

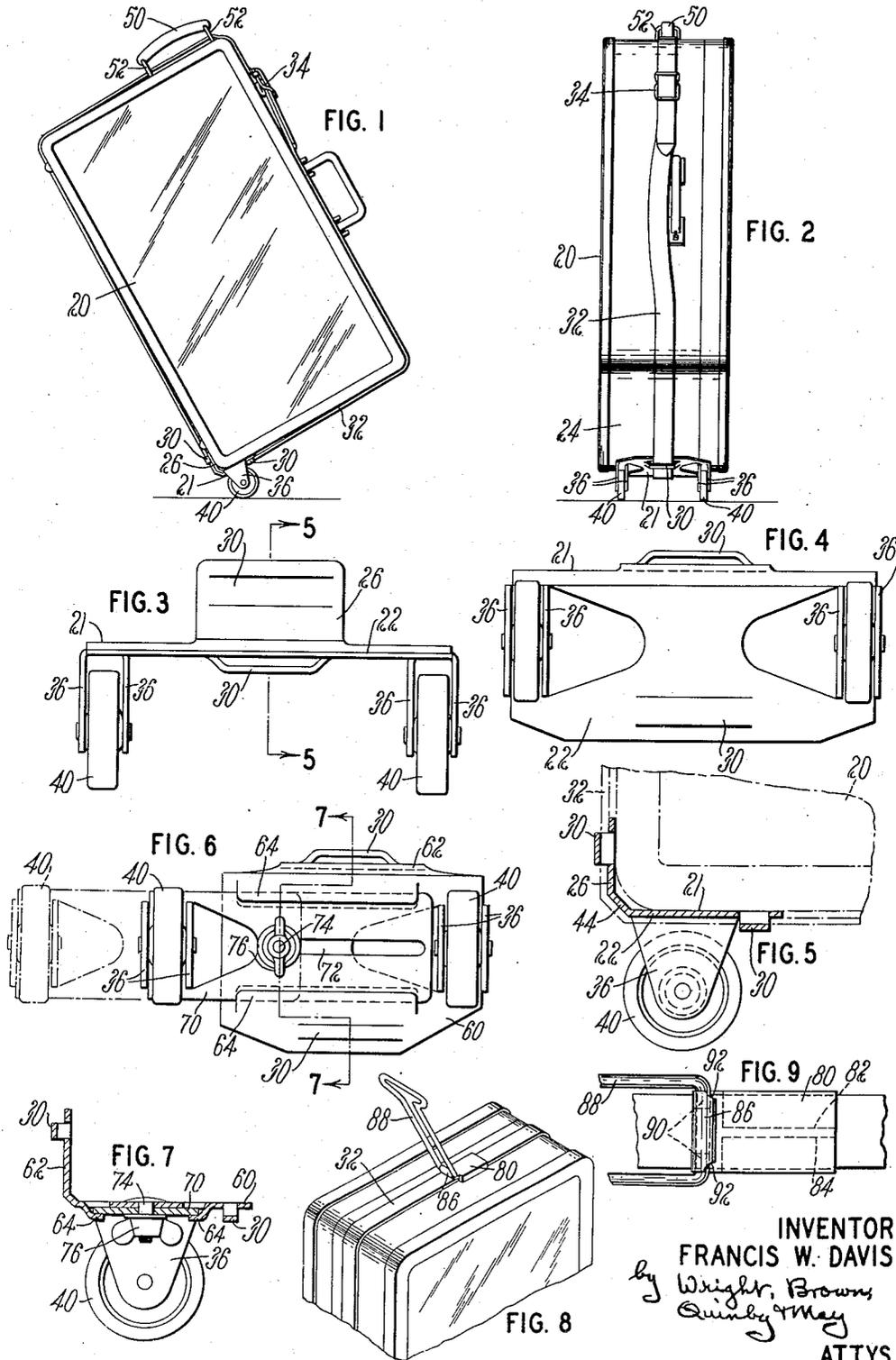
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CARRIAGE FOR SUITCASE OR THE LIKE

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CARRIAGE FOR SUITCASE OR THE LIKE

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1 Claim. (Cl. 280—47.13)

This invention relates to a carriage for facilitating the manual transportation of rectangular objects such as suitcases or the like. It is often desirable to support the weight of a piece of baggage on wheels for such transportation. Various wheeled devices have heretofore been constructed for this purpose. It is an object of the present invention to provide a wheeled structure which can readily be attached to and detached from a suitcase or another equivalent object without the use of tools, which is simple and relatively cheap to manufacture and which does not interfere with the opening and closing of the suitcase itself when the device is in operative position.

As hereinafter more fully described, the carriage embodying the present invention may be made of one or two sheet metal stampings adapted to rest against a corner edge of a suitcase and to be held in position by a suitable strap which passes around the periphery of the suitcase, that is, the ends and narrow sides thereof. In its simplest form, the carriage may be made of one sheet metal stamping bent so that two portions thereof are at right angles to each other. Ears are struck up from one of these portions to lie in planes which are perpendicular to the planes of both portions. Wheels are journaled between pairs of these ears to support the weight of the suitcase. A handle is mounted on the strap at a point remote from the carriage so as to facilitate the trundling of the carriage with the suitcase thereon.

For a more complete understanding of the invention, reference may be had to the following description thereof and to the drawing of which—

Figure 1 is an elevational view of a suitcase having a carriage and handle attached thereto, the suitcase being shown in the position it occupies when being supported;

Figure 2 is an elevation of the same, viewed from the right as it appears in Figure 1;

Figure 3 is an elevation of the carriage itself, on a larger scale;

Figure 4 is a bottom plan view of the carriage shown in Figure 3;

Figure 5 is a section on the line 5—5 of Figure 3;

Figure 6 is a plan view of a modified form of the invention;

Figure 7 is a section on the line 7—7 of Figure 6;

Figure 8 is an isometric view of a portion of a suitcase having a strap thereon to which is attached a modified form of handle; and

Figure 9 is a fragmentary plan view of the handle shown in Figure 8, on a larger scale.

Figures 1 and 2 illustrate a conventional suitcase 20 on which is mounted a carriage 21 embodying the invention. In the following description of a suitcase, it will be thought of as resting flat in the position it always occupies when it is being packed or unpacked. Thus the broad face on which it rests is referred to as the bottom, the narrow peripheral faces as the front, rear and end walls, and the other broad face as the top, the latter being part of the cover which is always hinged to the rear wall, the hinge axis being below the level of the top. The carriage comprises a single piece of stiff sheet metal including a body portion 22 adapted to rest against an end surface 24 of the suitcase 20 at a rear corner thereof. The carriage also includes a lateral extension 26 bent up from a side edge of the body portion 22 in a plane perpendicular to the plane of the body portion. This extension 26 is adapted to bear against the rear surface of the suitcase just around the corner from the end surface 24. The body portion 22 and the extension 26 are each

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provided with a loop 30 struck up from the planes thereof sufficiently to receive a suitable strap or belt 32. This strap is passed around the entire periphery of the suitcase and is tightly secured by means of a suitable buckle 34 so as to hold the carriage firmly on a corner of the suitcase.

At each end of the body portion 22 of the carriage, a pair of ears 36 are bent down into parallel planes each of which is perpendicular to the planes of the body portion 22 and of the extension 26. The ears 36 of each said pair are suitably spaced to support between them a wheel 40 suitably journaled near the ends thereof. The axis of rotation of these wheels is thus parallel to the planes of the body portion 22 and extension 26 of the carriage. As is indicated in Figure 1, the ears 36 are so arranged that when the carriage is secured in place on the suitcase, the ears and wheels carried thereby will project from the end face 24 of the suitcase and will be clear of the floor or other supporting surface when the suitcase is set on such floor in the usual manner, that is, on its rear surface. The body member 22 of the carriage is preferably of such length that the wheels 40 at its ends will be between the planes of the broad (i. e. the top and bottom) faces of the suitcase, as indicated in Figure 2, but will provide a sufficient wheel base for reasonable lateral stability of the suitcase when it is being wheeled.

The lateral extension 26 is cut away so as to avoid interference with the rim of the cover at the rear of the suitcase which swings outward when the suitcase is opened. Hence the suitcase can be opened and shut without removing the carriage or the strap which hold it on. Thus the suitcase can be laid on its bottom and can be opened and closed when the carriage and its strap 32 are in operative position. Instead of the extension 26 making a sharp right angle with the body portion 22, two bends may be made in the sheet, these bends being separated by a narrow intermediate portion 44 as indicated in Figure 5. This connecting portion is preferably inclined at angles of 45 degrees to the body portion 22 and to the extension 26. A suitable handle 50 may be provided at the corner of the suitcase diagonally opposite the corner on which the carriage is mounted. This handle may be a conventional leather handle having a wire ring 52 at each end through which the strap 32 passes. This handle facilitates the trundling of the suitcase when in the position shown in Figure 1, in which position substantially all of the weight of the suitcase is carried by the wheels 40.

Since suitcases and other equivalent articles are made in several different sizes, it may be desirable to provide for adjustments of the carriage so that the spacing between the two wheels 40 can be increased or diminished in accordance with the thickness or small dimensions of the suitcase. For this purpose the body member of the device may be made in two separable parts as indicated in Figure 6. One of the parts comprises a body portion 60 having a loop 30 struck up therefrom to receive a strap, and a lateral extension 62 perpendicular thereto, this extension being substantially shorter than the body member when the latter is adjusted to its minimum length and also having a struck-up loop 30 as hereinbefore described. The part 60 has a pair of ears 36 bent up therefrom to support a rotatable wheel 40. The part 60 also has a pair of struck-up guide members 64 extending longitudinally and adapted to receive between them the other part 70 which is adapted to slide upon and telescope with the body portion 60 of the first part. The part 70 is provided with an elongated longitudinal slot 72 which extends along the mid-line thereof and registers with a hole through the body portion 60. A bolt 74 projects through the hole and the slot 72 and is provided with a wing nut 76 operable to clamp the two parts 60 and 70 together in any position of adjustment. The part 70 is provided with a pair of ears 36 carrying a wheel 40 in a plane parallel to the wheel carried by the part 60. By adjustably sliding the part 70 on the part 60, the spacing between the two wheels 40 can be increased or decreased as desired within the range of adjustment provided.

Some suitcases or articles of baggage which can be carried by the carriage herein described are somewhat smaller in size than the standard suitcase so that an ordinary handle such as that indicated at 50 in Figure 1 might be too low for convenient operation by the traveler.

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A modified form of handle is illustrated in Figures 8 and 9. As therein shown, a flat sleeve 80 is provided to fit on the strap 32. The sleeve 80 may readily be made from a sheet metal blank by bending the end portions of the blank back on themselves so as to form a flattened split tube. It is not necessary for the ends of the folded blank to meet each other so as to complete the tube, and it may be convenient to have such ends spaced apart as indicated at 82 and 84 in Figure 9. The sleeve 80 is provided with an extension at one end thereof which is curled back to form a tube 86 offset from the sleeve itself so as not to interfere with the strap 32 which passes through it. The handle member 88 is elongated and may be formed by bending a metal rod to the proper shape as indicated in Figure 8. This shape is a modified U with parallel legs having inturned end portions 90 which are adapted to enter the opposite ends of the tube 86. The handle member 88 is preferably stiffly resilient and is made so that the end portions 90 press toward each other when engaged in the tube 86. This tube is bevelled or notched at its ends as indicated at 92 in Figure 9. Thus when the handle member 88 is swung back so that it is parallel to the sleeve 80, the portions of the handle member adjacent to the end portions 90 press into these bevels 72 and resiliently retain the handle member in a position close to the end surface of the suitcase.

The devices hereinbefore described can quickly and easily be attached to any ordinary suitcase or the like and can quickly and easily be detached therefrom.

I claim:

A carriage for a suitcase comprising a body member of rigid sheet metal having an elongated rectangular portion adapted to be mounted against an end surface of a suitcase adjacent to a corner edge, the width of said rec-

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tangular portion exceeding the depth of the suitcase when open, a lateral extension on said rectangular portion bent up at right angles thereto and adapted to bear against the rear surface of said suitcase adjacent to said corner edge, a pair of ears bent down from said rectangular portion at each end thereof, and a wheel rotatably mounted between each pair of said ears to rotate on a common axis, said wheels being below and entirely within the lateral confines of said rectangular portion, said extension being cut away to avoid interference with the cover of the suitcase, whereby the suitcase can be opened when said carriage is mounted thereon, and a strap extending across said rectangular portion and said extension and adapted to pass around the side walls of said suitcase to hold said carriage in place thereon.

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