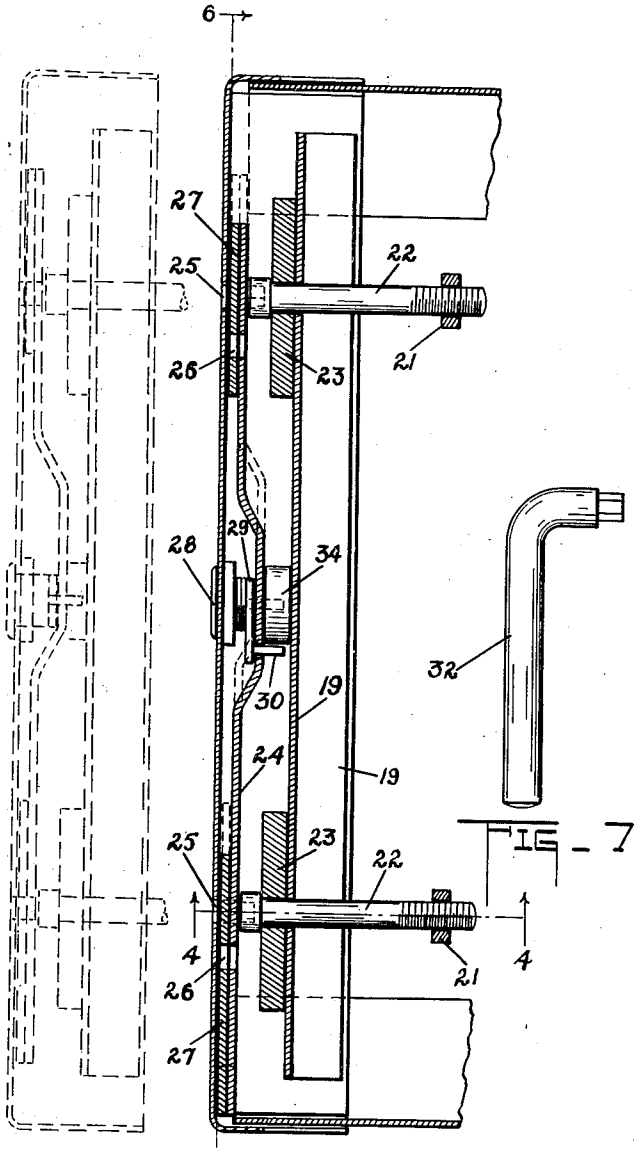


FIG - 5 -

FIG - 7 -

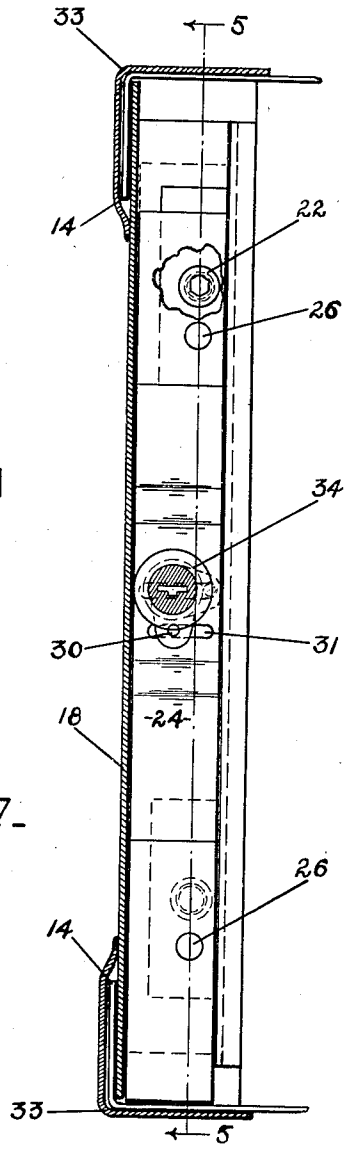


FIG - 6 -

INVENTOR
Rolla J. McFarland
BY
Duffy & Duffy
ATTORNEYS

Patented Sept. 5, 1939

2,171,664

UNITED STATES PATENT OFFICE

2,171,664

MACHINE LOCKING DEVICE

Rolla J. McFarland, Peoria, Ill., assignor of one-third to Edward Seitz and one-third to Howard Proehl, both of Peoria, Ill.

Application June 8, 1936, Serial No. 84,141

3 Claims. (Cl. 248—154)

This invention has reference to the art of making a lock stand for game machines and the like and has for its object to provide a stand structure which includes structure adapted to receive the base portion of a game machine, a device for securely holding the base in the structure and means for locking said device to the end that a game machine may be securely attached to and locked upon the stand.

Another object is to provide a stand as aforesaid in which the holding device is made adjustable so that the machine is held attached to the stand in a vise-like manner.

A further object is to provide a stand as aforesaid having an adjustable device adapted to enclose the machine base in a tight grip and a key lock on the device operative to prevent removal of the device from the stand.

Other and additional objects will appear in the following specification and accompanying drawings in which:

Fig. 1 is a rear perspective view showing a game machine attached to a stand embodying my invention;

Fig. 2 is a plan view of the same with outline of the machine body shown dotted;

Fig. 3 is a fragmental, sectional, elevational view taken on line 3—3 in Fig. 2;

Fig. 4 is a fragmental sectional elevational view taken on line 4—4 in Fig. 5;

Fig. 5 is a sectional plan view showing the parts from the under side approximately from the line 5—5 in Fig. 6;

Fig. 6 is an elevational sectional view taken from line 6—6 in Fig. 5; and

Fig. 7 illustrates a key wrench to be referred to.

In Fig. 1 I show a stand structure 10 upon which is supported a conventional game machine 11, the latter having a base portion 12, see Fig. 3, which is provided with cleats 13 along each lower side. The game machine and base portion thereof are shown herein for illustration only and are not a part of the present invention. I do not wish to be limited to any particular form of machine or material of construction.

The top edge of the stand structure is turned inwardly across the front and two sides to form flanges 14 as shown. Below this is a ledge 15 extending along the front and two sides and secured to the walls of the stand 10.

The ledge structure is obviously adapted to receive and support the base 12, while the flanges 14 overlie the upper edges of the base. Thus the base is confined on three sides between the ledge 15 and flanges 14.

To confine the base on the back side I provide a removable member 16 which comprises a front face portion 17 and a top portion 18 made from one piece of material.

Attached to the inner side of this is an angle strip 19, Fig. 4, which, together with the front and top portions forms a boxed housing and support for the locking mechanism to be described.

Attached to the back wall of the stand is an angle strip 20 which carries a pair of angled members 21 made from hardened steel.

Members 21 are disposed as shown in Fig. 5, in position to receive the threaded ends of hardened steel screws 22 which are rotatably supported in reinforcing blocks 23 welded to the upright wall of member 19.

The heads of the screws are obviously backed by the blocks 23 and are adapted to be screwed into the members 21, whereby member 16 is securely attached to the stand 10. Fig. 4 illustrates that the top edge of member 16 lies in contact with the upper back edge of machine base 12, and by means of the screws 22 the member 16 is forced against the base to hold it in place with a vise-like action.

As a means of preventing unauthorized detachment of member 16 I provide a mechanism consisting of a sliding shield member 24, Figs. 5 and 6, disposed back of the front plate 17.

It will be noted that plate 17 is provided with holes 25 which lie in register with recesses in the heads of screws 22.

The shield member 24 is provided with holes 26. Hardened steel plates 27 are secured to the member adjacent the holes 26.

It will be seen that member 24 may be slid so as to bring holes 26 into register with holes 25 and the screw heads, or shifted to one side so as to bring the hardened plates 27 between the screws and holes 25.

Centrally of member 16 I attach a conventional key lock mechanism 28 which carries an arm 29 and pin 30. The pin is engaged in a slot 31 in member 24 by means of which, when the lock is turned, member 24 is moved to cover or uncover the holes 25 as will be apparent.

As shown best in Fig. 6, the recesses in the heads of screws 22 have a hexagonal form, although a square or any other key form may be used. To operate the screws I use a wrench 32 such as that shown in Fig. 7, which has an end portion fitting the recesses in the screws.

It will now become apparent that with the

member 16 removed as indicated in dotted lines in Figs. 2 and 5, the game machine base may be slid in upon flanges 15 to the position shown in Figs. 1 and 2, after which the member 16 is placed in position on the stand. The holes 25 and 26 being in register, the end of wrench 32 is inserted in the screws and the latter are screwed in tightly thus securely fastening the member 16 and the machine base to the stand 10.

After the screws are made up the lock 28 is turned by means of a key and member 24 is shifted to one side whereby the screw heads are covered by the hardened plates 27 and the screws are no longer accessible. Thus the base is securely locked on the stand.

To assist in preventing tampering I usually attach cover portions 33 to the ends of member 16, which are arranged to overlie the flanges 14, as shown best in Fig. 6, and extend down and over the side walls of the stand 10 as shown in Fig. 1. It will be apparent that the arrangement shown provides a secure and complete covering means to prevent access to the working parts of the device.

The locking feature obviously depends for its effectiveness upon the positioning of member 24 in "off" position and retaining it in this position. It is apparent that one means of nullifying the lock would be to drill through the member 24 to expose the screw heads. This is prevented by the plates 27 which are made harder than any drill that may be used.

Another possible means of tampering would be to tear off one of the end pieces 33 and drive a tool against the end of member 24 to force it so as to bring the holes 26 into register, thus giving access to the screws 22. The resistance of a conventional lock mechanism may not be sufficient to prevent the forced movement described and to assist the lock mechanism in resisting it I provide a circular lug 34 attached to member 19. The lug is of such dimensions that the pin 30, during its operative movement, lies adjacent and when the pin is in lock position any forced movement of member 24 will tend to force the pin against the lug which effectively backs it against such movement. Even though the left hand end, Fig. 5, of member 24 were forced far enough to register the holes in that end, the movement could not be transmitted past the pin 30 to the opposite end and the screw at that end would prevent removal of member 16. Thus an effective, tamper-proof machine locking means is provided.

The foregoing has described my invention. Modifications of structure are obviously possible without alteration of the principle disclosed. I do not wish to be limited in structure or function except within the scope of the appended claims.

What I claim is:

1. A device of the class described, comprising a stand adapted to receive the base of a game machine, said stand having a hollow portion, a fixed member confined within said hollow portion, a removable tubular member adapted to confine the base on the stand, an adjustable connection between said fixed member and an internal face of said tubular member whereby the base is attached to the stand, openings in a wall of said tubular member in alignment with said adjustable connection whereby access may be gained to said connection, and key operated mechanism operable selectively to clear or obstruct said openings.

2. A device of the class described comprising a hollow stand adapted to receive the base of a game machine, locking means comprising a tubular removable member rectangular in cross section attachable to the stand to confine the said base thereon, aligned openings in opposed walls of said removable member, a screw having its shank projected through the opening in the inner wall and its head confined within said tubular member, a member fixed to an interior wall of said stand and having threaded engagement with the shank of the screw, a reciprocable closure member for the opening in the outer wall of the tubular member, and a key-operated lock operatively connected with said closure member for actuating the same.

3. In a locking stand for a public service machine, a supporting stand having machine securing means on the sides, an entrance opening for the machine in the fourth side, vertical wall enclosing means for the open side, horizontal bolt means for adjustably securing the enclosing means to the stand, and a shield having lock means for concealing said bolt means.

ROLLA J. McFARLAND.