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Robinett et al.

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[54] **CAR STEREO EXPANSION LOCKING KIT**

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[51] **Int. Cl.** **F16m 13/00**

[58] **Field of Search** 248/201, 203; 211/4; 70/58

[56] **References Cited**

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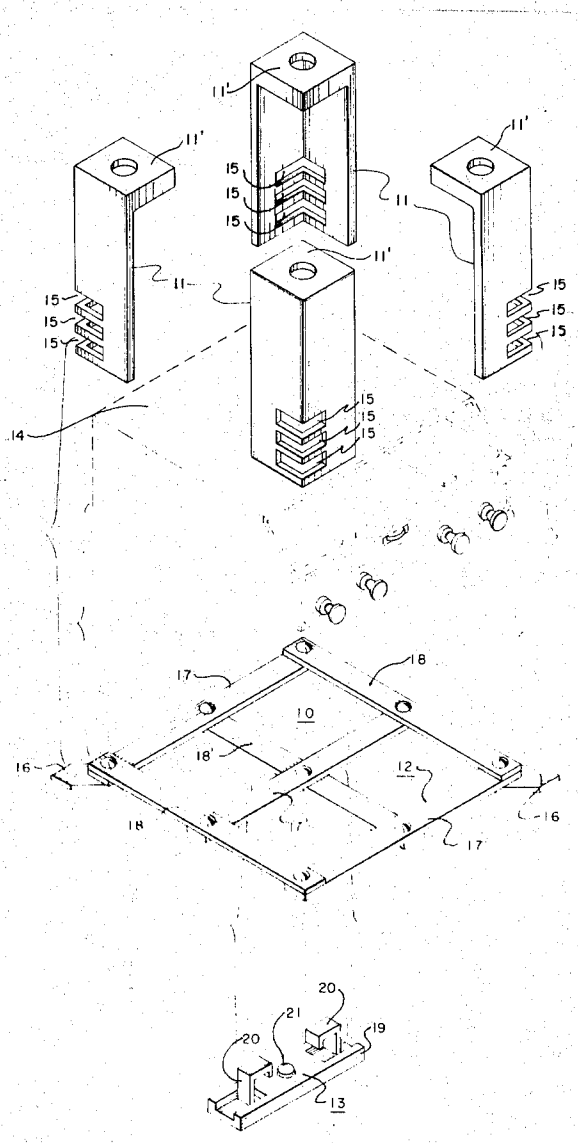
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[57] **ABSTRACT**

The car stereo expansion locking kit comprises a plurality of cornerposts operable to closely, slidably receive a car stereo, or the like, and having a plurality of horizontally cut lattice receiving slots, a locking lattice including a plurality of rectilinear and transverse lattice strips pivotally mounted at intervals to each other to form a parallelogram and including a pair of diagonally disposed, slot-engaging leaves fastened at diagonal corners of the locking lattice, and a lock operable to selectively lock the locking lattice into the slots of the cornerposts.

2 Claims, 3 Drawing Figures



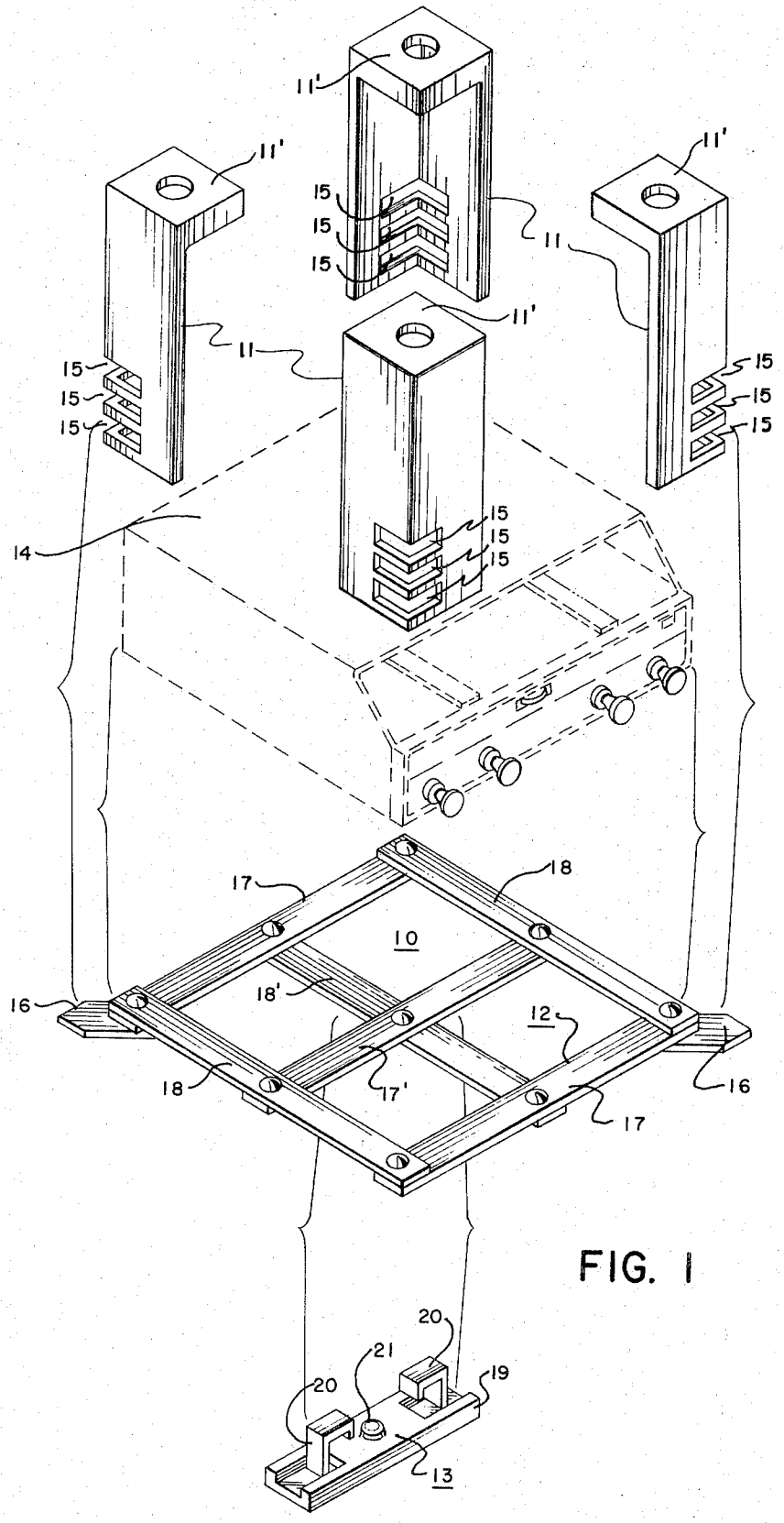


FIG. 1

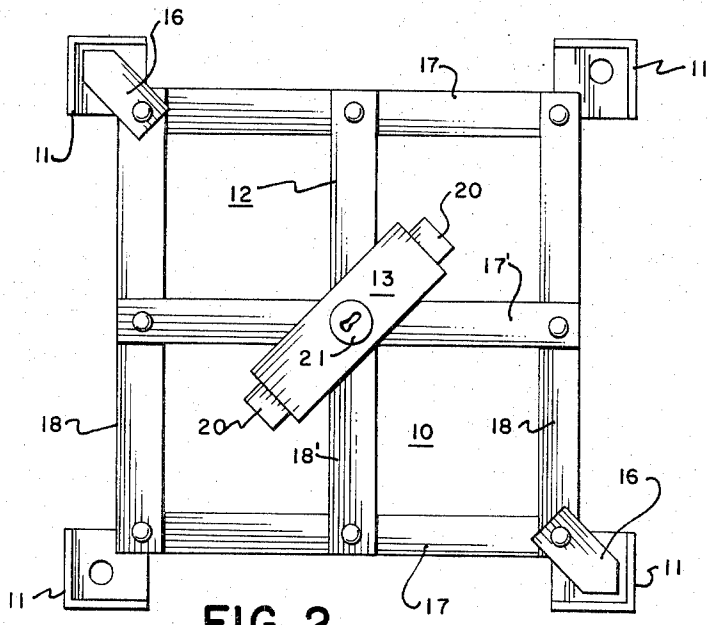

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17'
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20
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FIG. 2

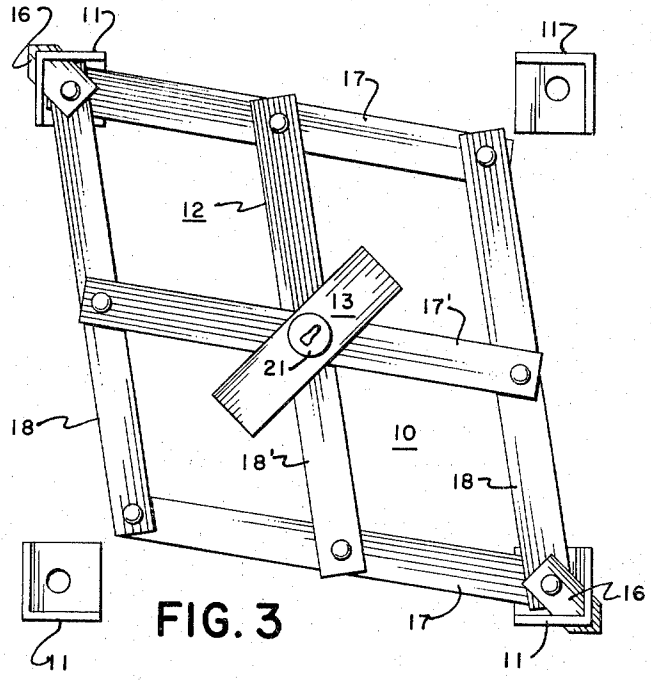

16
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FIG. 3

CAR STEREO EXPANSION LOCKING KIT

FIELD OF INVENTION

The present invention relates to demountable brackets for electronic accessories and more particularly to demountable brackets which are provided with locking means.

DESCRIPTION OF THE PRIOR ART

Demountable brackets for auto tape players and similar accessories for motor vehicles and the like have commonly included a pair of mating, engageable bracket members, one intended to be fixedly mounted to the auto, and the opposing bracket intended to be mounted to the player. Demountable brackets may be fastened to the respective auto and player by a variety of fastening means, such as bolts, rivets, and welds. Demountable brackets for auto tape players may also be provided with locking means. Commonly, the locking means employs various types of shackles and hasps engageable through the mating bracket members. These demountable brackets, having mated bracket members and locking shackles, may be costly and complicated, without adding to the structural strength and security of the locking bracket. In practice, it has been found that the bracket member, mounted to the tape player, may impair the use of the tape player for purposes outside the automobile, such as remote tape playing; and may impair the appearance and performance of the tape player itself.

Accordingly, it is an object of the present invention to provide locking, demountable bracket means for auto electronic accessories, which employ a fixedly mounted bracket means and a locking lattice independent of the electronic accessory.

It is a further object of this invention to provide demountable bracket means which is visually inaccessible and which may be conveniently locked and unlocked with a key.

These and other objects shall become apparent from the description following, it being understood that modifications may be made without affecting the teachings of the invention here set out.

SUMMARY OF THE INVENTION

Generally, the car stereo expansion locking kit comprises a plurality of cornerposts operable to closely, slidably receive a car stereo, or the like, and having a plurality of horizontally cut lattice receiving slots, a locking lattice including a plurality of rectilinear and transverse lattice strips pivotally mounted at intervals to each other to form a parallelogram and including a pair of diagonally disposed, slot-engaging leaves fastened at diagonal corners of the locking lattice, and a lock operable to selectively lock the locking lattice into the slots of the cornerposts.

A more thorough and comprehensive understanding may be had from the detailed description of the preferred embodiment when read in connection with the drawings forming a part of this specification.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a left front perspective view of the car stereo extension locking kit of this invention shown with the parts thereof exploded away for illustrative purposes, including a car stereo player shown in broken lines for illustrative purposes.

FIG. 2 is a bottom plan view of the locking lattice and lock of this invention shown as it would appear in its unlocked position.

FIG. 3 is a bottom plan view of the apparatus of the FIG. 2 shown as it would appear in the locked position.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings and more particularly to the FIG. 1, the car stereo expansion locking kit of this invention is shown to advantage and generally identified by the numeral **10**. The expansion lock **10** comprises a plurality of cornerposts **11**, a locking lattice **12**, and a lattice lock **13**. The cornerposts **11** may be fabricated of angle iron-like members, and may be fastened upstandingly to a vehicle (not shown) by means of bolts, rivets and the like (not shown) engageable through bolt brackets **11'** provided at the interior corner at the uppermost terminal end of each of the members **11'**. Each of the posts **11** are fastened with their vertical corners disposed away from the geometrical center of a substantially rectangular region which is operable to closely receive a car stereo **14** and similar accessory equipment. A plurality of horizontally cut, distally disposed slots **15** are provided from the vertical corner edge into the side walls of the cornerposts **11.**

The slots **15** are operable to engage locking leaf portions **16** of the locking lattice **12.** The locking lattice **12** comprises a plurality of rectilinear lattice strips **17** and **17'** and transverse locking strips **18** and **18'**. A pair of rectilinear lattice strips **17** and a pair of lattice locking strips **18** are parallelly, pivotally fastened to the respective terminal ends of each of the strips **17** and **18.** The rectilinear middle lattice strip **17'** is pivotally fastened at its terminal ends midway on the transverse lattice strips **18**; and the transverse middle lattice strip **18'** is pivotally fastened at its terminal ends midway on the rectilinear lattice strips **17** and at its midpoint to the midpoint of the middle lattice strip **17'**. Thus, it may be seen that the locking lattice, comprising the lattice strips **17, 17', 18** and **18'**, is operable to form a pivotally fastened parallelogram. The locking leaves **16** are fastened at a pair of diagonal corners of the pivotally fastened intersects of the lattice strips **17** and **18.** The locking leaves may have a pointed configuration operable to engage suitable horizontal pairs of the slots **15** of the cornerposts **11.** It is to be understood that while all the cornerposts **11** are provided with slots **15,** the expansion lock **10** of this invention may be satisfactorily fabricated with slots **15** included in a pair of diagonal cornerposts **11.**

The lattice lock **13** is intended to selectively lock the lattice **12** into a predetermined locked juxtaposition. The lattice lock **13** comprises a body member **19,** a pair of dogs **20,** and a cylinder **21.** The dogs **20** are a pair of substantially C-shaped members, and are carried opposingly to each other on the body member **19.** The locking dogs **20** are actuated and locked by means of a substantially commonly known locking cylinder **21** disposed between the dogs **20** in the body member **19.** The lattice lock **13** is operable to lock the lattice **12** by engaging the intersect of the lattice strips **17'** and **18'** on a geometrical diagonal perpendicular to the diagonal of leaves **16.**

In operation, a car stereo **14** may be slidably disposed within the cornerposts **11.** As shown in the FIGS. **2** and **3,** the locking lattice **12** is conformed to a substantially rectangular configuration and is disposed adjacent the lowermost terminal side of the car stereo **14.** The lattice lock **13** may be disposed diagonally at the intersect of the strips **17'** and **18'** with the edges **20** disposed in their outermost position. The lattice **12** may then be conformed into a parallelogram with the locking leaves **16** disposed through a suitable, horizontal slot **15** in each of a diagonal pair of cornerposts **11.** By actuating the locking cylinder **21** and simultaneously locking the dogs **20** to their closed position, the lattice **12** is secured into a locked, substantially stable configuration beneath the car stereo **14.**

Having thus described in detail a preferred apparatus which embodies the concepts and principles of the invention and which accomplishes the various objects, purposes and aims thereof, it is to be appreciated and will be apparent to those skilled in the art that many physical changes could be made in the apparatus without altering the inventive concepts and principles embodied therein. Hence, it is intended that the scope of the invention be limited only to the extent indicated in the appended claims.

We claim:

1. A car stereo expansion locking kit comprising

a plurality of cornerposts, each of said cornerposts having an upstanding angle iron-like member, a bolt bracket provided at the interior terminal corner of the uppermost terminal ends of said angle iron-like members, and a horizontal slot cut into the vertical corner of angle iron-like member of a diagonal pair of said cornerposts;

a locking lattice including a pair of rectilinear lattice strips pivotally fastened at each of their terminal ends to the terminal ends of a pair of parallelly disposed transverse lattice strips, a rectilinear middle lattice strip being pivotally fastened at its terminal ends midway on said transverse lattice strips, a transverse middle lattice strip being pivotally fastened at its terminal ends midway on said rectilinear lattice strips and at its midpoint to the midpoint of said rectilinear middle lattice strip, and a pair of locking leaf portions, said locking leaf portions being operable to engage said cornerpost slots, said locking leaf portions being fastened at a pair of diagonal exterior corners of said locking lattice; and

a lattice lock including a body member, a pair of dogs including a pair of substantially C-shaped members operable to ride opposingly to each other on said body member, and a locking cylinder operable to actuate and lock said locking dogs in their juxtaposition on said body.

2. The apparatus of claim **1** including suitable horizontal slots disposed in all of said cornerposts.

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