July 5, 1966 G. W. BUSH 3,259,285

COMBINED SHOULDER STRAP AND HANDGRIP

Filed June 28, 1965

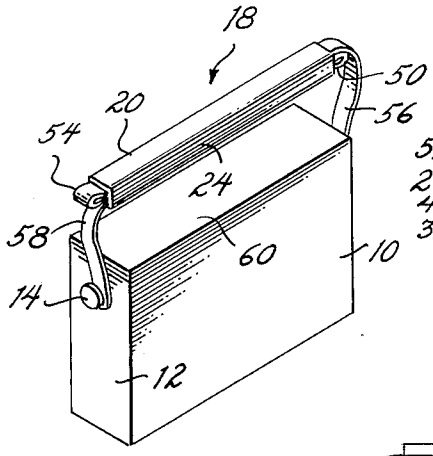


Fig. 1.

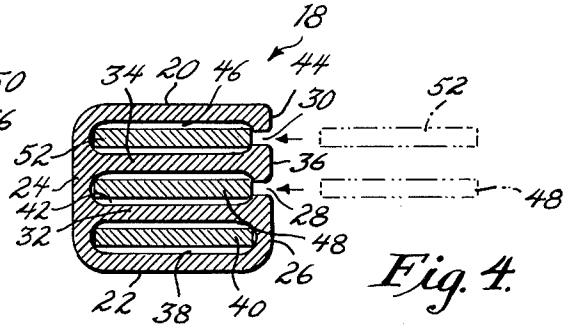


Fig. 4.

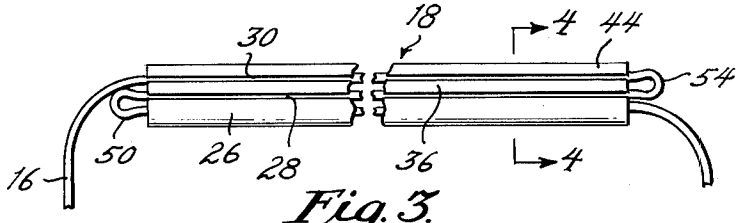


Fig. 3.

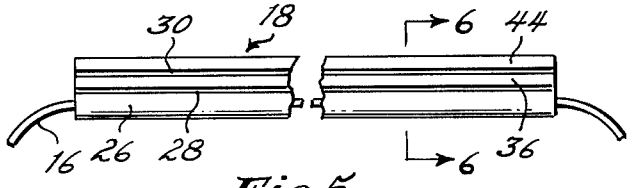


Fig. 5.

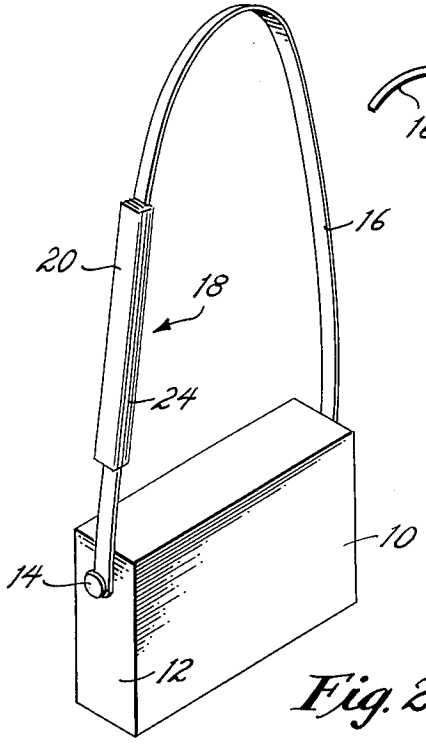


Fig. 2.

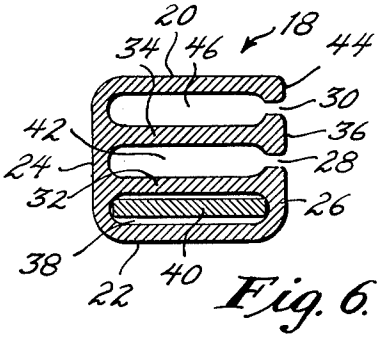


Fig. 6.

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COMBINED SHOULDER STRAP AND HANDGRIP

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6 Claims. (Cl. 224—46)

This invention relates to a combined shoulder strap and handgrip for use in carrying photographic equipment, portable radios, test equipment, handbags and similar articles.

Heretofore there has not been a satisfactory means to convert a shoulder strap to a handgrip. The usual method involves the removal of a strap section and a rebuckling of the straps which remain attached to the carrying case. This does not shorten the handle sufficiently to render it a true handgrip and furthermore is uncomfortable since the buckle engages the palm.

The primary object of the invention is to overcome these disadvantages by providing a construction which makes it possible quickly to convert from a shoulder strap length to a regular handle height above the carrying case and with a smooth, comfortable and attractive handgrip.

Another object of the invention is to provide a combined shoulder strap and handgrip wherein the handgrip is slidably mounted on the shoulder strap and includes a plurality of spaced grooves which open through the side thereof and are adapted to receive portions of the strap to thereby shorten the same and position the handgrip at regular handle height above the carrying case.

Yet another object of the invention is to provide a combined shoulder strap and handgrip of the character described in which the grooves are contoured to allow easy placement of the shoulder strap portions therein but act to releasably retain said portions in the grooves.

These and other objects of the invention will become more apparent as the following description proceeds in conjunction with the accompanying drawing, wherein:

FIG. 1, is a perspective view of the handle illustrating the handgrip position;

FIG. 2 is a view similar to FIG. 1 illustrating the shoulder strap position;

FIG. 3 is a side elevational view of the handle shown in FIG. 1;

FIG. 4 is a sectional view taken on the line 4—4 of FIG. 3;

FIG. 5 is a side elevational view of the handgrip portion as shown in FIG. 2; and

FIG. 6 is a sectional view taken on the line 6—6 of FIG. 5.

Specific reference is now made to the drawings wherein similar reference characters are used for corresponding elements throughout.

Indicated generally at **10** is a suitable carrying case, portable photographic equipment, radio, test equipment and the like to the sides **12** of which is pivotally attached by any conventional means, such as a rivet, headed screw or the like **14**, a shoulder strap **16** which is preferably but not necessarily flat, of rectangular cross-section, and made of suitable materials, such as flexible plastics, leather or cloth.

A handgrip **18** is provided which is preferably but not necessarily rectangular in cross-section, is made of an extruded hard plastic, is smooth, and is of a length approximating that of the carrying case so that in the handgrip position of FIG. 1, better comfort and appearance results.

The handgrip is molded or otherwise made to contain upper and lower continuous walls **20** and **22**, a continuous connecting wall **24** on one side thereof, a discontinuous wall on the other side consisting of a continuous lower

portion **26** and a plurality of vertically spaced through slots **28** and **30** thereabove which are coextensive with the handgrip, and a plurality of vertically spaced bars which are coextensive with the handgrip, one of which **32** extends between the sidewall **24** and the other sidewall portion **26**, and the other of which **34** extends between the sidewall **24** and the portion **36** of the other sidewall which is located between the slots **28** and **30**.

The sidewalls **24** and **26**, the lower wall **22** and the bar **32** define between them a channel **38** which is coextensive with the handgrip and is closed at its top, bottom and sides but open at its ends and through which a portion **40** of the shoulder strap slidably extends. The sidewall **24** and opposite sidewall portions **26** and **36** and the bars **32** and **34** define between them a groove **42** which is coextensive with the handgrip, is closed at its top and bottom and on one side, but is open at its other side through slot **28** and is open at its ends. Similarly, the upper portion of the sidewall **24**, the upper portion of the opposite sidewall **44**, the upper wall **20** and the upper bar **34** define between them an upper groove **46** which is coextensive with the handgrip, is closed at its top and bottom and on one side, but is open at its other side, through slot **30**, and is open at its ends. It will be noted that the channel **38** and the grooves **42** and **46** have substantially rounded longitudinal sides whereas the strap **16** is substantially rectangular in cross-section.

In use, when the carrying member is used as a shoulder strap, as in FIG. 2, the handgrip **20** is slid on the strap **16** to a position which can be comfortably gripped by the hand on the same side as the shoulder over which the strap is slung. When one wishes to convert the member to a regular handle, he takes the longest portion of the strap and places it into the lower groove **42** by pushing it through the slot **28**. This forms a portion **48** which extends lengthwise through the lower groove **42** which has a loop **50** that is disposed outside one of its ends. The remainder of the strap is then placed into the upper groove **46** by pushing it through the slot **30**. This forms a portion **52** which extends lengthwise through the upper groove **46** which has a loop **54** that is disposed outside the other end of the handgrip. In so doing, the strap is effectively shortened so that two portions **56** and **58** remain attached to the carrying case, see FIG. 1, and the handgrip **18** extends substantially parallel to the upper wall **60** of the case at a comfortable hand carrying distance therefrom. It will be understood that by varying the length of the handgrip and providing a plurality of grooves, the distance of the handgrip from the case can be varied as desired. It should also be noted that the thickness of the strap is less than the height of grooves **42** and **46** but exceeds that of the slots **28** and **30** so that when the strap is pushed through the slots the latter are opened wider by flexing action of the handgrip at the slots, and when the strap is disposed in the grooves it is effectively retained therein since it requires a positive force again to withdraw it through the slots.

While a preferred embodiment of the invention has here been shown and described, a skilled artisan may make minor variations without departing from the spirit of the invention and the scope of the appended claims. It will be understood that the term "carrying case" used in the claims is intended to generically cover portable photographic equipment, radios, test equipment, handbags and the like.

I claim:

1. A combined shoulder strap and handgrip comprising an elongated strap adapted for connection at its ends to a carrying case, a handgrip including an elongated member having a channel extending therethrough and slidably receiving one portion of said strap, and a plurality of vertically spaced grooves above said channel extending through said member and opening through one side thereof, said

grooves being adapted to removably receive lengths of the remaining portion of said strap to thereby shorten the overall length of said strap and position said member substantially midway between the ends of said strap.

2. The combination of claim 1 wherein the height of said openings of said grooves through said one side of said member is less than the thickness of said strap so that said openings are flexed upon insertion into or removal of said strap from said grooves.

3. A combined shoulder strap and handgrip comprising an elongated strap adapted for connection at its ends to a carrying case, a handgrip including an elongated member having upper and lower walls, opposite sidewalls, vertically spaced bars therebetween and slots opening through one sidewall between said bars and between said upper wall and an adjacent bar, said lower wall, adjacent bar and sidewalls defining between them an open-ended channel coextensive with said member and slidably receiving a portion of said strap, and the remaining structure providing vertically spaced grooves coextensive with said member which are open at their ends and at said one sidewall through said slots, said grooves being adapted to removably receive lengths of the remaining portion of said strap through said slots and the open ends of said groove to thereby shorten the overall length of said strap and position said member substantially midway between the ends of said strap.

4. A combined shoulder strap and handgrip comprising an elongated strap adapted for connection at its ends to a carrying case, a handgrip including an elongated member having upper and lower walls, opposite sidewalls, vertically spaced bars therebetween and slots opening through one sidewall between said bars and between said upper wall and an adjacent bar, said slots being narrower than the thickness of said strap, said lower wall, adjacent bar and sidewalls defining between them an open-ended channel coextensive with said member and slidably receiving a portion of said strap, and the remaining structure providing vertically spaced grooves coextensive with said member which are open at their ends and at said one sidewall through said slots, said grooves being adapted to

slidably and removably receive lengths of the remaining portion of said strap through said slots and the open ends of said grooves to thereby shorten the overall length of said strap and position said member substantially midway between the ends of said strap.

5. A combined shoulder strap and handgrip comprising an elongated strap adapted for connection at its ends to a carrying case, a handgrip including an elongated member having at least one sidewall and a channel therein coextensive therewith and opening through the ends thereof, said channel receiving a portion of said strap, a groove in said member coextensive therewith and spaced from said channel, a slot through said sidewall coextensive with said member and opening into said groove, said groove being adapted to removably receive a length of the remaining portion of said strap to thereby shorten the overall length of said strap and position said member substantially midway between the ends of said strap.

6. A combined shoulder strap and handgrip comprising an elongated strap adapted for connection at its ends to a carrying case, a handgrip including an elongated member having at least one sidewall and a channel therein coextensive therewith and opening through the ends thereof, said channel receiving a portion of said strap, a groove in said member coextensive therewith and spaced from said channel, a slot through said sidewall coextensive with said member and opening into said groove, said slot being narrower than the thickness of said strap, said groove being adapted to slidably and removably receive a length of the remaining portion of said strap to thereby shorten the overall length of said strap and position said member substantially midway between the ends of said strap.

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