Sept. 23, 1952 L. F. METZGER 2,611,636

AUTOMATIC LATCH GRIP

Filed July 3, 1951

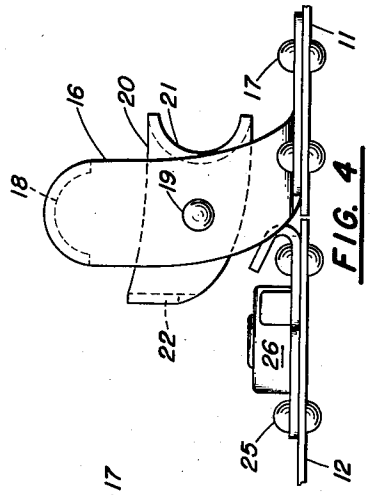


FIG. 4

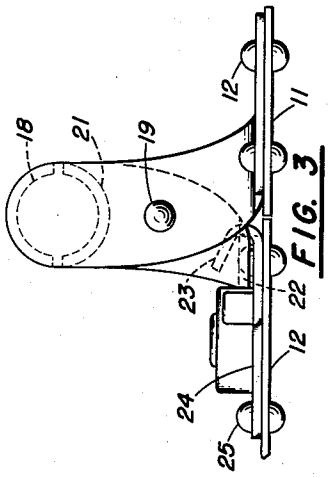


FIG. 3

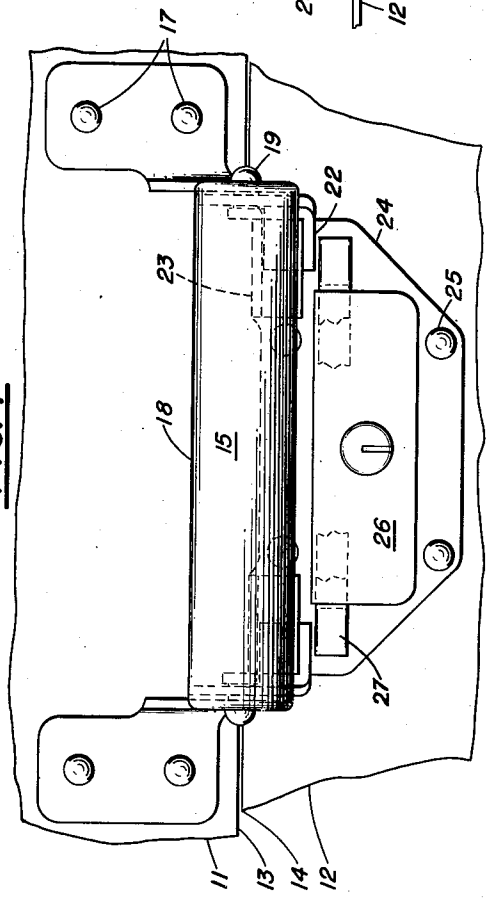


FIG. 1

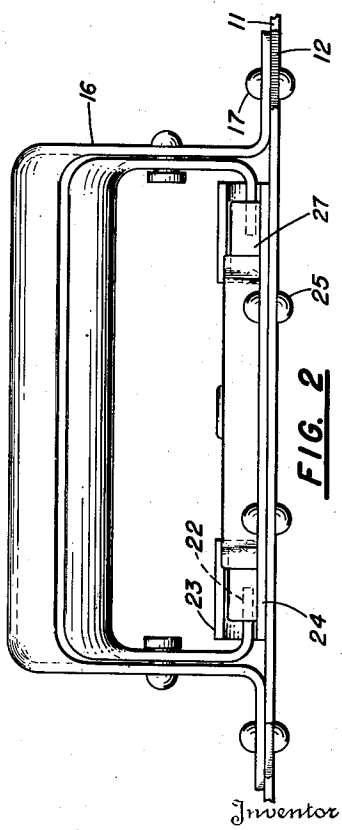


FIG. 2

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AUTOMATIC LATCH GRIP

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5 Claims. (Cl. 292—218)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

1

The present invention relates generally to latches and in particular to a combination locking latch and handle for a top opening chest or tool box.

Tool boxes and chests commonly in use employ a variety of handles and latches, most of them having numerous parts and requiring many hand movements to align the latches, close them, erect the handles and secure the lock.

The present invention has for its principal object to provide a handle for a tool box combining the latch and lock in few parts and requiring but few hand motions to secure the latch and make ready the handle for carrying the box in latched or locked condition.

Another object of the invention is to provide a latch-handle combination for a tool box which automatically latches when the handles are moved to a carrying position.

A further object of the invention is to provide a handle and latch combination having a lock to restrain either unlatching of the latch or movement of the handle from carrying position while in latched position.

Other objects and many of the attendant advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings in which like reference numerals designate like parts throughout the figures thereof and wherein:

Fig. 1 is a top plan view of a partion of a tool box having two hinged and abutting lids with this invention fixed thereon.

Fig. 2 is a side view in elevation of the latch and handle of this invention.

Fig. 3 is an end view of the invention in latched position, and

Fig. 4 is an end view showing the latch and handle in unlatched position.

Referring in more particular to the drawing, the tool box lids 11 and 12 have abutting edges 13 and 14 and are here shown to be in one plane although it is to be understood that the lids may be angled to each other to suit any type of tool box. Handle 15 is constructed of an upper member 16 rigidly secured to lid 11 by rivets 17 and having an arcuate gripping portion 18. Pivotally secured to member 16 by pins 19 is latch member 20 having a similar arcuate portion 21 which in latched position coacts with portion 18 to form a substantially cylindrical handle. Latch member 20 has inwardly turned latch lips 22 which engage with

2

upwardly bent lugs 23 which are portions of the latch plate 24 secured on lid 12 by rivets 25. A conventional type cam and pawl lock 26 has reciprocal tongues 27 which extend to positions behind the latch lips 22 to prevent their movement out of engagement with lugs 23 when locked.

In operation, one movement will bring the latch member 20 into position for carrying, the lips 22 engaging the lugs 23 to latch the lids 11 and 12 together against accidental falling open of the lids with the attendant loss or dearrangement of the tools. The lock may be used to secure the contents of the tool box against pilferage. The latch and handle mechanism thusly described may be easily constructed of sheet metal by either pressing operation or stamping and welding of the individual components used therein. It will be readily seen that the device is of simple and inexpensive construction, may be readily fabricated and is of exceptional utility as a handle and latch combination speedily assembled and secured to any top lidded tool box or chest which is desired to be portable and hand carried.

It should be understood, of course, that the foregoing disclosure relates only to a preferred embodiment of the invention and that numerous modifications or alterations may be made therein without departing from the spirit and the scope of the invention as set forth in the appended claims.

The invention described herein may be manufactured and used by or for the Government of the United States of America for governmental purposes without the payment of any royalties thereon or therefor.

What is claimed is:

1. A handle and latch device for a top-opening container having at least a pair of abutting lids comprising a substantially U-shaped first member secured by its leg end portions to one lid at the edge thereof, a second member similarly shaped but with inwardly turned leg end portions, said second member pivotally secured to said first member at approximately the midpoint of the leg portions of each member, said first and second members having matching arcuate sections constructed and arranged to form a handgrip, and latch means on the other lid of the container adjacent the edge thereof engageable with the inwardly turned leg end portions of said second member.

2. A combination handle and latching device for joining two rigid plates having abutting edges comprising a substantially U-shaped first mem-

ber having flanges on the legs thereof secured to one of said rigid plates adjacent the edge, a second U-shaped member pivotally secured in nested position within said first member, said first and second members having matching semi-cylindrical mid-portions coacting in latched position to provide a cylindrical handgrip, and hook means secured to the other plate at the edge thereof to receive the leg portions of said second member when and while said members are in latched position.

3. A combination handle and latch device for securing together abutting edges of two lids of a tool box or the like comprising a first handle portion having two curved legs secured by flanged ends to one of the lids at the edge thereof, said first handle being axially parallel to and positioned substantially vertically over said abutting edges, a second handle portion pivotally secured to said first portion, hook means on the other of said lids at the edge thereof, and hook-engaging means on said second handle portion constructed and arranged to releasably secure said hook means.

4. The device as set forth in claim 3 in which said second handle portion has similarly shaped curved legs with the ends thereof bent to approximately parallel the plane of said lids and constituting said hook engaging means.

5. The device as set forth in claim 4 in which said hook means on the other of said lids is a plate with backwardly bent tab portions adjacent the edge of the lid and having its hook opening substantially tangential to the arcuate movement of the bent ends of the legs of said second handle portion.

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