

Sept. 29, 1953

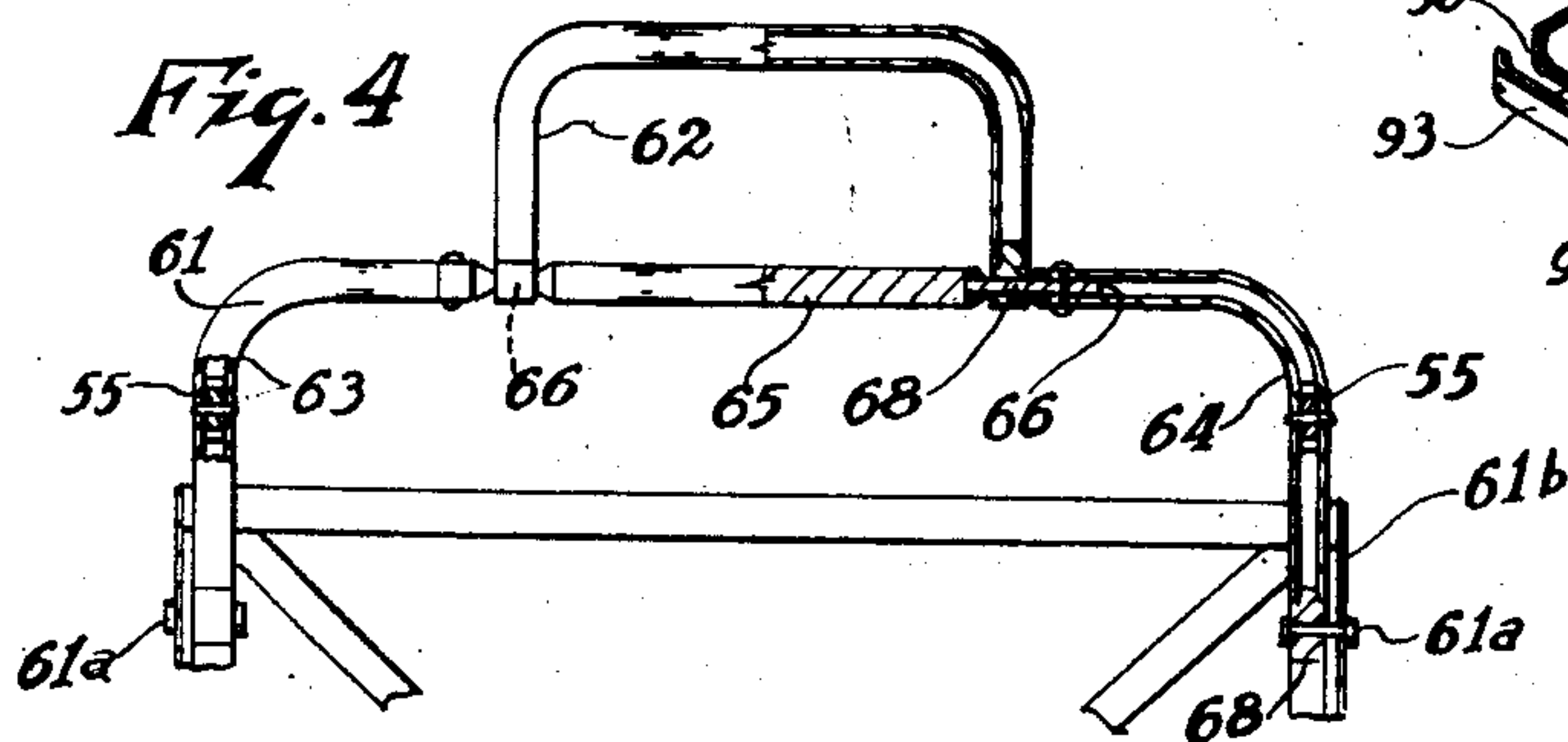
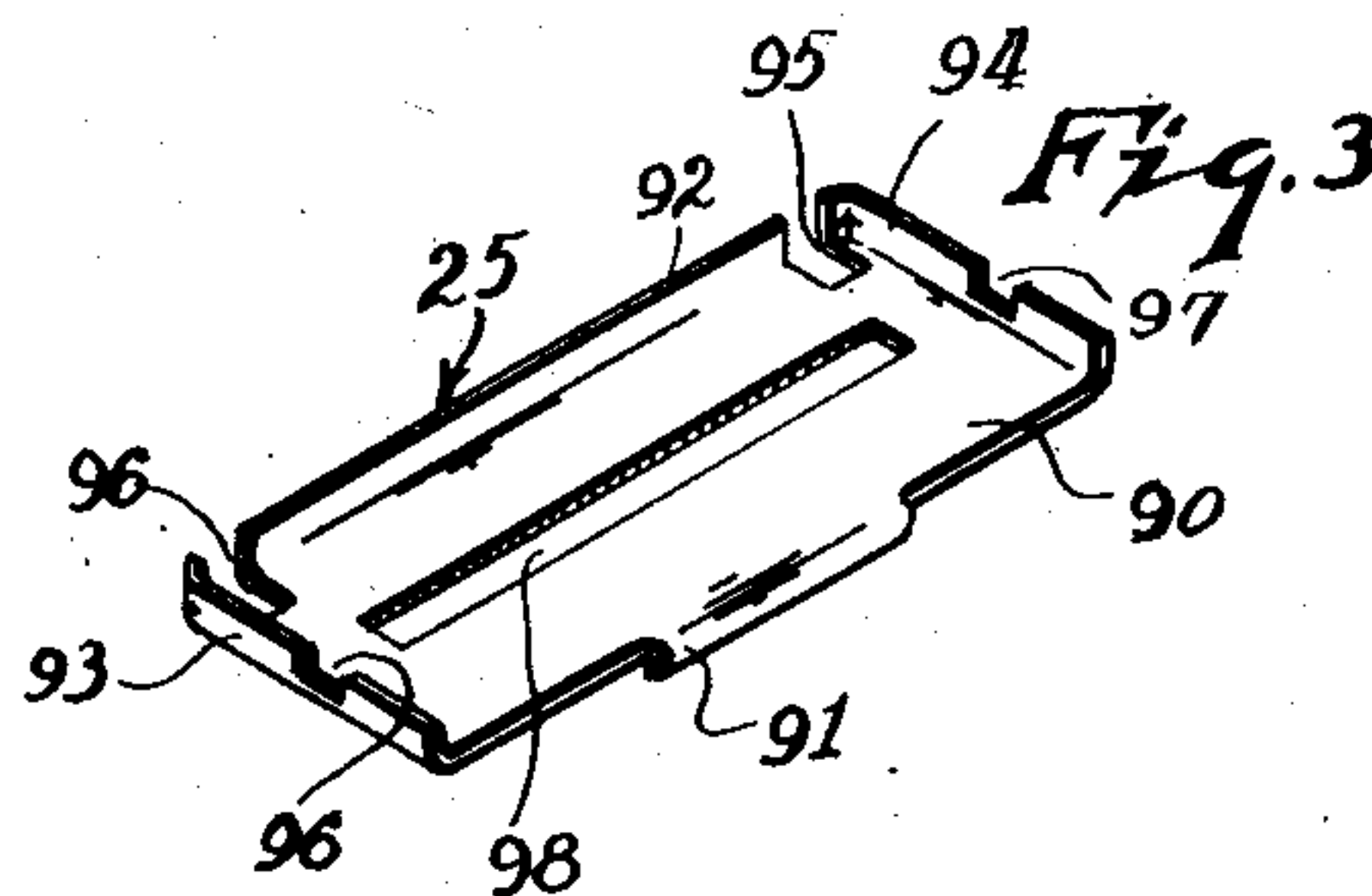
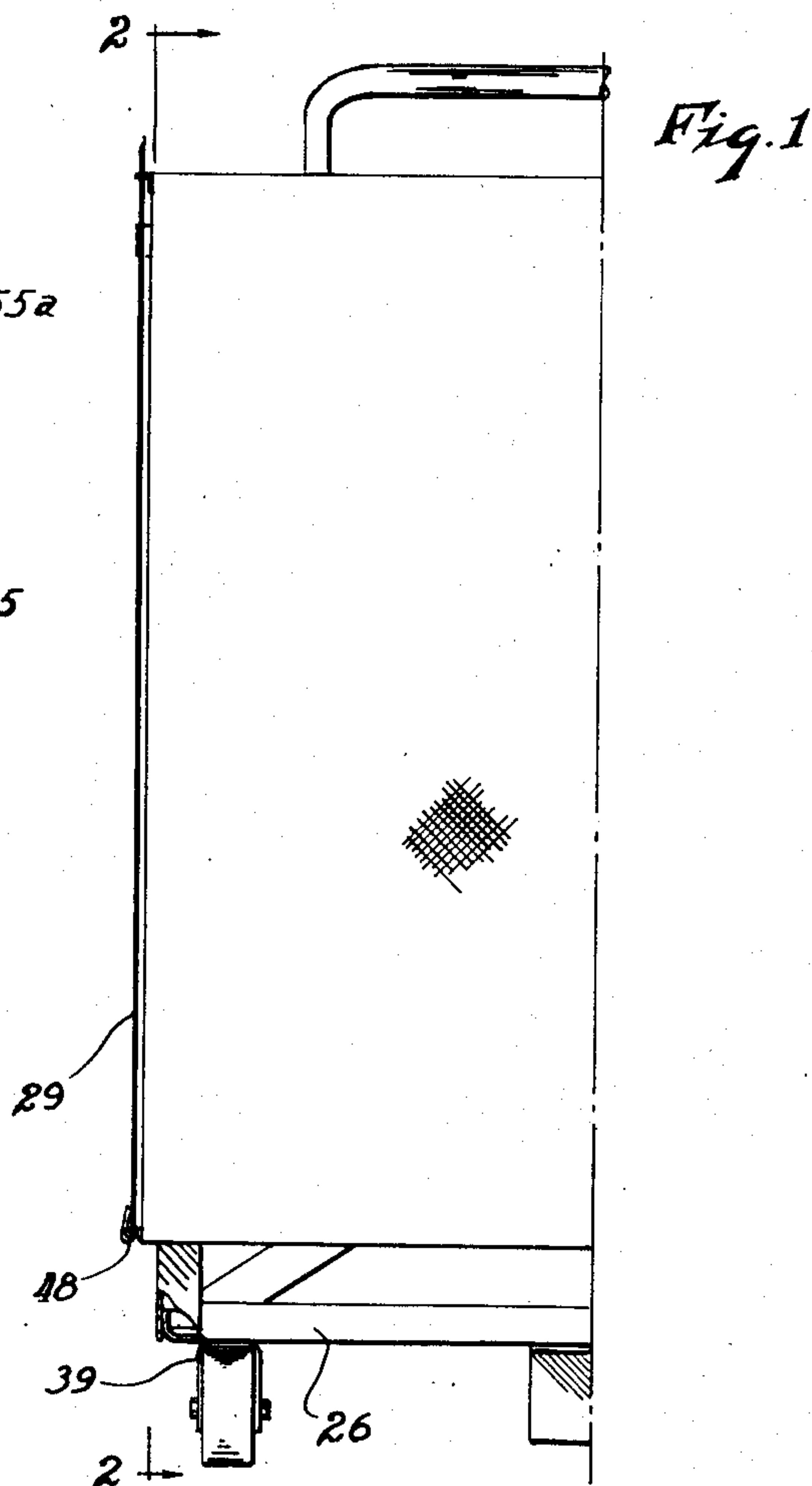
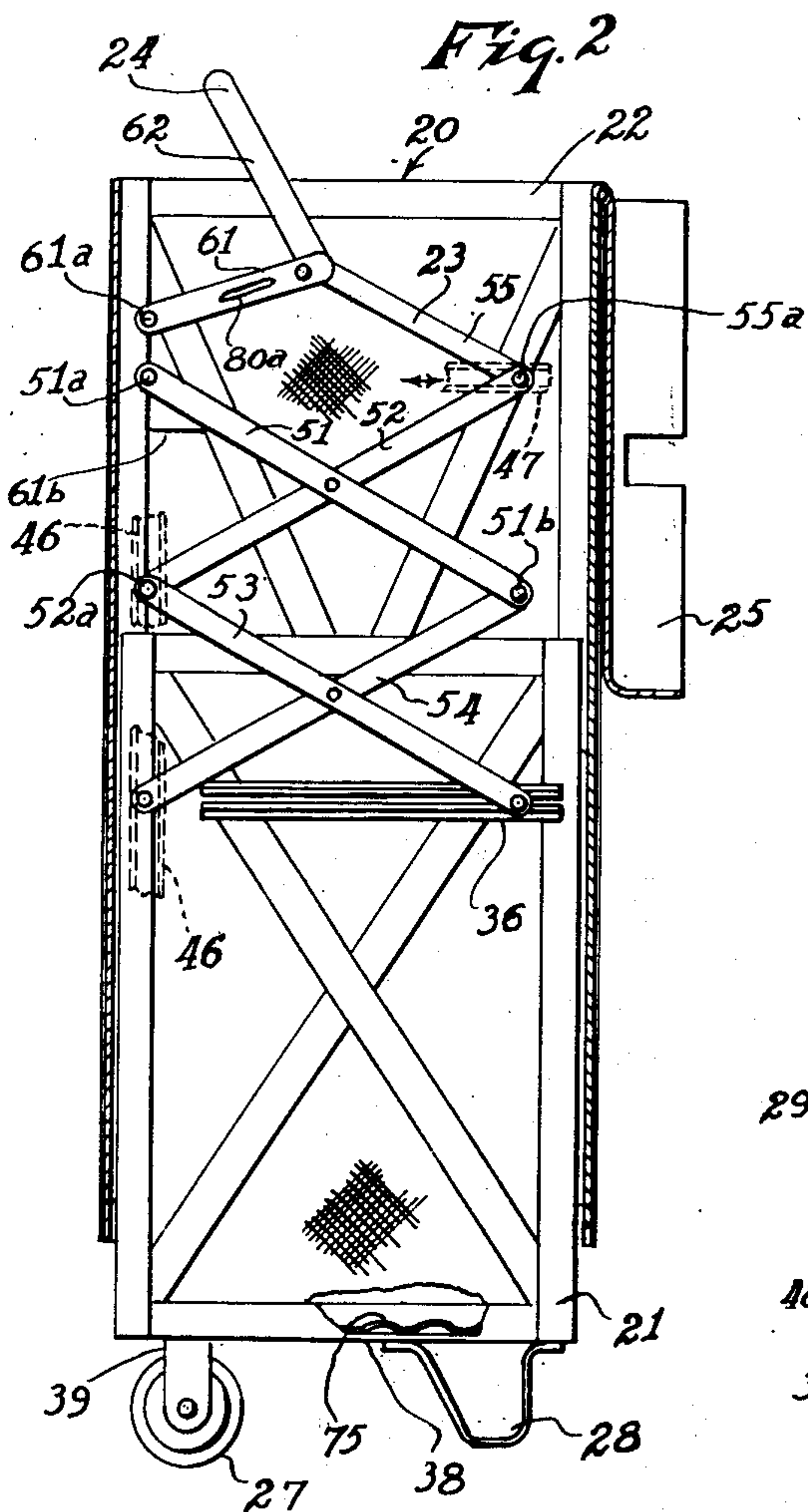
YEN-SHEN LU

2,653,826

PORTABLE FOLDABLE SHOPPING BASKET

Filed March 20, 1951

2 Sheets-Sheet 1



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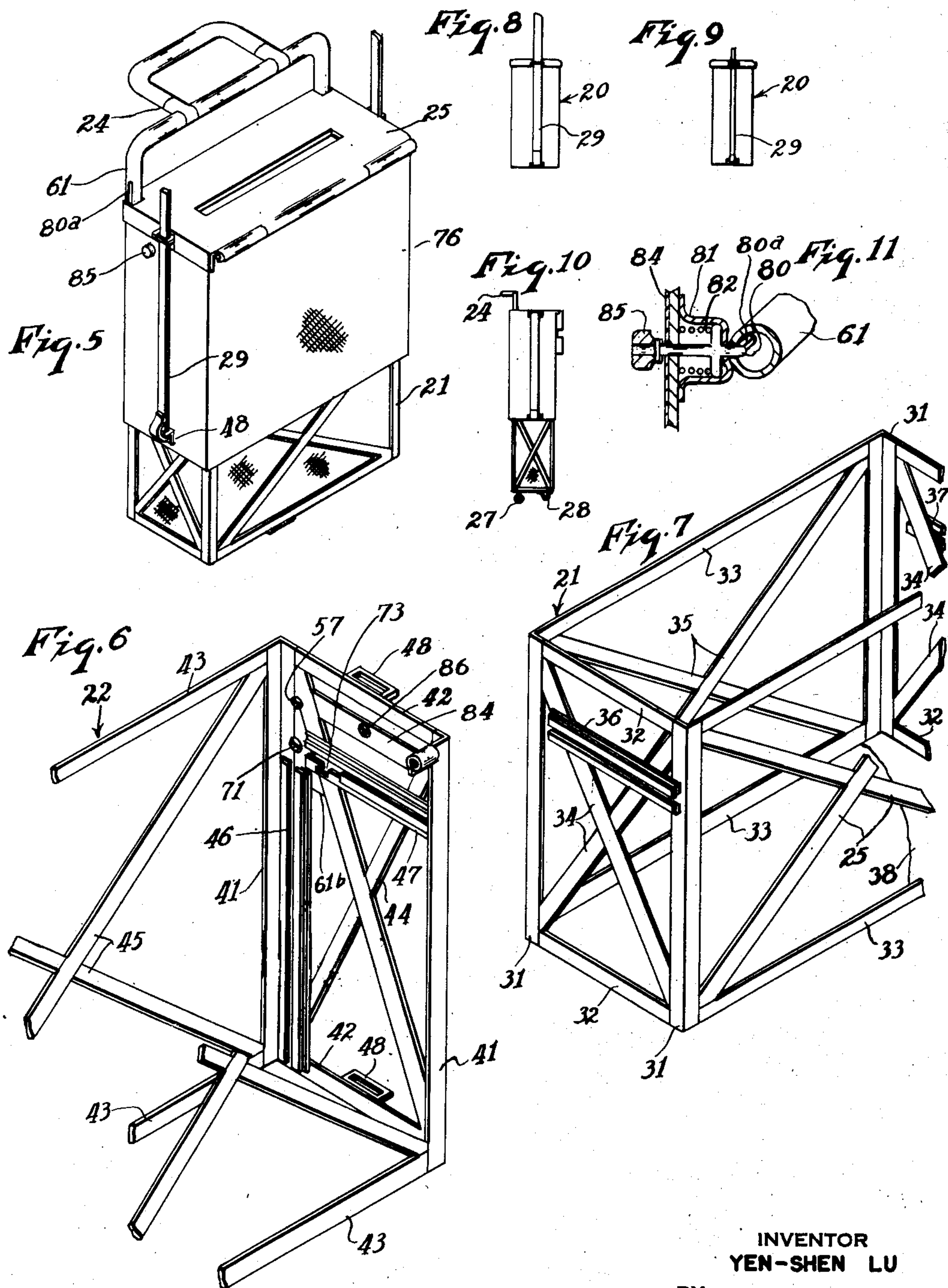
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PORTABLE FOLDABLE SHOPPING BASKET

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2 Sheets-Sheet 2



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2,653,826

PORTABLE FOLDABLE SHOPPING BASKET

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Application March 20, 1951, Serial No. 216,480

2 Claims. (Cl. 280—36)

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This invention relates to light, portable shopping baskets.

One object of this invention is to provide a lightweight basket of two sections that may be telescoped so that the device may be handled conveniently as a hand basket or as a shoulder bag, when only a small number of packages are to be carried, or the two parts of the basket may be extended to provide an enlarged amount of carrying space, the basket thus formed being provided with a pair of wheels that will permit the basket to be trundled or wheeled along.

Another object of this invention is to provide a basket of the foregoing type with a removable liner for one portion of the basket and with a cover for the outer portion of the basket with a top cover to protect the contents of the basket from rain or other undesirable external matters or objects.

Another object of this invention is to provide a multi-section shopping and utility basket that may be used for shopping or for storage, with a suitable construction that will permit it to be stored in a small space, when stored or used for storage, and yet be extensible to provide increased carrying capacity either for storage or for shopping purposes, when such additional space is necessary.

The construction and manner of operation of the combination basket-bag which constitutes the subject matter of this invention may be understood more readily upon reference to the accompanying drawings, in which:

Fig. 1 is a front elevational view of the basket-bag with its outer frame and covering slightly raised to show the lower part of the inner frame with its rollers and supporting foot;

Fig. 2 is a side view, partially in section and partially in elevation, taken along the line 2—2 in Fig. 1, just inside the side wall of the outer frame;

Fig. 3 is a perspective view of the top cover;

Fig. 4 is a front view, partially in elevation and partially in section, of the handle structure;

Fig. 5 is a perspective view of the basket-bag, showing the handle in upper outside position;

Fig. 6 is a perspective view of a portion of the outer frame, to show the arrangement and location and disposition of the horizontal and vertical guides for the end pins of the expansion links, shown in Fig. 2;

Fig. 7 is a perspective view of the major portion of the inner frame, showing the parallel horizontal guides for certain of the end pins of the expansion links of Fig. 2;

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Figs. 8, 9 and 10 are simple side elevational views of the basket-bag, with the handle down under the cover, so the unit may be carried by the shoulder strap; with the handle extending upward through the middle of the cover so that the entire unit may be covered as a basket; and with the basket in extended position with the outer cover in its elevated position and the handle in upper outer elevated position to trundle the basket-bag on its wheels;

Fig. 11 is a vertical section, a locking plug or pin for locking the outer and the inner frames against undesired relative movement.

As shown in Figs. 1 and 2 of the drawings, a shopping basket-bag combination 20 in accordance with this invention, comprises an inner or lower basket frame 21, an upper or outer basket frame 22, an extension mechanism 23, an operating and manipulating handle 24, a cover 25, and an under structure 26 including a pair of rollers or wheels 27 and a front balancing or supporting step or foot 28.

A strap 29 is provided, which may be used to carry the basket from the shoulder or to be used as an auxiliary handle.

The inner or lower frame 21 is shown in more detail in the perspective view of Fig. 7, and is shown to be formed as a box structure, with four corner angle pieces 31 suitably connected by framing strips 32 along the side of the box and framing strips 33 along the front and rear of the box, at the top and bottom ends of the corner angle pieces 31. Diagonal straps 34 in the two end panels and diagonal straps 35 in the front and rear panels help the framing strips 32 and 33 to hold the structure as a rigid box-like unit. The corner angle pieces 31 provide adequate rigidity and strength, while they, at the same time together with the thin connecting straps and framing strips, provide a relative light weight structure.

Two guide strips or rails 36 and 37 are provided to guide and restrain the guide pin on the lower link of the expansion mechanism 23, shown in Fig. 2.

The various elements, including the corner angles and the framing strips of the frame 21, in Fig. 7, may be connected in any suitable manner, but preferably by spot welding to obviate the weight of additional connecting devices. Thus, the two guide rails 36 and 37 may extend clear across the frame 21 and be supported on and between the associated vertical corner angles 31. The guide rails 36 and 37 may also be additionally spot welded to the adjacent diagonal strips,

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thereby adding to the rigidity of the end panels of the box frame 21.

The inner frame 21 is also provided with a floor or platform 38 which is suitably spot welded to the corner posts and the side and front and rear strips 32 and 33 respectively. The floor 38 constitutes a part of the bottom platform 26 from which the wheels 27 are supported by means of suitable brackets 39 that are secured to and supported from the floor 38, in any suitable manner, such as by spot welding. The supporting step or foot 28, shown in more detail in Fig. 2, may similarly be secured to the floor 38 of the platform 26 by spot welding, to provide together with the wheels 27, a stable three-point support for the basket under load. Although only one foot 28 is illustrated, it will be clear that two such feet may be provided, to dispose one foot at each corner of the platform, to provide a four-point support with the two rollers 27.

The upper or outer frame 22 is similarly constructed as a box frame, as in Fig. 6, with one end panel shown in detail. Both end panels are the same so that only one need be described.

As shown in Fig. 6, the vertical angle pieces 41 are connected by bottom framing strips 42 and 43 and correspondingly numbered top framing strips. Diagonal straps 44 and 45 connect the vertical angles 41 in the end panels and in the front and rear panels. A vertical guide 46 is disposed and supported along each rear corner post 41, only one vertical guide 46 being shown in Fig. 6. A similar guide, not shown, is supported at the other rear corner post of the box frame 22. A horizontal guide 47 is supported on each end wall of the outer frame 22, only one being shown in Fig. 6. A similar unit, constructed as a mirror image of the unit 47, shown in Fig. 6, is supported on the opposite end wall of the basket frame 22.

The top and bottom end strips 42 of the outer frame 22 are provided at each end with bails or ears 48 to receive a connecting loop or snap for the strap 29, as shown for example in Fig. 5.

The dimensions of the inner basket frame 21 are such as to fit loosely within the outer frame 22, of Fig. 6, with lazy tong or extension link means 23 disposed between the adjacent end walls of the two basket frames 21 and 22. The inner frame 21 may then be raised or lowered in the outer frame 22 without interference, when the basket is to be extended or telescoped.

The extension of the basket, to raise the outer box frame 22 relative to the inner box frame 21, is controlled by a pair of extension mechanisms 23, as shown in Fig. 2, which are modifications of the device usually referred to as a lazy tongs.

The extension mechanism 23 is shown in Fig. 2, and comprises the links 51, 52, 53, 54 and a tension link 55. This extension mechanism has the handle 24 to which the upper end of the tension link 55 at each side of the basket is attached.

The handle 24 comprises a lower bail 61 and an upper bail 62 attached to the lower bail. The two ends of the lower bail 61 are respectively pivoted on pins 61-a that are pivotally supported in the respective end walls of the upper or outer basket 22 as shown in Figs. 2, 4 and 6. A suitable corner plate 61-b is anchored on each end wall structure to provide a suitable bearing support for the pivot pin 61-a. The lower bail 61 placed in a position where it is entirely within the upper basket frame 22, or it may be raised to elevated position where the top of the lower bail 61 will be above the top level of the frame 22.

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As shown in Fig. 4, the lower bail 61 comprises the two side arm sections 63 and 64 of bent tubing, a center section 65 and two connecting pins 66 that connect the center section 65 to the two side arms 63 and 64. The connecting pins 66 also serve as bearing pivot pins for the pivotally supported upper bail 62. The bearing pivot pins 66 are suitably secured to the end arms 63 and 64 to prevent their casual displacement. The pivot pins 61-a for the lower arms of the lower bail 61 are disposed and supported in bearing openings 57, one in each end plate 61-b. In order to provide suitable bearing additional thicknesses of the plate 61-b may be added. Similarly, end plugs 68 may be provided in the ends of the tubular portions of the upper and lower bails.

In order that the handle may control the operation of the extension mechanism 23, the upper end of the tension strip 55 is pivotally connected to the adjacent side arm of the lower bail 61, near the top of the vertical portion of that side arm 63 or 64. When the handle 24 is operated to raise the lower bail 61 into its elevated position, for example, from the position shown in Fig. 2 to the position shown in Fig. 5, the tension strip 55 is pulled by the handle 24 in such direction as to extend the extension mechanism 23. At the same time the lifting movement on the handle 24 imparts a lifting force component to the lower bail 61 and its pivot pins 61-a, to the outer basket frame 22 and thereby raises that outer basket frame 22, so the extension mechanism 23 may more easily and more readily assume its extended position, without requiring the entire operating force to be extended through the extension mechanism itself.

In order to control the movement of the extension mechanism 23, the horizontal guard strips 36 and 37 on the inner frame 21, and the horizontal guard strips 47 and vertical guard strips 46 on the end walls of the outer frame 22 are employed. The lower end pin 51-a, as shown in Fig. 2, rides in the horizontal guard 47 that is located on the corresponding end wall of the outer frame 22. As was previously mentioned, the guard strip 47 on the end wall of the outer frame 22 is a mere image of the strip 47 shown on the end wall of the partial view in Fig. 6.

When the handle 24 is raised the tension strip 55 is pulled to the left hand side, and the pivot pin 55-a is moved toward the left in its confined pathway in the guard strip 47. The upper end of bar 51 of the expansion mechanism 23, is pivoted at pin 51-a which is fixed in or pivotally disposed in opening 71 (Fig. 6) in the auxiliary bearing plate 61-b. Consequently, when the handle 24 is raised or pulled, tension strip 55 is pulled towards the left, pivot pin 55-a will be moved to the left in the guard strip 47 and connecting bar 52 will be moved downward. Lower end pins 52-a are thus moved downward and are confined in a fixed vertical pathway in a vertical guard strip 46 and a similar vertical guard strip 46 in Fig. 6, mounted on the opposite end wall of the outer frame 22, which is removed in the view shown in Fig. 2.

Thus, as the crossbar 52 is moved downward at its lower end, the crossbar 51 is similarly moved downward at its lower end 51-b. The lower ends of connecting bars 53 and 54 then move to readjust their respective positions in the horizontal guard strip 36 and the vertical guard strip 46 that is mounted on the end wall of the outer frame 22, that is removed in Fig. 2.

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When the outer frame 22 has been raised to elevated position, the handle 24 is pulled sufficiently to move the pivot pin 55-a of the tension bar 55 to the left hand terminal position, at which the pivot pin 55-a is permitted to drop into a keyhole slot 73 in the lower rail of the guard strip 47, which is not shown in Fig. 2 but corresponds to the similar slots 73 shown in the guard rail 47 of Fig. 6. When the container is to be telescoped, lowered or closed, the outer frame 22 down over the lower box frame 21, the handle is raised sufficiently to remove the pivot pin 55-a from the keyhole slot and then permitted to resume its position in the straight passageway of that guard strip 47.

As further shown in Fig. 2, a fabric liner or bag 75 is provided for the lower box frame 21 to hold articles from falling out of the lower box frame 21. A similar outer covering is provided to encircle the outer or upper box frame 22, as illustrated in Fig. 5. The bag 75 and the outer coverings 76 may be made of light weight canvas material which may be removed for cleaning. The provision of the bag 75 and the outer cover 76 together with the top cover 25 serves to enclose the entire basket structure to protect any of the articles within the basket from dust, external dirt and rain.

When the basket bag is to be used to carry only a small number of packages, it is not necessary to extend the basket to its full height. Under such conditions the upper basket is in its lower telescoped position over the inner basket 21. In that position the upper or outer basket 22 may be locked to the inner basket 21 by a simple spring biased latch pin 80, that is adapted to fit into an opening 80-a in the lower bail 62 of the handle when the handle is lowered to its internal position. The upper bail of the handle may then be utilized as a carrying handle for the entire basket. When the lower bail 61 is held in its lowered position by the anchoring pin 80, as shown in Fig. 11, the expansion mechanism 23 serves as the connecting means between the outer basket 22 and the inner basket 21, to prevent their separation.

The connecting pin 80, shown in Fig. 11, comprises the pin 80, a casing 81 therefor, a biasing spring 82 disposed between a cross piece on the pin 80 and the inner surface of the supporting wall of a bracing strip 84, as shown in Fig. 6. A small operating knob 85 permits the spring bias pin 80 to be operated to release the handle bail 61 or to anchor that bail in the lowered position.

The ears 48, shown on the top and bottom end connecting strips of the outer frame 22 serve as the means for connecting the strap 29 to the outer frame 22 so that the basket may be carried by the strap as a shoulder supported strap.

The cover 25, as shown in Fig. 3, consists of a top section 90 with a hinge 91 along the front edge, and aprons 92, 93, and 94 along the back and side edges. Two slots 95 and 96 are provided adjacent the back edge 92 to provide clearance for the side arms 63 and 64 of the lower bail 61, in elevated position, and for the top links 55, depending on how high the links 55 are pivoted on the side arms 63 and 64, and how high the side arms rise above their pivots 61-a. Two slots 96 and 97 in the side aprons 93 and 94 provide clearance for the cover over the upper side ears 48 for the shoulder strap 29. A cen-

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tral slot 98 provides space for the top bail 62 of the handle 24 when the lower bail 61 is latched in lower position under the cover, by the latch pin 85 in slot 80-a in the lower bail 61.

The invention is not limited to the specific details that are illustrated here in the drawings, since modifications may be made therein as desired, without departing from the spirit and scope of the invention, as defined by the claims.

I claim:

1. A shopping basket comprising an outer frame having front and rear sides and an open bottom, an inner frame adjustably connected to the outer frame and movable in and out of the bottom of said outer frame, said inner frame having supporting wheels connected to its bottom, lazy tong means connected between the front side of the outer frame and the inner frame, a bail having arms pivotally connected to the front side of the outer frame, said lazy tong means having a tension pull member pivotally connected to the bail removed from the pivotal connection with the front side of the frame, said bail being pivotable upwardly and out of the top of said outer frame to serve as a handle to pull or push the shopping basket when extended out of the top of the outer frame and against the front side thereof, and means for retaining the bail in the lowered and raised positions.

2. A shopping basket comprising an outer frame having front and rear sides and an open bottom, an inner frame adjustably connected to the outer frame and movable in and out of the bottom of said outer frame, said inner frame having supporting wheels connected to its bottom, lazy tong means connected between the front side of the outer frame and the inner frame, a bail having arms pivotally connected to the front side of the outer frame, said lazy tong means having a tension pull member pivotally connected to the bail removed from the pivotal connection with the front side of the frame, said bail being pivoted upwardly and out of the top of said outer frame to serve as a handle to pull or push the shopping basket when extended out of the top of the outer frame and against the front side thereof, an upper bail of less length than the one bail and pivotally connected to the top of the one bail, a cover hinged to the rear side of said upper frame and having an elongated slot intermediate thereof for receiving the upper bail when the lower bail is moved inwardly to retract the inner frame whereby to provide a handle for said shopping basket when the inner frame is retracted, said cover having notches on the front edge thereof for receiving the arms of the one bail to lock the one bail in its pivoted position against the front side of the outer frame and in a position to push or pull the shopping basket.

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