Dec. 26, 1939. A. T. HAGERTY ET AL 2,185,078

COMBINATION BAGGAGE RACK AND LIGHTING FIXTURE

Filed Dec. 31, 1936 5 Sheets-Sheet 1

Fig. 1

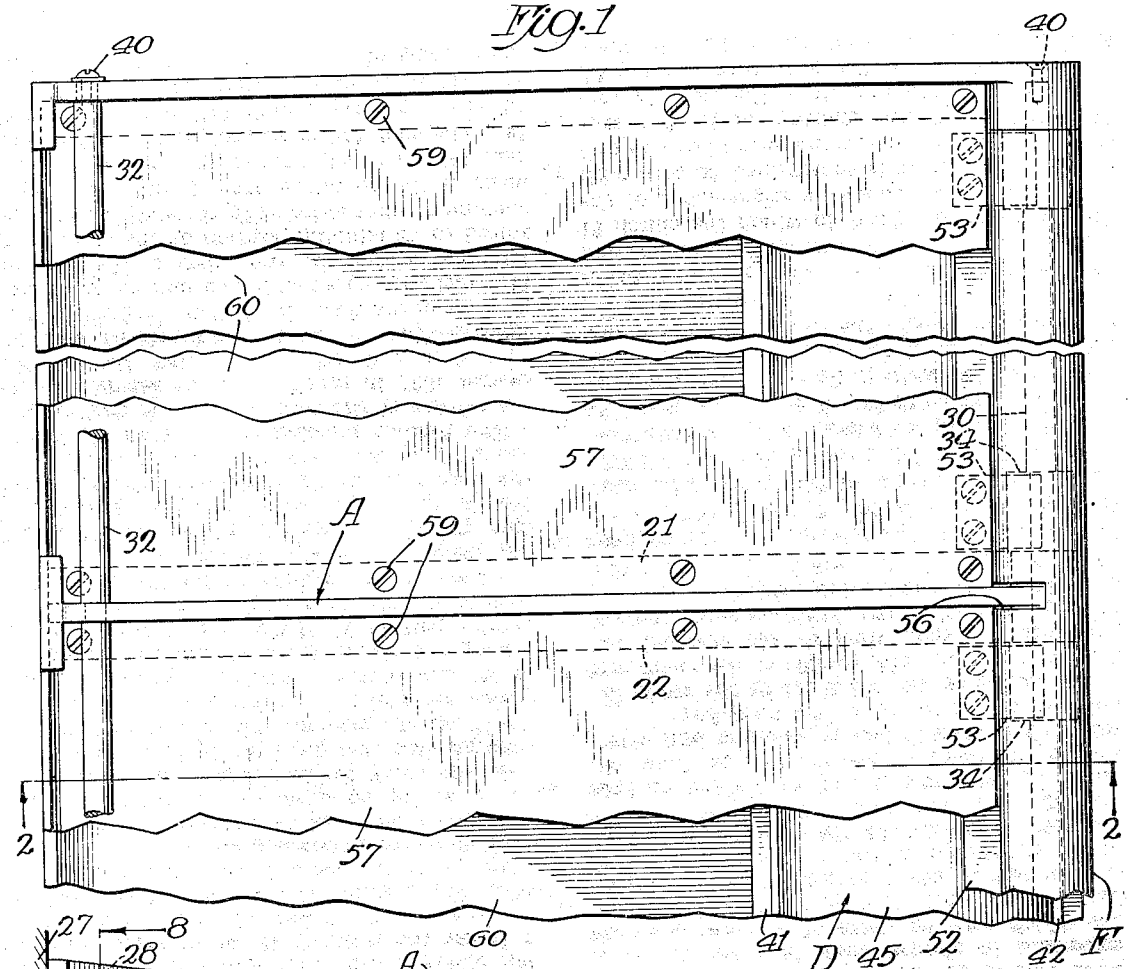


Fig. 2

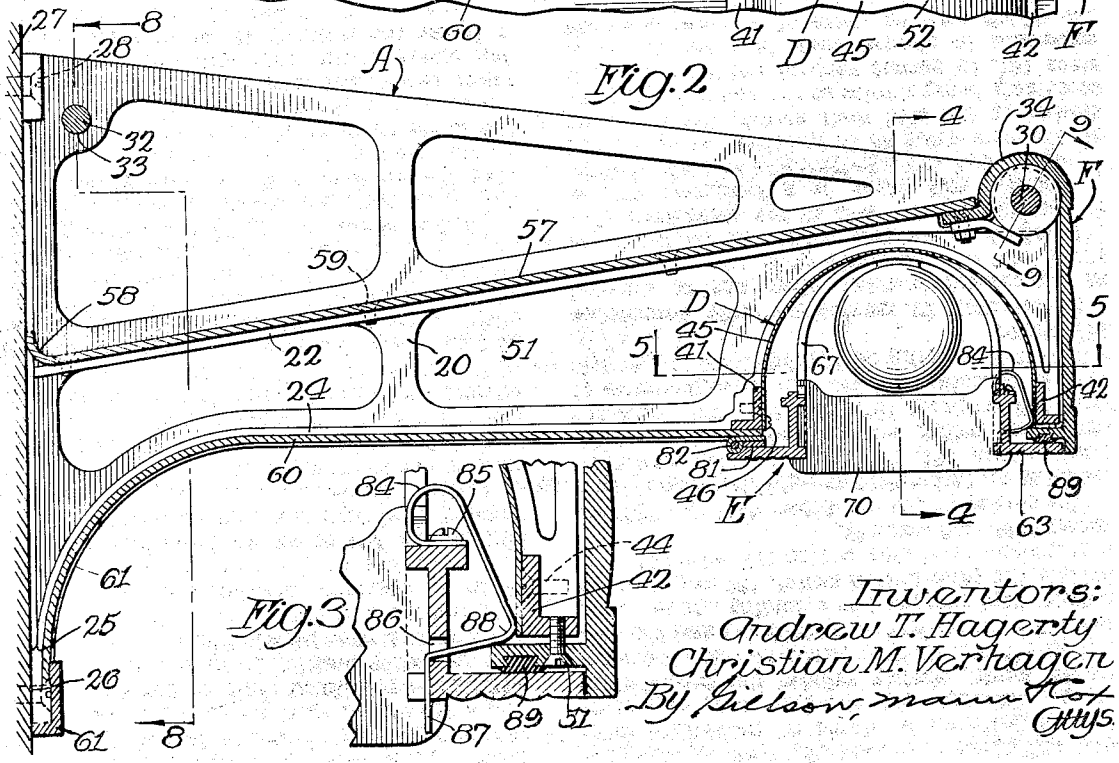


Fig. 3

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Filed Dec. 31, 1936 5 Sheets-Sheet 2

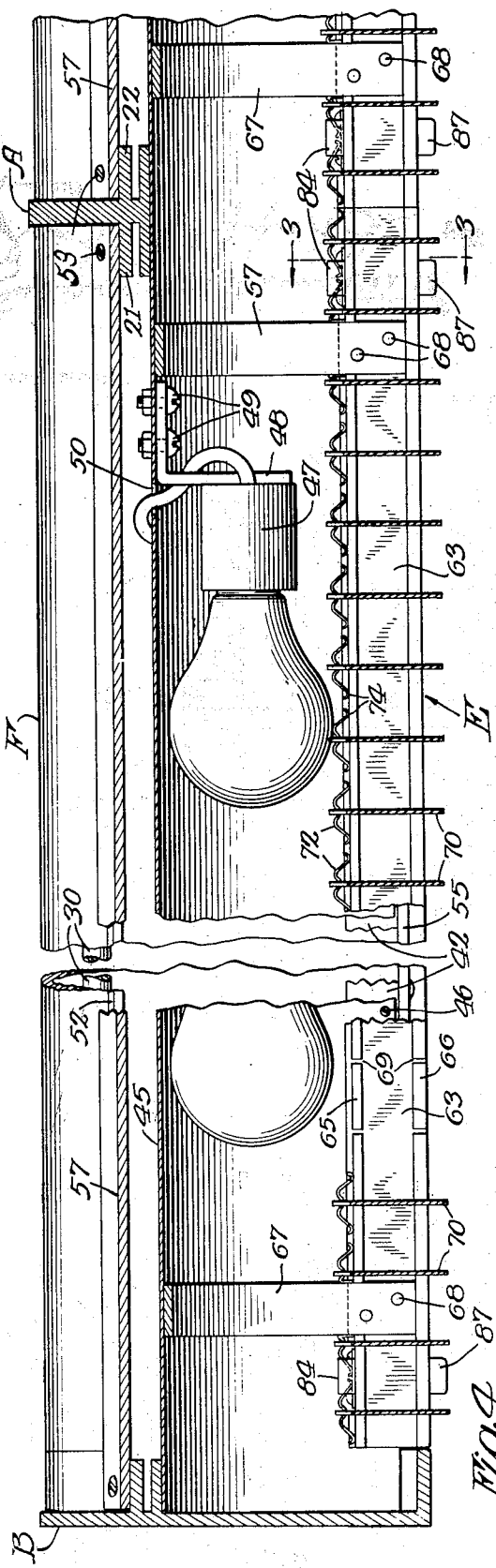


Fig. 4

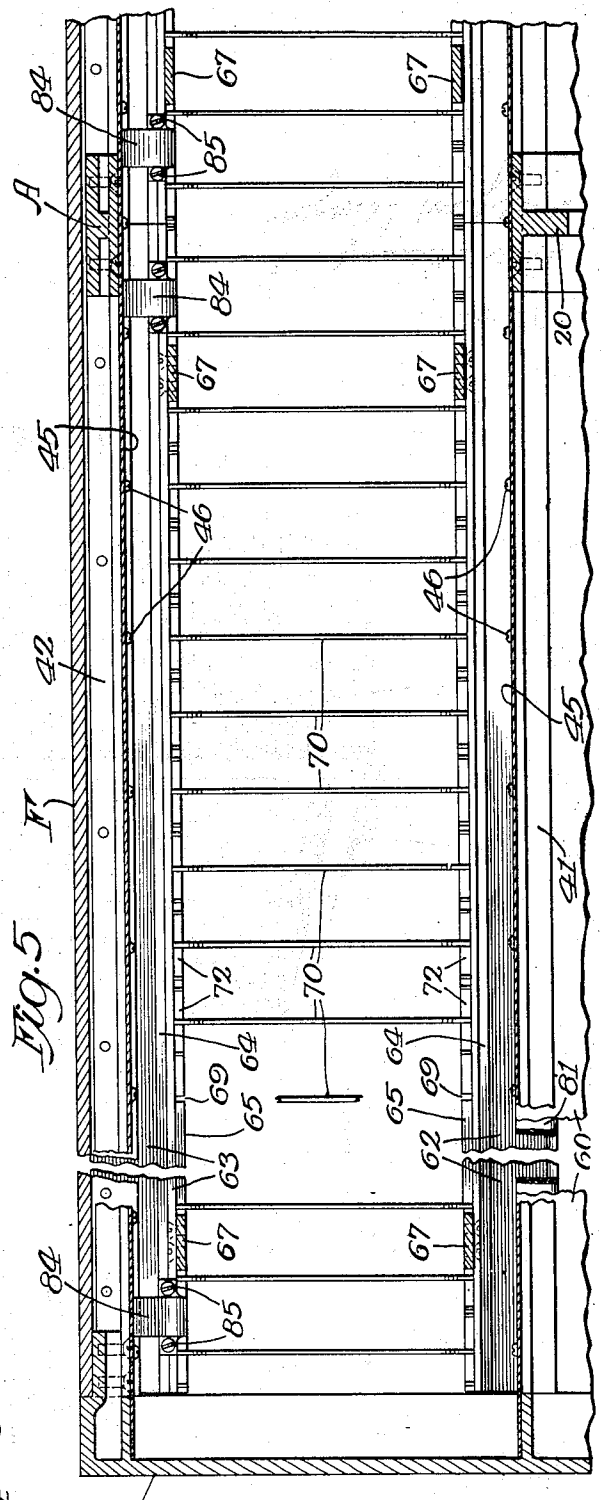


Fig. 5

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COMBINATION BAGGAGE RACK AND LIGHTING FIXTURE

Filed Dec. 31, 1936 5 Sheets-Sheet 3

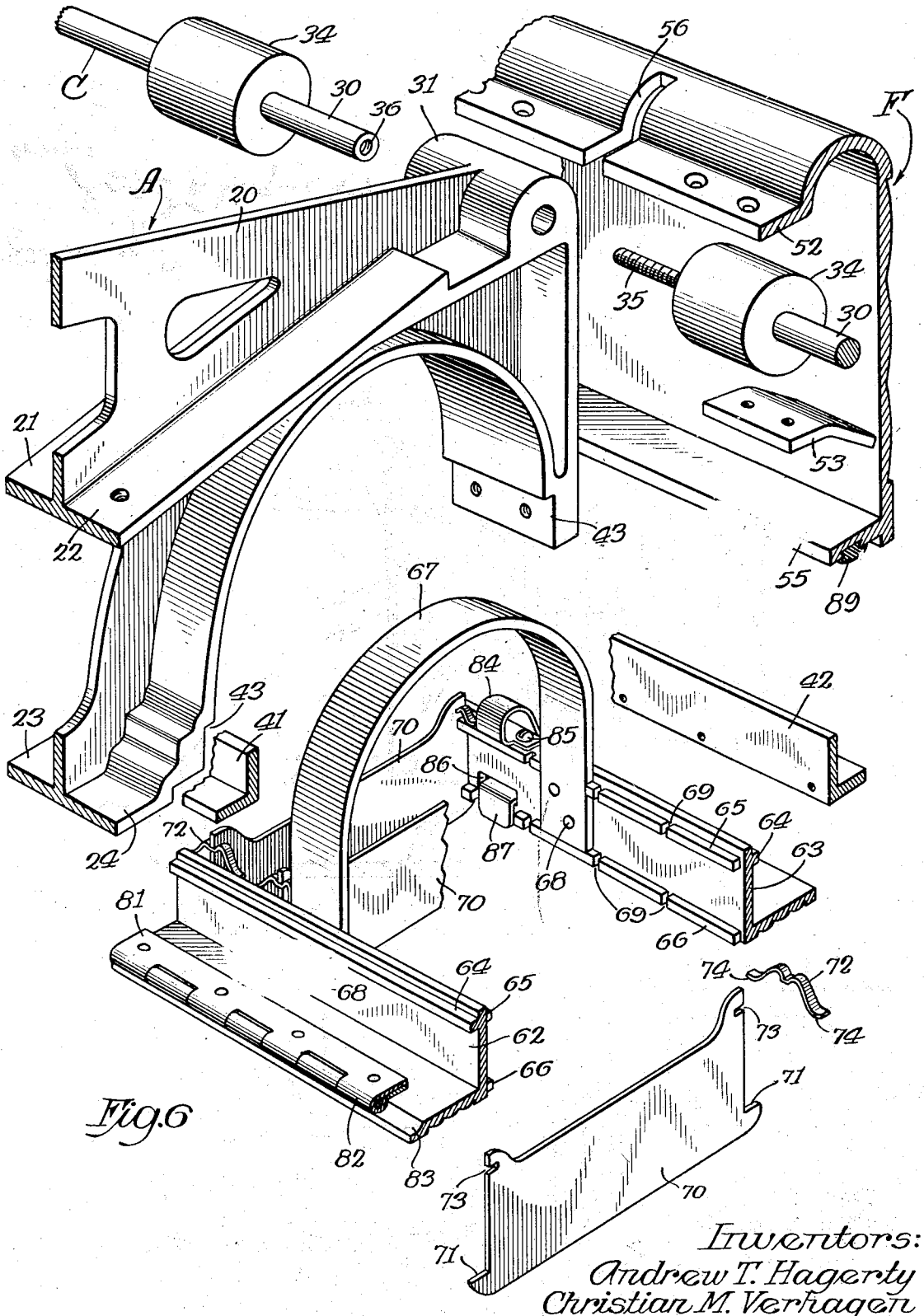


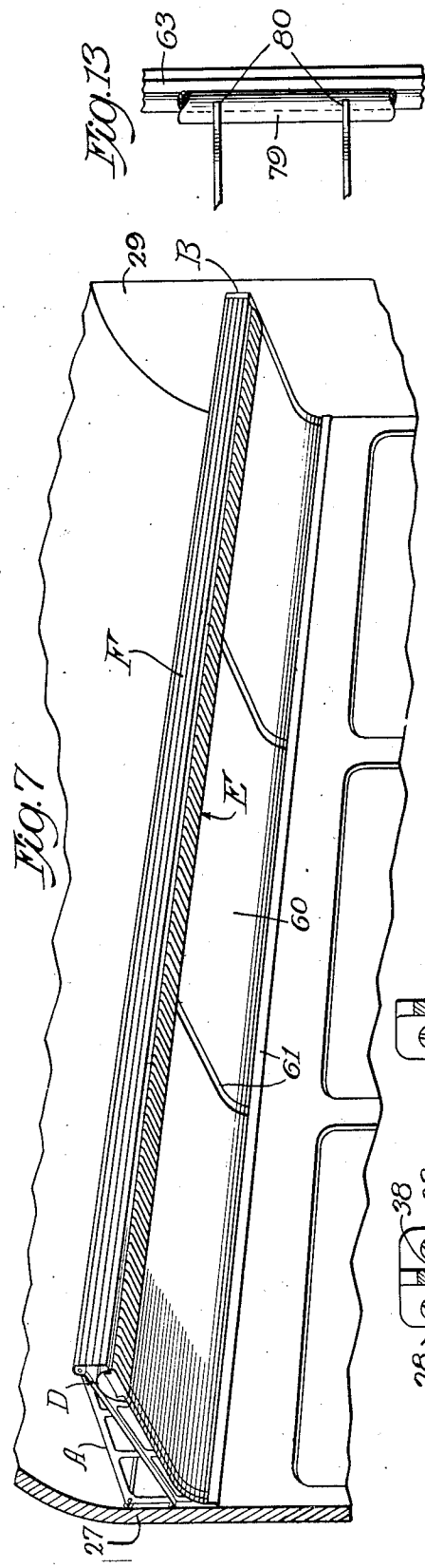
Fig. 6

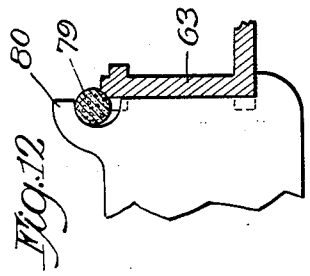
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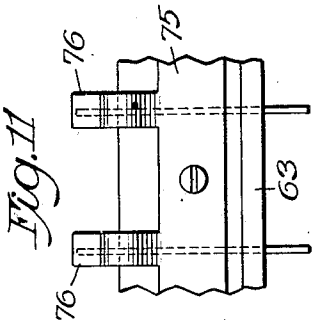
Dec. 26, 1939. A. T. HAGERTY ET AL 2,185,078

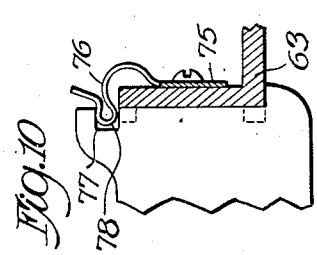
COMBINATION BAGGAGE RACK AND LIGHTING FIXTURE

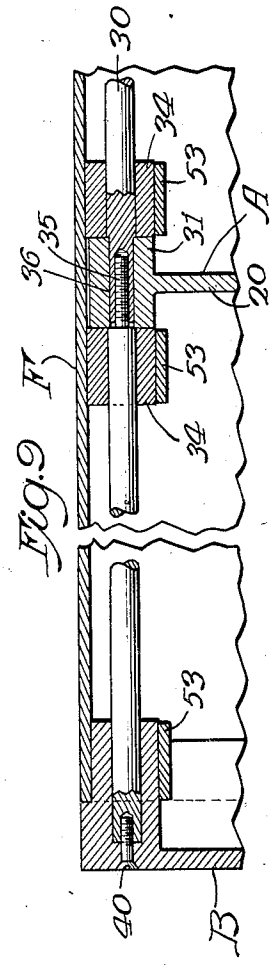
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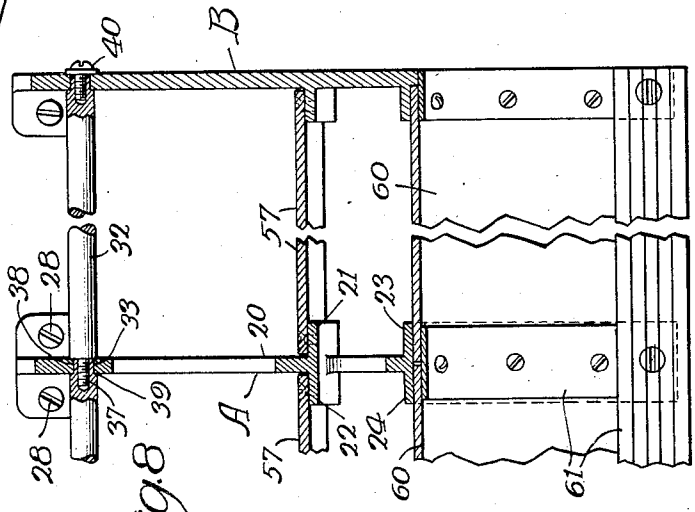












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Dec. 26, 1939. A. T. HAGERTY ET AL 2,185,078

COMBINATION BAGGAGE RACK AND LIGHTING FIXTURE

Filed Dec. 31, 1936 5 Sheets-Sheet 5

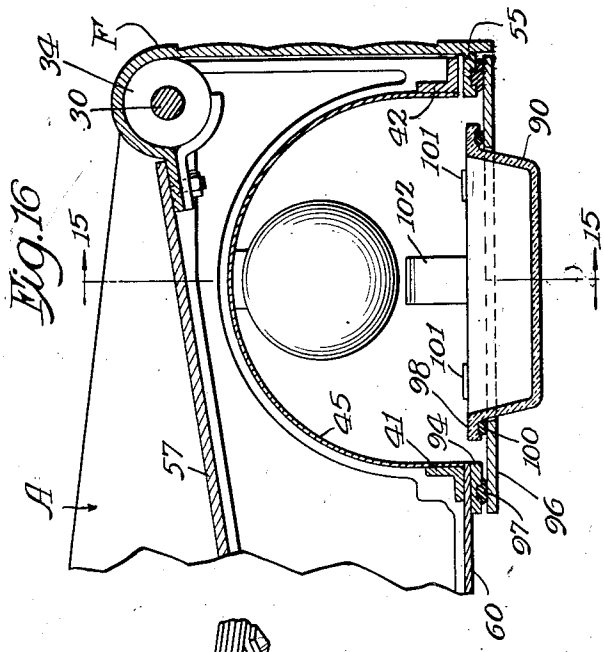


Fig. 16

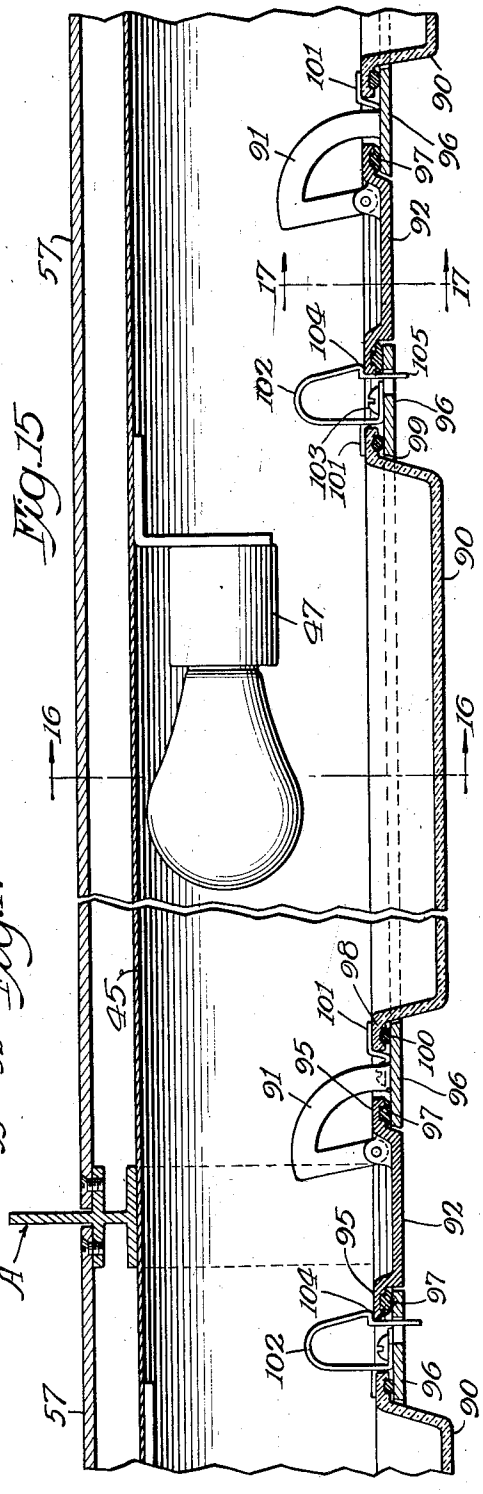


Fig. 15

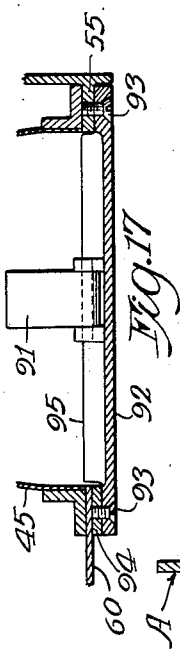


Fig. 17

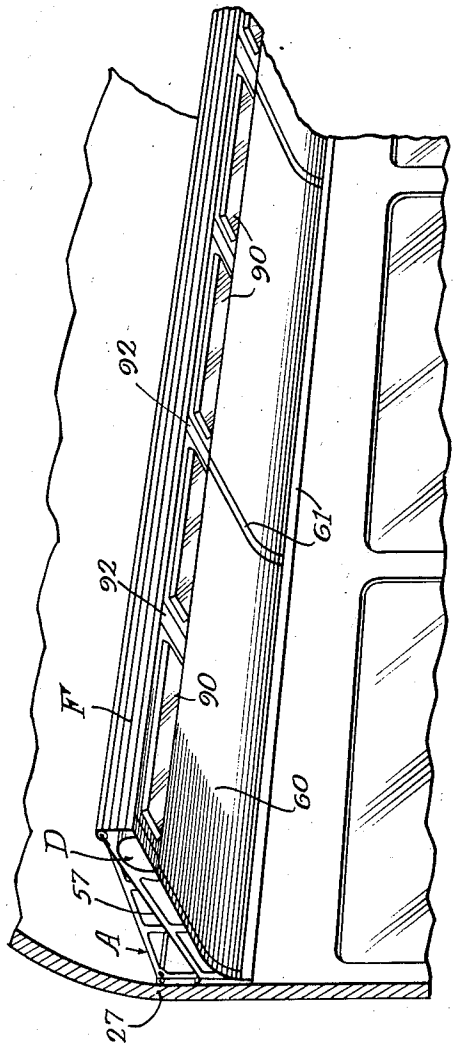


Fig. 14

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UNITED STATES PATENT OFFICE

2,185,078

COMBINATION BAGGAGE RACK AND LIGHTING FIXTURE

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Application December 31, 1936, Serial No. 118,580

5 Claims. (Cl. 240—7.1)

The principal object of this invention is to combine a baggage rack with a lighting fixture in such a way that the attractiveness and effectiveness of the lighting means more or less obscures the utilitarian function of the baggage rack, this object being accomplished by structure which may be manufactured at minimum cost and readily assembled and disassembled on the car.

Further and other objects and advantages will become apparent as the disclosure proceeds and the description is read in conjunction with the drawings, in which

Fig. 1 is a plan view of a preferred form of the invention with portions broken away;

Fig. 2 is a transverse sectional view taken on the line 2—2 of Fig. 1;

Fig. 3 is an enlarged, transverse, sectional view through the outer edge of the rack;

Figs. 4 and 5 are longitudinal, sectional views taken on the lines 4—4 and 5—5, respectively of Fig. 2;

Fig. 6 is a perspective view showing the principal structural elements and the manner in which they are assembled together;

Fig. 7 is a fragmentary, perspective view showing the combined baggage rack and lighting fixture installed in the car;

Fig. 8 is a vertical, sectional view taken on the line 8—8 of Fig. 2;

Fig. 9 is a detail sectional view taken on the line 9—9 of Fig. 2;

Fig. 10 is a fragmentary view showing one way in which the louvres may be resiliently held in place within the lighting trough;

Fig. 11 is a front elevational view of the louvre holding means shown in Fig. 10;

Fig. 12 shows another way of holding the louvres in place within the lighting trough;

Fig. 13 is a plan view of the louvre holding means shown in Fig. 12;

Fig. 14 is a fragmentary, perspective view showinng the application of a modified form of the invention to the interior of the car;

Fig. 15 is a longitudinal, sectional view through the modified arrangement of Fig. 14, the section being taken on the line 15—15 of Fig. 16;

Fig. 16 is a transverse, sectional view taken on the line 16—16 of Fig. 15; and

Fig. 17 is a sectional view taken on the line 17—17 of Fig. 15.

A preferred form of the invention and several modifications have been shown in the drawings and will hereafter be described, but it will be understood that the appended claims are not limited to the structure shown and should be construed as broadly as the prior art will permit.

The combined baggage rack and lighting fixture include a plurality of wall brackets A, end brackets B, connecting rods C which span the distance between brackets and form the baggage rack, a lighting trough D built into the outer margin of the rack, a hinged door assembly E which carries the light transmitting or light directing elements, and the finish molding F extending along the outer margin of the rack.

The wall brackets A are preferably cast in aluminum, and each comprises a vertical web portion 20 provided with laterally extending ledges 21, 22, and bottom flanges 23, 24, the latter curving downwardly adjacent to the inner margin of the bracket and terminating in an enlarged portion 25 adapted to receive one or more screws 26 for fastening the lower portion of the bracket to the wall 27. The bottom flanges 23 and 24 connect with a semi-circular portion (Figs. 2 and 6) adjacent to the outer margin of the bracket to form a part of the lighting trough. The top of the bracket is secured to the wall by one or more screws 28 passing through bosses which are cast integrally with the bracket.

The end brackets B are much the same as the wall brackets A, the principal difference being that there are no projecting flanges on one side of the vertical web 20 in order that the web may fit tightly against the end wall or bulkhead 29 of the car.

Since the end brackets and wall brackets are so nearly alike, similar reference characters will be used for corresponding parts.

The entire baggage rack assembly is divided into a plurality of sections, each of which is bounded at its sides by a wall or an end bracket. The sections are in a large measure independent of one another so that they may be individually removed for replacement or repair.

The brackets of each section are connected by a pair of rods C, one of which, 30, is joined to the corresponding rod of the adjacent section at the apertured lug 31 formed on the wall bracket, and the other rod of which, 32, is joined with the corresponding rod of the adjacent section through an opening 33 in the vertical web 20, as best shown in Fig. 8.

A convenient means for joining the rods 30 together is shown in Fig. 9 in which collars 34 are welded adjacent to the ends of the rods to act as spacers, and the projecting ends are machined to provide a threaded male portion 35 adapted to be screwed into a drilled and tapped female portion 36 of the adjacent rod. The collars 34

act as stops so that the two rods may be securely joined together and held in fixed position relative to the wall bracket.

In a similar manner, the back rods 32 of adjacent sections may be joined together, one rod being provided with a threaded male portion 37 and the other with a reduced drilled and tapped female portion 38, so that when the two rods are screwed together, the shoulders 39 rigidly hold the rods in fixed position relative to the bracket.

At the end brackets, the front and rear rods 30 and 32 are secured in place by screws 40, as best shown in Fig. 1.

After the brackets and rods have been put in place, the brackets are connected by angle bars 41 and 42 which fit into recesses 43 provided in the bottom flanges of the wall brackets so that the inside faces of the angles are flush with the semi-circular portion of the flanges 23 and 24. These angles are secured in place by any suitable means, such as screws 44, as best shown in Figs. 2 and 3. After the angles are in place, the reflector trough 45 is fastened in place, the trough being cut into lengths corresponding to the rack sections to facilitate assembling and disassembling the individual sections. The reflector may be secured in place by light screws, such as shown at 46 in Figs. 2 and 5.

A plurality of lamp sockets 47 are supported from the reflector trough by angle brackets 48 secured in place by nuts and bolts 49. The wires to and from the lamp sockets pass through openings 50 in the top of the trough and are then carried to the main conduits through the openings 51 in the wall brackets. Preferably, there are at least two lamps for each section of the rack.

The outside molding F is preferably an extruded aluminum piece and may have an ornamental design on its outside face. The top of the molding is curved inwardly with a radius that corresponds to that of the collar 34 and terminates in an inwardly extending flange 52 to which clips 53 are secured in the manner best shown in Fig. 2. The clips firmly hold the molding against the wall brackets and prevent rattling.

In applying the molding F, the upper curved portion is slipped over the collars 34 with the front portion held at an angle to the vertical. The molding is then swung about the collar to bring the face of the molding in a vertical position and the molding is then fixed in place by screws 54 which enter the bottom flange of the angle 42. Sufficient clearance is provided between the bottom flange of the angle and the inwardly extending flange 55 of the molding so that the molding can be swung into position. Slots 56 in the top of the molding accommodate the vertical web 20 of the wall brackets.

Each baggage rack section is provided with an aluminum floor plate 57 which rests on the laterally extending flanges 21 and 22, and on the inwardly extending flange 52 of the molding F. The inner margin of the plate is curved upwardly as indicated at 58. Suitable screws 59 secure the plates in place.

Finish sheets 60 of light metal or plyboard are secured to the bottom flanges 23 and 24 of the brackets. The pieces are held in place by finish strips 61, as best shown in Fig. 8.

The door assembly E, which preferably swings on a longitudinal axis, consists of opposed angles 62 and 63, preferably of extruded aluminum and provided with laterally extending flanges 64 and 65 adjacent to the top of the vertical web and an inwardly extending flange 66 adjacent to the bottom of that web. The angles are held in spaced relation by a plurality of arches 67 held in place by screws 68. The inside flanges 65 and 66 of the angles 62 and 63 are milled with regularly spaced vertically alined slots 69 adapted to receive louvres 70 preferably of the form shown in Fig. 6. The louvres are inserted from the bottom through the slot 69 until the shoulders 71 strike the bottom flange of the angles and then retaining spring clips 72 are inserted in the slot 73 of the louvres to hold them resiliently in place, the feet 74 of the spring clips resting on the ledges 65 of the angles 62 and 63. The resilient mounting of the louvres prevents them from rattling and still permits them to be replaced in case of damage.

Another method of securing the louvres in place is shown in Fig. 10 in which a strip 75 of resilient metal, such as light steel, is secured to the outside faces of the angles 62 and 63. The strip 75 is provided with a plurality of upstanding fingers 76 of the form shown, so that when the louvre is pushed upwardly between the angles 62 and 63, the spring fingers hold the louvres in place. When a retaining strip such as the strip 75 is used, the slots 77 are of an appropriate size to receive the inwardly extending portion 78 of the fingers.

Another means for resiliently clamping the louvres in place is shown in Figs. 12 and 13, in which a rubber strip 79 is forced between the upper edge of the channel and the fingers 80 of the louvres.

The door assembly is swung about a longitudinal axis on a concealed hinge 81, the pintle 82 of which seats within a groove 83 formed in the horizontal flange of the channel 62. The door is held in closed position by any suitable means, as for example, a spring latch 84 fastened by screws 85 to the ledge 65 of the channel 63 and having its free end extending through an opening 86 in the vertical wall of the channel with a portion projecting downwardly as indicated at 87 for permitting the latch to be operated. The edge 88 of the latch snaps over the inwardly extending flange 55 of the molding F when the door is being closed, so that movement of the latch to the left (Fig. 3) will release the door.

In order to prevent the door assembly from rattling, the horizontal web of the angle 62 may rest against a rubber strip 89 which is dovetailed into the flange 55 of the molding F.

In the modified form of the invention shown in Figs. 14–17 inclusive, the door assembly carries a light transmitting bowl 90 and is hinged on a transverse concealed hinge 91 of quadrant form (Fig. 15) supported on a transverse plate 92 secured by screws 93 to a flat bar 94 extending along the inner margin of the lighting trough and to the flange 55 of the molding F at the outer margin of the trough. Each of the transverse plates 92 have offset flanges 95 to permit the door 96 to be flush with the face of the plate 92. Sound insulating rubber strips 97 are dovetailed into the flanges 95 of the transverse plates 92, the bar 94 and the flange 55 of the molding F to insure against rattling of the door.

The bowl 90 has laterally extending flanges 98 which overlap and rest upon the margin of the openings 99 in the door 96. A rubber gasket 100 is interposed between the flanges 98 and the door to prevent rattling and the bowl is held in place by a plurality of clips 101 suitably fastened to the door 96.

A spring latch 102 is fastened by screws 103 to the free end of each door, and a shoulder 104 on the latch engages the adjacent flange 95 of the transverse plate 92 to hold the door in closed position. A finger 105 extends downwardly slightly below the face of the door 96 and plate 92 to permit the latch to be operated.

Obviously louvres might be used in place of the light transmitting bowl shown in Figs. 14–17 inclusive, and similarly light transmitting bowls may be used in place of the louvres shown in Figs. 1–13 inclusive.

We claim:

1. A baggage rack for a vehicle including spaced bracket supporting members, an upper floor plate and a lower finish plate spaced apart and supported by the bracket, a continuous lighting trough between the plate and finish sheet extending between said spaced bracket supporting members and opening downwardly through the finish sheet, and lighting means in the trough co-extensive with the length of the trough.

2. A baggage rack for a vehicle including spaced wall bracket supporting members, an upper floor plate and a lower finish sheet spaced apart and supported by the brackets, a continuous trough along the outer edge of the rack and between the plate and the finish sheet extending between said spaced bracket supporting members and opening downwardly through the finish sheet, and lighting means in the trough co-extensive with the length of the trough.

3. In a vehicle, a baggage rack extending longitudinally of the vehicle along a side wall thereof, a downwardly opening longitudinally extending trough mounted on the baggage rack and continuous throughout the length of the rack, and lighting means in the trough coextensive therewith, the trough being along the outer margin of the rack and having a plurality of transversely extending louvers across the mouth of the trough.

4. In a vehicle, a baggage rack extending longitudinally of the vehicle along the side wall thereof, said rack comprising a plurality of spaced wall brackets, a relatively deep molding connecting the outer ends of the wall brackets, a continuous downwardly opening concave trough extending between adjacent brackets and having its lower margin positioned at or above the lower margin of the molding, lighting means coextensive with the trough mounted in the trough, light controlling means mounted at the mouth of the trough, and a finish sheet on the lower face of the rack extending from the wall to the lower inner edge of the trough.

5. In a vehicle, a baggage rack extending longitudinally of the vehicle along the side wall thereof, said rack comprising a plurality of spaced wall brackets, a relatively deep molding connecting the outer ends of the wall brackets, a continuous downwardly opening concave trough extending between adjacent brackets and having its lower margin positioned at or above the lower margin of the molding, lighting means coextensive with the trough mounted in the trough, light controlling means mounted at the mouth of the trough, and a finish sheet on the lower face of the rack extending from the wall to the lower edge of the trough, said light controlling means comprising a plurality of spaced transverse louvers.

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