

July 31, 1951

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2,562,686

RETRACTABLE LUGGAGE CARRIER

Original Filed Aug. 21, 1948

2 Sheets-Sheet 1

Fig. 1

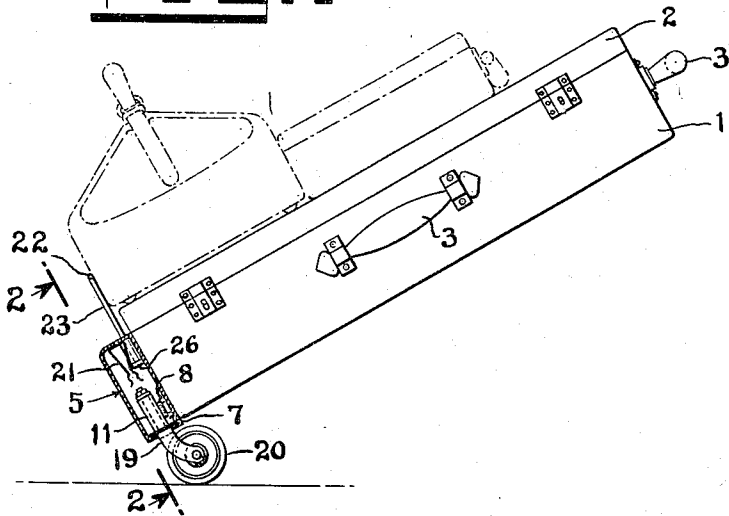


Fig. 2

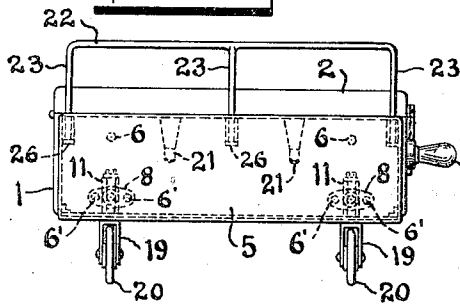


Fig. 3

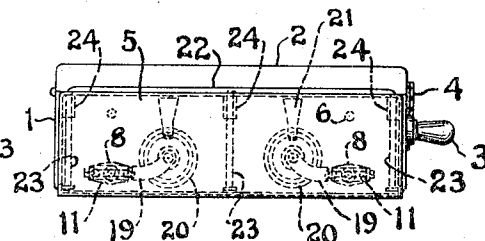
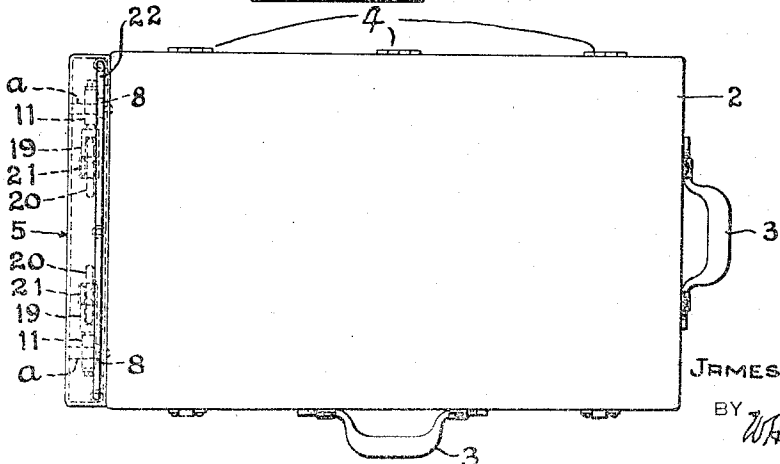


Fig. 4



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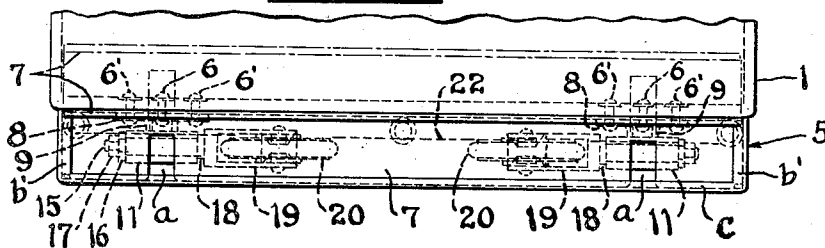
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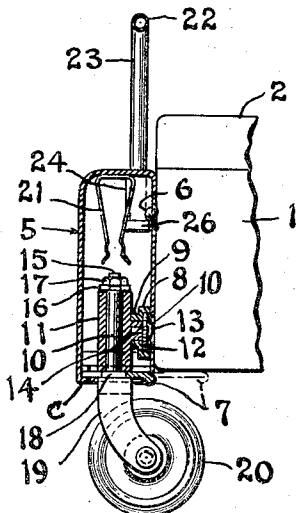
Original Filed Aug. 21, 1948

2 Sheets-Sheet 2

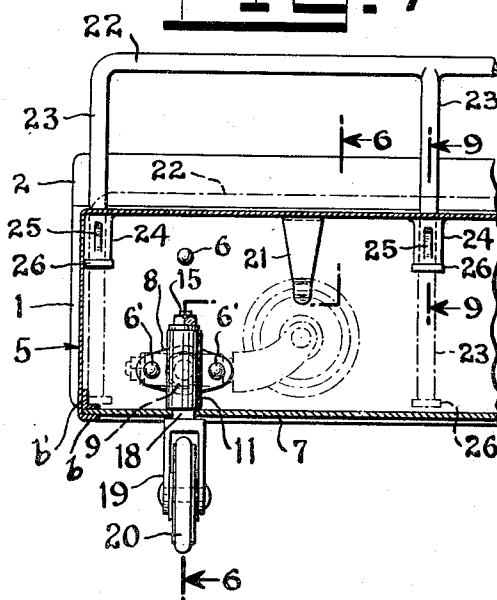
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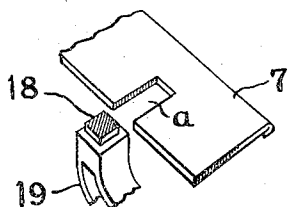
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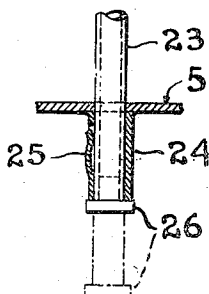
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2,562,686

RETRACTABLE LUGGAGE CARRIER

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Substituted for abandoned application Serial No. 45,490, August 21, 1948. This application November 23, 1949, Serial No. 129,161

5 Claims. (Cl. 280—38)

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This invention relates to attachments for luggage such as bags of various types, suit cases and the like, for rendering the same readily transportable along station platforms, streets and elsewhere on wheels carried by such luggage and normally concealed therein.

Among the objects of the invention are the provision of an attachment for the aforesaid purposes, having collapsible wheels which can be permanently installed on such luggage at a small expense, and which attachment is compact, cheap, sturdy and equipped with wheels that are conveniently accessible when it is desired to utilize the same for the transportation of the luggage equipped therewith. Other objects of the invention are hereinafter set forth.

My invention is fully set forth in the following detailed description thereof and accompanying drawings forming a part thereof in which latter:

Figure 1 is a side elevation of a suit case equipped with such attachment showing the same elevated and being utilized as a luggage carrier;

Figure 2 is an end elevation of such carrier taken on the line 2—2 of Figure 1 but with the extra luggage removed;

Figure 3 is an end elevation generally similar to that shown in Fig. 2 but showing the wheels lying in a folded position within the housing of such attachment;

Figure 4 is a plan view of the luggage carrier when in the position shown in Fig. 3;

Figure 5 is a fragmentary plan view from below of the luggage carrier in the position shown in Fig. 3;

Figure 6 is a fragmentary vertical section taken on the line 6—6 of Fig. 7;

Figure 7 is a fragmentary vertical section taken just inside the end face of the luggage carrier housing;

Figure 8 is a perspective view, partially in section of the slidable bottom closure of the housing; and

Figure 9 is a fragmentary vertical section taken on the line 9—9 of Fig. 7.

Referring to the drawings and the construction illustrated therein, the reference numeral 1 designates the body of a suit case equipped with my improved luggage carrier; 2 the hinged top

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thereof, 3, 3' the top and end handles, respectively, and 4 the hinges thereof.

The luggage carrier proper comprises a sheet metal or composition plastic, U-shaped housing 5 which is secured to the front end of the suit case by rivets 6 and which supports a slidable bottom plate or cover 7, having marginal slots *a*, which fits into grooves between bottom flanges *b* on the sides of the housing and the lower faces of angle guides *b'* on the end walls of the housing and normally rests on the bottom flange *c* on the front of the housing.

Oval retainer plates 8 are secured to the rear wall of the housing and the front end of the suit case by additional rivets 6', said plates having hollow bosses 9 which serve to snugly embrace projecting lugs 10 carried by tubular supporting members 11 and which lugs 10 are rotatably held within said bosses 9 by washers 12 which rest on the rear faces of the bosses 9 and locking screws 13.

Axles 14 are mounted within the supports 11, the same being threaded on their upper ends 15 and being locked in said supports by means of washers 16 and nuts 17, which latter are threaded on said ends 15. The axles 14 have shoulders 18 of square cross-section at their lower ends. They each carry a forked wheel support 19 which is welded or otherwise rigidly secured thereto. The said marginal slots *a* on the slide member 7 are of a size to snugly receive the said square portions or shoulders 18 of the said axles and prevent the rotation or turning thereof when the fork 19 and slide 7 are in the position shown in Fig. 1. Wheels or casters 20 are rotatably mounted in the forks 19 and spring clips 21 depending from the top of the housing serve to engage the said wheels when in the retracted position shown in Fig. 3.

A skeleton frame of steel tubing comprising a cross bar 22 and depending hollow legs 23 is slidably mounted in tubular sockets 24 carried by said housing 5, said sockets being slitted to form longitudinal strips that are bent into curvilinear spring fingers 25 which frictionally engage the legs 23 and serve to maintain the frame in any adjusted position. Flanged plugs 26 are tightly fitted in the lower ends of said legs, the same serving as stops to limit the outward movement of the said frame upon the engagement of the

flanges on said plugs with the bottom of the tubular sockets 24.

The luggage carrier constitutes a permanent attachment for an article of luggage, such as a rectangular suit case, trunk or the like. Normally, the forked shanks carrying the wheels 20 are caused to assume a folded position within the housing 5 as shown in Figs. 3-5, the same being retained in such position and prevented from rattling by the spring clips 21. The slidable cover 7 is normally in the closed position shown in Fig. 6.

When it is desired to operate the luggage carrier, the slide 7 is pulled out until it assumes the dash-and-dot line position shown in Fig. 6, thus uncovering the bottom of the housing and admitting of the swinging of the forked shanks 10 and the wheels 20 carried thereby into the potentially operative position shown in Figs. 1, 2 and 6 merely by exerting a sufficient pull on the forks to withdraw the wheels from engagement with the clips 21 and into the position shown in Fig. 6. The slide 7 is then returned to the solid line position shown in Figs. 5 and 6 in which position the sides of the slots *a* will snugly engage the shoulders 18 on said shank members and prevent rotation of the supports 11 in which the axles 14 are mounted, as aforesaid, thereby locking said forks in the positions shown in Fig. 6.

If it be desired to carry additional luggage, the cross-bar 22 of the skeleton frame is gripped with the hand and elevated to the desired adjusted position and the extra luggage such as the bag and small overnight case shown in Fig. 1, are then loaded onto the top of the suit case by the traveler in such a position that the bag rests against the said cross-bar 22 which has been so elevated. When the luggage carrier is in an operative position, such as shown in Fig. 1, the same can be readily manipulated by means of the handle 3' and transported to any desired location with but a minimum of weight being borne by the arm or arms of the traveler pushing or pulling the same and when the carrier is not in use it is effectively concealed and adds but little bulk or extra weight to the luggage equipped therewith.

If the slide 7 is arranged so as to slide away from instead of toward the suit case, then the housing 5 can be mounted somewhat higher on the end wall of the suit case so that the bottom of the housing will be flush with the bottom of the suit case when positioned as shown in Fig. 6.

Various modifications of the within described construction of luggage carrier may be made without departing from the spirit of the invention as embraced within the scope of the appended claims.

This application is a substitute for the abandoned application, Ser. No. 45,490, filed by applicant on August 21, 1948.

Having thus described the invention, what I claim and desire to secure by Letters Patent is:

1. In a luggage carrier, the combination, comprising a clothing receptacle of rectangular cross-section, having wide side faces and narrow top, bottom and end faces, a housing secured to one of the end faces thereof having a bottom opening lying in a plane parallel to that of a side face of the receptacle, a slidable closure member for said opening tubular supports pivotally mounted within said housing, a forked shank member pivotally mounted within each such support, the axis of rotation of each such shank member extending normal to that of the support in which

such shank member is mounted, and lying perpendicular to the planes of the side faces of said receptacle, a roller member mounted in the fork of each shank member, means for locking each support against rotation within said housing when the pivot of the shank member mounted therein lies in an upright position within said housing and separate means for maintaining each such support in a prone position within said housing when said forks and the rollers carried thereby are lying wholly within the housing, a retractable rack member carried by said skeleton housing and slidable in a plane normal to the planes that include the side faces of said receptacle, friction means for holding said rack member in any adjusted position and a handle mounted on one of the outer end faces of said receptacle.

2. In a luggage carrier, the combination with a storage receptacle, as a suit case, small trunk and the like of rectangular cross-section having relatively wide side faces and narrow top, bottom and end faces, of a housing member also of rectangular cross-section whose main side faces are substantially of the same size and shape as that of an end face of such receptacle and to which said housing is secured, said housing having an elongated bottom opening that is in a plane substantially parallel to the planes of the side faces of the receptacle, a slidable closure for said opening supported by said housing, a pair of swiveled support members mounted within said housing and rotatable about axes in parallelism with planes that include the side faces of the receptacle, forked shank members pivotally mounted on said support members and each having wheels rotatably mounted between the forks thereof, said shanks and wheels carried thereby being completely retractable within said housing and also projectable therefrom and separate means for locking said shank members against rotation on the last mentioned axes when the wheels are either in their lowermost position or in their retracted position.

3. In a luggage carrier, the sub-combination comprising a storage receptacle such as a suit case or trunk of rectangular cross-section having relatively wide side faces and relatively narrow top, bottom and end faces, a housing, also of rectangular cross-sections, secured to an end face of said receptacle, swiveled tubular support members mounted on said housing and rotatable about axes that are parallel to planes that include the said side faces of the receptacle, forked shank members pivotally mounted in said support members and rotatable therein about axes that are normal to the last mentioned axes, wheels rotatably mounted in said forked shank members which are optionally projectable from and retractable into said housing, means for locking said support members against rotation when the wheels are projected from said housing and a rack member optionally projectable from and retractable substantially entirely into said housing for serving as an abutment to retain extra baggage on said receptacle while the latter is being transported on said wheels.

4. In luggage carrier, the sub-combination comprising a storage receptacle of rectangular cross-section having relatively wide side faces, relatively narrow top, bottom and end faces, a rectangular housing, having a side face generally of the size and shape of an end face of said receptacle and rigidly secured thereto, swiveled support members mounted within said housing

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and rotatable about axes parallel to the planes which include the side faces of the receptacle, forked shank members pivotally mounted in said support members and rotatable about axes normal to the latter axes, wheels rotatably mounted adjacent the bottom of the forks of the shank members, means for optionally locking said support members against rotation and a retractable rack carried by said housing adapted, when projected therefrom, to serve as an abutment to retain baggage on one of the flat sides of the receptacle during the transportation of the latter on said wheels.

5. In a luggage carrier as claimed in claim 4,

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wherein said rack constitutes a tubular skeleton frame and friction means are provided to retain the same in any position to which the same may be adjusted.

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