

Sept. 2, 1958

W. ZARGES

2,849,812

REVERSIBLE ADDRESS SUPPORT FOR SHIPPING CONTAINERS

Filed Dec. 13, 1956

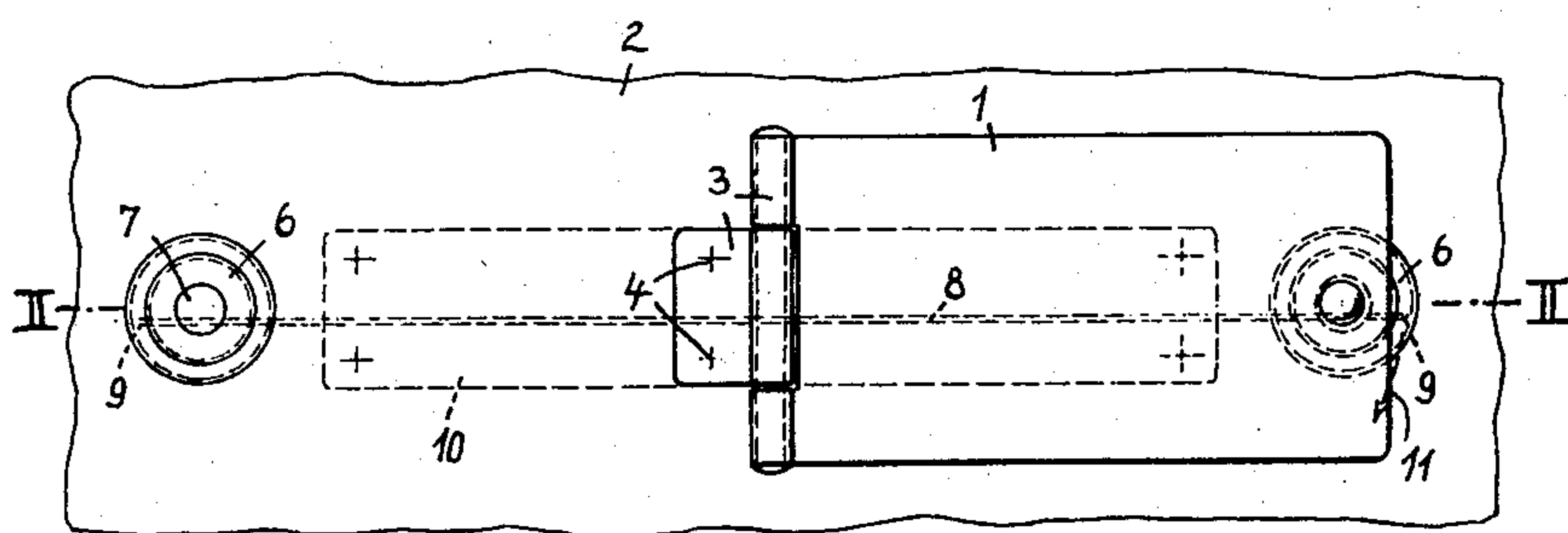
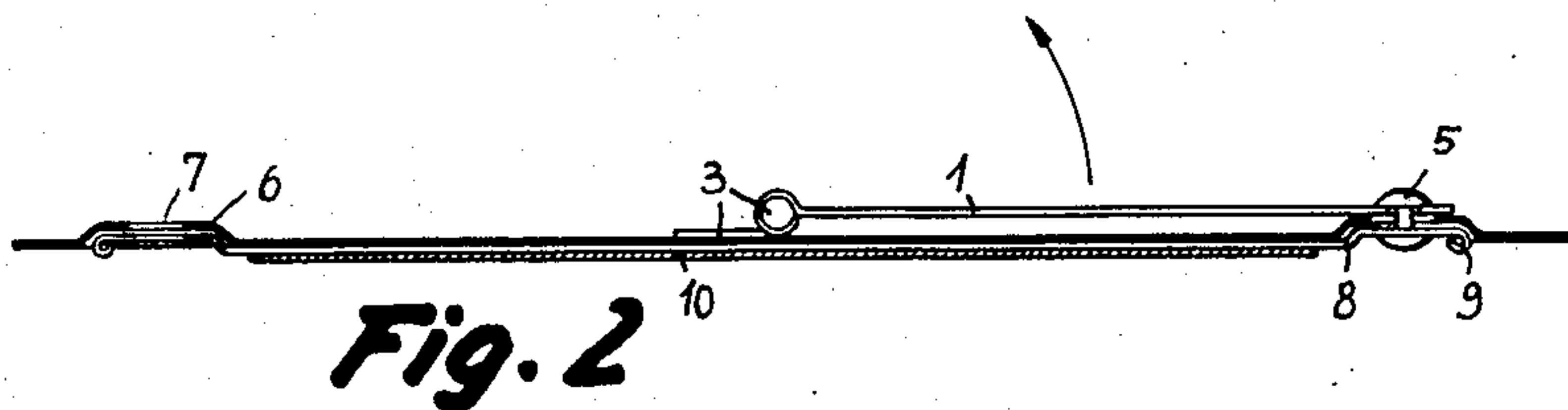


Fig. 1

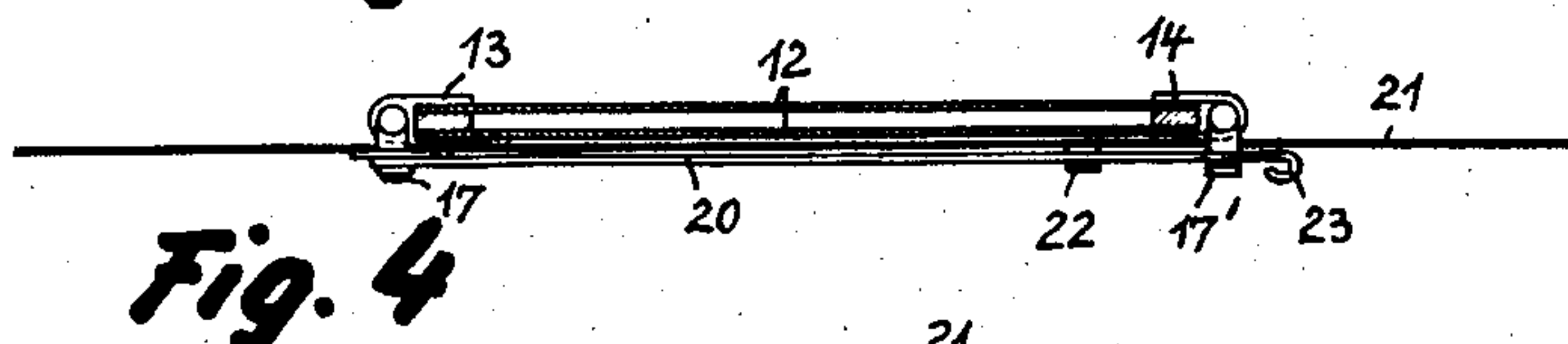


Fig. 4

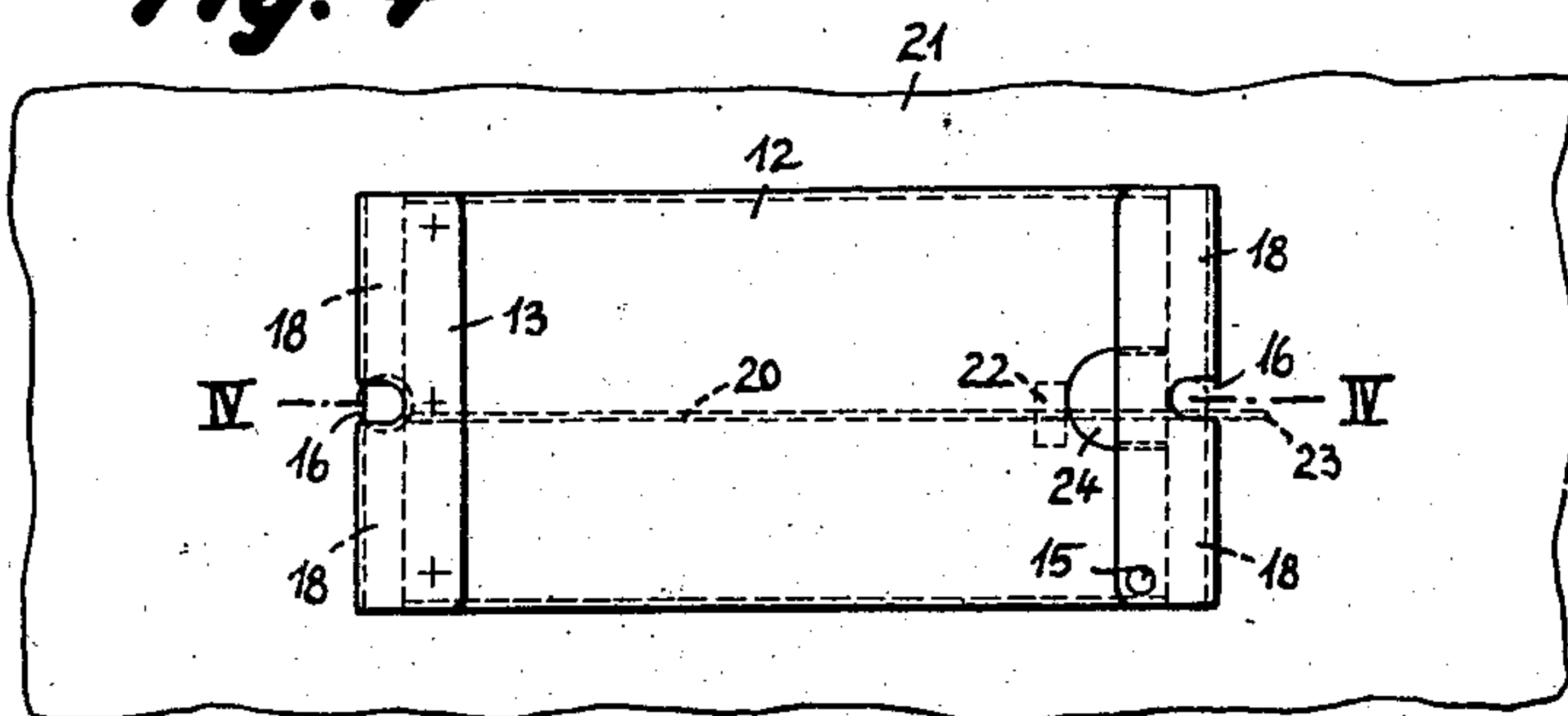


Fig. 3

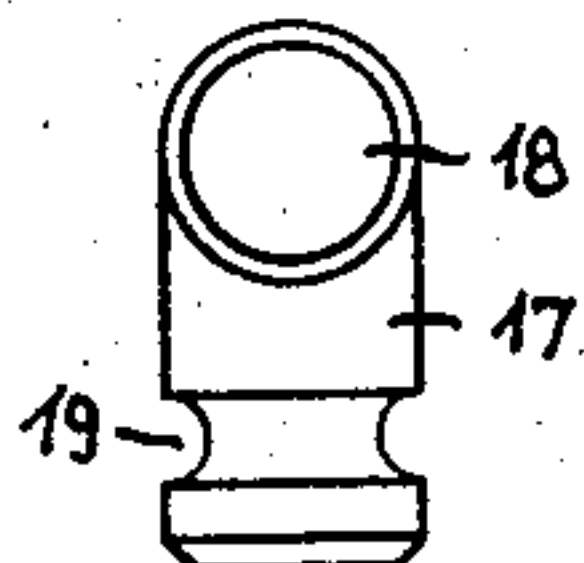


Fig. 5

Inventor.
Walther Zarges
By Michael S. Striker
att.

1

2,849,812

REVERSIBLE ADDRESS SUPPORT FOR SHIPPING CONTAINERS

Walther Zarges, Murnau, Oberbayern, Germany

Application December 13, 1956, Serial No. 628,059

12 Claims. (Cl. 40—5)

The present invention relates to new improvements in reversible address plates or plate holders for shipping containers.

In order to allow for a quick change of the forwarding addresses on a shipping container which, after being loaded or unloaded by the original addressee, is to be shipped back to the original sender or to be reshipped to some other address, such containers are usually provided with reversible address plates. One known type of these reversible plates carries the two different forwarding addresses on the opposite sides thereof and is hinged at one end to the container so that, when pivoted over, it will display the other forwarding address on the other side. Locking means are then provided to prevent tampering with the plate and to maintain it in the selected position.

Another known type of reversible address plate consists of a plate which is rotatably mounted on a central axis between two parallel arms so that, in either of its two positions, the plate covers the same surface of the shipping container, preferably the cover thereof. The pivotal arms are acted upon by a spring or springs so that the plate is normally pressed against the respective container surface.

All of these prior designs of reversible address plates have certain disadvantages. Thus, for example, the first-mentioned type in which the plate is pivotable at one end about a hinge which is mounted on the container must be locked in either position by a wire, seal, or the like which again has to be removed if the plate is to be turned over to the other position. If the locking means merely consist of a wire or pin, the same may be easily removed by an unauthorized person who might reverse the plate and lock it in the other position so that a wrong address would then be displayed. The other type of reversible plate may be turned over only after a bracket has been pivoted back against the action of a spring which acts thereon, and such pivoting can likewise only be prevented by locking the bracket to the container by a wire, a lead seal, or the like.

It is the object of the present invention to provide a reversible address plate or plate holder which avoids the disadvantages of those previously designed by being provided with a simple lock which is accessible only from the inside of the shipping container for unlocking the plate or holder to permit its reversal.

The actual locking means of the reversible plate according to the present invention may be a simple bolt, latch, spring catch, or the like which is mounted on the inside of the shipping container, for example, on the cover thereof and is accessible only from the inside and cannot be unlocked and reversed when the shipping container is locked. Preferably, however, the locking means for holding the reversible plate in either of its two positions consists of a single spring which is mounted on the inside of the container and adapted to engage in a notch or groove in a pin or the like which is secured to the plate or

2

plate holder, preferably at the free end thereof. Such pin is preferably made in the form of a rivet which is inserted in an opening in the plate and is loosely slidable therein vertically to the plate between its opposite heads which retain it on the plate. If the rivet is made of such a length that the distance between its heads is substantially equal to the combined thickness of the plate, the wall or cover of the container, and the diameter of the spring, the rivet does not need to be provided with an extra groove in its shank since the heads thereof will assume the function of such groove. By making the diameter of the aperture in the address plate slightly larger than that of the shank of the rivet so that such shank can freely slide within the aperture, and the diameter of the corresponding apertures in the wall or cover of the shipping container slightly larger than that of the rivet heads, and by providing the respective locking-member on the wall or cover of the container in the proper position so as to be engageable with one of the rivet heads after being passed through the container cover, it is merely necessary to exert a slight pressure upon the upper rivet head whereby the lower rivet head will urge the resilient locking member sideways and this member will then snap of its own accord behind the lower rivet head and thus lock the address plate securely to the container without danger that it might be tampered with from the outside.

If the address plate is to be reversed, the container must first be opened and the locking member disengaged from the rivet from the inside before the plate can be pivoted about its hinge on the outside toward the other position and be relocked by a second locking member by pressing upon the upper rivet head which previously had been in engagement with the first locking member. If the two locking members consist of a single spring, it should be mounted on the inside of the container cover and preferably underneath the hinge of the address plate so that each of its two free ends will serve as a locking member which is engageable with one or the other head of the rivet in one or the other position of the address plate.

The address plate as thus described is reversible by covering a different surface portion of the shipping container in each position. According to a modification of the present invention, the address plate may also be designed so as to be reversible and locked in the same relative position to the container in either of its positions. For this purpose, the hinge of the address plate is designed in the form of a universal joint which permits the plate when pivoted away from the container cover to be reversed by being turned about its own longitudinal axis. The locking pin at the other end of the address plate is in that case preferably pivotally mounted or hinged at one end thereof on the free end of the plate so that only one locking projection or groove need be provided on the free end of the locking pin. When the address plate is to be reversed and the locking spring has been disengaged from the locking pin and the plate been turned over on its universal joint, the locking pin which then projects upwardly from the plate is pivoted downwardly about an angle of 180° and is then reinserted into the same aperture in the container cover and locked on the inside of the container by the same spring end. This address plate design is of neater appearance than the design as first described and also has the advantage that the wall or cover of the shipping container on which the address plate is to be mounted has to be provided with only one aperture for the insertion of the locking pin, and that the locking spring has to be only half as long or even less than the spring of the first embodiment of the invention.

Another feature of the invention consists in making the address plate in the form of a pocket of transparent material, one end of which is permanently closed, while the other end may be opened or closed either by a U-shaped or angular metal strip which may either be slipped over the free end of the two transparent plates so as to close the same or be pivotally connected at one end to the transparent plates. The actual address plate then forms a separate element which may be inserted in such pocket and be easily exchanged for another plate.

Further objects, features, and advantages of the present invention will be apparent from the following detailed description thereof, particularly when read with reference to the accompanying drawings, in which—

Fig. 1 shows a plan view of a portion of the cover of a shipping container provided with a reversible address plate according to the invention;

Fig. 2 shows a cross section taken along line II—II of Fig. 1;

Fig. 3 shows a plan view of a reversible address plate according to a modification of the invention;

Fig. 4 shows a cross section taken along line IV—IV of Fig. 3; while

Figs. 5 shows an enlarged front view of a T-shaped member which may serve either as a universal joint at one end of the reversible plate or as a connecting member and part of the retaining means for securing the plate in the selected position.

Referring to the drawings, and first particularly to Figs. 1 and 2, the reversible plate 1 is connected to the cover 2 of a shipping container by means of a hinge 3 which is secured to the cover, for example, by rivets 4. The free end of plate 1 is provided with a pin, preferably in the form of a rivet 5 which is inserted in an aperture in plate 1 and is freely slidable therein in a direction vertical to plate 1. At two opposite points on cover 2 spaced at equal distances from the center of rotation of hinge 3 corresponding to the distance between such center and that of the aperture in plate 1 containing rivet 5, cover 2 is provided with outwardly pressed circular portions 6, each having a central aperture 7 of a size to allow the respective head of rivet 5 to pass through the aperture facing toward the same. Each portion 6 preferably projects from the outer surface of cover 2 so that plate 1 when resting thereon extends substantially parallel with such outer surface, as shown in Fig. 1. For locking plate 1 in the selected position on one or the other projecting portions 6, a spring 8 is substantially centrally secured, at the inner surface of cover 2 underneath hinge 3. The two end portions 9 of spring 8 are bent slightly upwardly into the recess formed by portion 6 and parallel with the surface thereof. The outer ends of spring 8 may be bent downwardly and inwardly for easier handling of the spring. If desired, an inner plate 10 may be secured to cover 2 to protect spring 8 from the contents of the container. Thus, when rivet 5 on plate 1 is inserted into aperture 7 in one of the projecting portions 6 and depressed by pressure upon its upper head, the rounded lower head will first push spring end 9 sideways so that it will then snap over the lower head and against the shank of the rivet. Spring 8 will thus lock plate 1 securely in its selected position.

If plate 1 is to be reversed from the position shown in Fig. 1 toward its other position, spring end 9 is disengaged from rivet 5 by being pivoted in the direction shown by arrow 11 in Fig. 2, so that plate 1 will be released. It may then be pivoted about hinge 3 toward the other side and upon the other projecting portion 6 on cover 2, whereupon rivet 5 may be depressed so that the other spring end 9 will snap over the other head of rivet 5 which previously had been facing upwardly and thus lock plate 1 in its other position. If plate 1 is to be reversed, it is advisable first to open cover 2 of the container fully before disengaging spring 8

from rivet 5, as plate 1 will then disengage from its previous locking position by its own gravity.

The reversible address plate holder according to the modification of the invention as shown in Figs. 3 and 4 consists of two parallel plates 12 of transparent material, which together form a pocket. One end of this pocket is closed by a metal strip 13 of U-shaped cross section, while the other end is adapted to be opened or closed by means of a U-shaped or angular metal strip 14 which is either slipped over the free end of the two transparent plates 12 or is pivotally mounted at one corner on a rivet or the like 15. At the center of its bent end wall, each strip 13 and 14 has a cutout 16 of a width and depth sufficient to accommodate the shafts 17 and 17', respectively, of a T-shaped member, shown particularly in Fig. 5, the two arms 18 of which are pivotally mounted in strips 13 and 14, respectively. The free end of each shaft 17 and 17' is preferably provided with an annular groove 19. The locking member for securing pocket 12 in the selected position again consists of a spring 20, one end of which is connected to shaft 17 by being bent around the grooved portion 19 of the left T-shaped member 17. In order to prevent spring 20 from pivoting freely around member 17 and to insure its resilient locking action, a pair of slots may be cut in the cover and the intermediate portion be bent downwardly so as to form a small strap 22. Spring 20 is then inserted between this strap and cover 21 and is thus held in a fixed position on cover 21 so that its free portion 23, the outer end of which is bent over to serve as a handle portion is adapted by its spring pressure to engage into groove 19 of the T-shaped member 17' at the right side extending from strip 14 after this member has been inserted through an aperture in cover 21. Pocket 12 is thus securely locked in position on cover 21.

If pocket 12 is to be reversed from the position shown in Figs. 3 and 4 so that its former upper side will face toward cover 21, spring 20 is disengaged from groove 19 on member 17' by pressing spring end 23 away from its, whereupon pocket 12 is pivoted upwardly about the left T-shaped member 17 which serves as a universal joint, provided it does not so pivot of its own accord because of the raised position of cover 21. Pocket 12 is then completely turned over about shaft 17 so that the position of arms 18 thereon will be reversed. Shaft 17' is then also pivoted over by 180° from its previous position, whereupon pocket 12 is placed back upon cover 21, and shaft 17' is inserted into the aperture in cover 21 and pressed down until spring 20 snaps into groove 19.

If the shipping container should be provided with another forwarding address, it is merely necessary to unlock and slightly lift member 12, and then either withdraw the U-shaped cover strip 14 therefrom or pivot the angular strip 14 about its axis formed by rivet 15 so as to open pocket 12 at this end. The address plate may then be withdrawn from the pocket and turned over or be exchanged for another address plate whereupon cover strip 14 may either be slipped on or pivoted back upon the pocket so as to close the same. Shaft 17 is then reinserted into the aperture in the cover and locked thereon by its snap engagement with spring 20. For facilitating the removal of the address plate from pocket 12, the outer end of one or both transparent plates 12 may be provided with a finger recess 24 through which the plate may be easily grasped.

Although the new address plate or address plate holder has been described and illustrated as being mounted directly on the shipping container and preferably on the cover thereof, it will be obvious to anybody familiar with the art that it may also be manufactured and sold as a separate item. In such event, member 2 or 21 may form a base plate which may be easily mounted on any shipping container by rivets or bolts. The container itself is then preferably provided with a small aperture, preferably in its cover underneath the handle portion 9 or 23 of spring

1 or 20, respectively, to permit the insertion of a finger or tool for disengaging the spring from rivet 5 or shaft 17, respectively, from the inside of the container.

Also, the locking pin may in either of the embodiments consist either of a rivet or the like as shown in Figs. 1 and 2 or of a pivotable member as shown in Figs. 3 to 5.

Even though the invention has been described in detail with reference to certain now preferred embodiments thereof, I wish to have it understood that it is in no way limited to these embodiments, but is adaptable to numerous modifications within the scope of the appended claims.

Having now fully disclosed my invention, what I claim as new is:

1. An address support for shipping containers comprising a supporting member adapted to display a pair of forwarding addresses on the opposite sides thereof, means for connecting said member to the outside of a shipping container and also for reversing said sides of said member to display a different address toward the outside, and snap fastening means for locking said member in either of said two positions to said container and by pressure upon said member toward said container, and adapted to be unlocked only from the inside of said container to permit said member to be reversed.

2. An address support for shipping containers comprising a base, a substantially flat supporting member adapted to display a pair of forwarding addresses on the opposite sides thereof, means on one end of said member for pivotally connecting the same to the upper side of said base and for reversing said sides of said member to display a different address toward the outside, and locking means for locking the other end of said member in both positions to the upper side of said base and comprising a locking pin connected to said other end of said member and normally extending at a right angle thereto, said locking pin having a recess therein, and a spring member mounted on the lower side of said base underneath said supporting member and, when depressed in the direction toward said base, adapted to engage in said recess for locking said member in its selected position, and adapted to disengage from said locking pin only by manual movement of said spring member, said spring member being accessible only from the lower side of said base for disengaging the same from said locking pin.

3. An address support as defined in claim 2, wherein said base forms a portion of the cover of said container and said spring member is accessible only from the inside of said cover.

4. An address support as defined in claim 2, wherein said base is adapted to be secured to the outside of a wall of a shipping container, said wall having an aperture therein underneath said spring to permit said spring to be disengaged from said locking pin only from the inside of said container through said aperture.

5. An address support as defined in claim 2, wherein said locking pin is of a rivetlike shape having a shank and a head at each end of said shank, said address supporting member having an aperture near its free end, said shank being disposed within said aperture and slidable therein intermediate said heads in a direction vertical to said member, said base having at least one aperture therein at a point and of a size to permit the respective rivet head facing toward said base to be passed therethrough, said spring being adapted to engage with said shank behind said rivet head.

6. An address support as defined in claim 2, wherein said base forms a portion of the cover of said container, said locking pin having a rivetlike shape with a shank and a head at each end of said shank, said address supporting member having an aperture near its free end, said shank being disposed within said aperture and slidable therein intermediate said heads in a direction vertical to said member, said cover having a pair of apertures therein of a size to permit the respective rivet head facing toward said cover to be passed there-through, and disposed

at opposite points from said pivoting means and each at a distance therefrom corresponding to the distance between the axis of said pivoting means and the center of said aperture in said member, so that when said member is pivoted toward one or the other side to display one or the other address, and the upper rivet head is depressed, the lower rivet head will first push the spring sideways underneath said cover until said spring snaps over said head and locks the supporting member in the selected position.

7. An address support for shipping containers comprising a base, a substantially flat supporting member adapted to display a pair of forwarding addresses on the opposite sides thereof, a universal joint on one end of said member and connected to said base for permitting said member to be pivoted about said joint relative to said base and, when pivoted away from said base, also to be turned about its own longitudinal axis so as to display at first one and then the other side of said member toward the outside, and locking means for locking the other end of said member in either position to the upper side of said base and comprising a locking pin connected to said other end of said member and normally extending at a right angle thereto, said base having an aperture therein, said locking pin having a recess therein and being adjustable on said member so that said pin with the recess therein will project toward said base in either position of said member, said pin being adapted to be inserted through said aperture in said base, and a spring member mounted on the lower side of said base underneath said member and adapted to engage in said recess on said pin for locking said member in its selected position, and adapted to disengage from said locking pin only by manual movement of said spring member, said spring member being accessible only from the lower side of said base.

8. An address support as defined in claim 7, wherein said locking pin is pivotally mounted at one end thereof on the free end of said supporting member, and said recess is disposed near the other end of said pin, whereby said pin may be pivoted so as to project toward said base in either position of said member.

9. An address support as defined in claim 1, wherein said supporting member comprises a transparent pocket adapted to receive a member having at least one forwarding address marked thereon.

10. An address support as defined in claim 7, wherein said supporting member comprises a transparent pocket having two open ends, a substantially U-shaped member closing one of said ends and secured to said universal joint, and another member adapted to close the other end of said pocket and to be removable therefrom to permit an address plate to be inserted in said pocket, said locking pin being connected to said other closing member.

11. An address support as defined in claim 7, wherein said supporting member comprises a transparent pocket having two open ends and secured to said universal joint and another member adapted to close the other end of said pocket and pivotally mounted thereon near one corner thereof so as to permit said pocket to be opened to permit an address plate to be inserted in said pocket, said locking pin being connected to said other closing member.

12. An address support as defined in claim 2, wherein said base forms a portion of the cover of said container, further comprising means mounted on the inside of said cover underneath said spring for covering at least a part of said spring toward the inside of said container.

References Cited in the file of this patent

UNITED STATES PATENTS

195,178	Somers	Sept. 11, 1877
258,883	Burgdorf	June 6, 1882
1,619,827	Meyerson	Mar. 8, 1927
2,302,560	Latona	Nov. 17, 1942