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F. T. STUART

MEANS FOR INTERENGAGING AND ALIGNING THE MEMBERS OF HINGED BAG FRAMES

Filed Oct. 22. 1926

Fig. 1

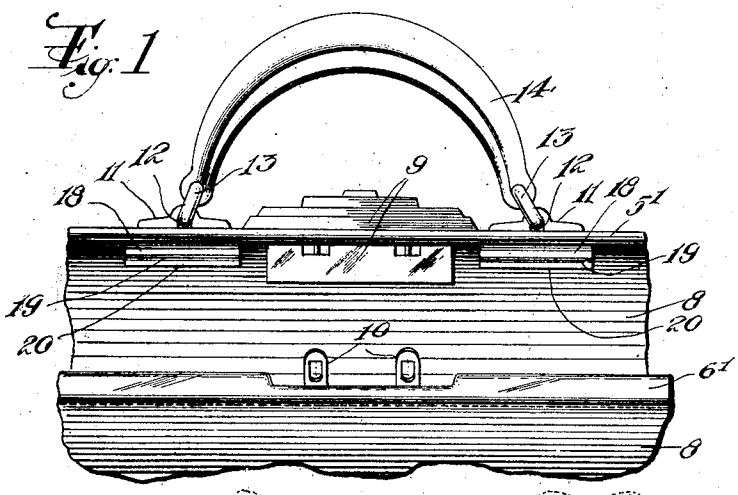


Fig. 2

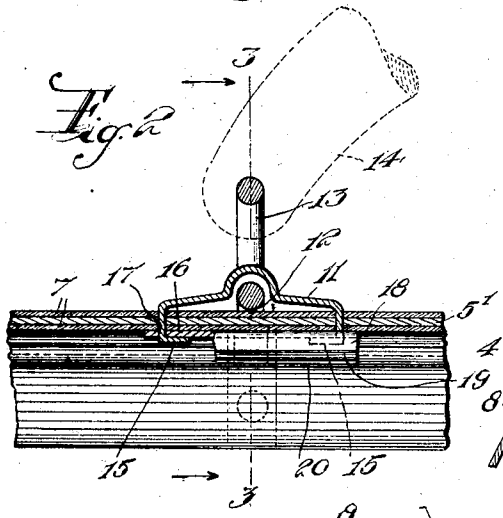


Fig. 3

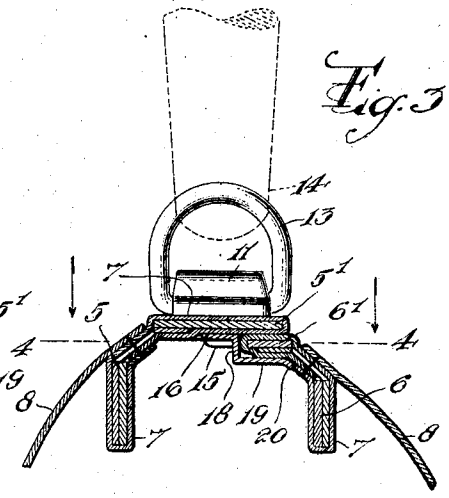


Fig. 4

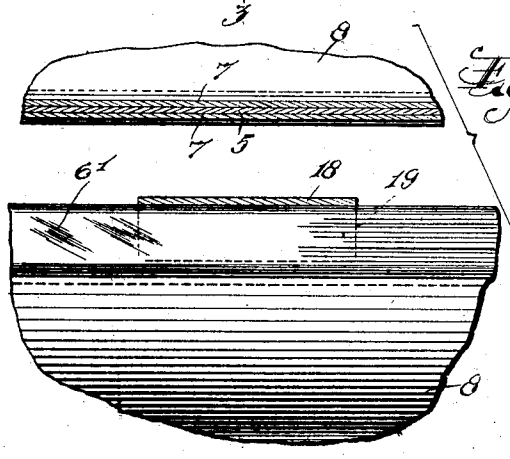
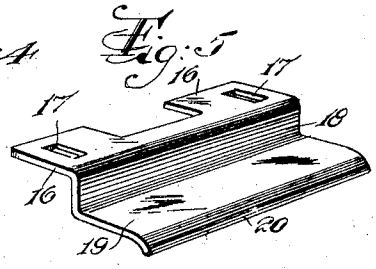


Fig. 5



INVENTOR.
Frank T. Stuart
BY
Fraser, Hyde and Richards
ATTORNEYS.

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UNITED STATES PATENT OFFICE.

FRANK T. STUART, OF MAPLEWOOD, NEW JERSEY, ASSIGNOR TO THE R. NEUMANN HARDWARE CO., A CORPORATION OF NEW JERSEY.

MEANS FOR INTERENGAGING AND ALIGNING THE MEMBERS OF HINGED BAG FRAMES.

Application filed October 22, 1926. Serial No. 143,347.

This invention relates to an improved means for interengaging and aligning the members of hinged bag-frames, the principal object of the invention being to provide in connection with a bag-frame comprising an outer frame-member and an inner frame-member so hinged together that the latter telescopes into the former when the bag-frame is closed, a novel arrangement and construction of means which serve to interconnect and support the closed frame-members against vertical separation or distortion, while at the same time affording stop means for aligning the inner frame-member with the outer frame-member so as to assure proper mutual engagement and cooperation of the locking or fastening devices with which the frame-members are furnished, and by which they are retained in closed relation.

A further object of the invention is to provide combined supporting and aligning brackets of such construction that they may be secured to the outer frame-member in association with the handle-loop bearings thereof, so that their supporting functions are applied at points corresponding to the application of lifting force to the bag-frame, all to the end that vertical separation or bending apart of one frame-member relative to the other under the weight of the suspended bag is prevented, and at the same time a proper longitudinal alignment of one frame-member relative to the other obtained.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention consists in the novel features of construction and combination of parts which will be more fully described hereinafter and particularly pointed out in the claim.

In the drawings accompanying and forming part of this specification:

Figure 1 is a fragmentary side elevation of a bag with the frame open, the same being provided with the novel combined supporting and aligning brackets made according to and embodying the principles of this invention;

Figure 2 is an enlarged detail longitudinal section through the outer frame-member, showing the associated operative relation of a combined supporting and aligning bracket with a handle loop bearing thereof;

Figure 3 is a transverse section, taken on line 3—3 in Figure 2, but showing the frame-members closed;

Figure 4 is a horizontal section, taken on line 4—4 in Figure 3; and

Figure 5 is a perspective view of one of the novel combined supporting and aligning brackets removed from the bag-frame.

Similar characters of reference are employed in all of the hereinabove described views, to indicate corresponding parts.

Referring now to said drawings, the reference characters 5 and 6 respectively indicate the outer and inner frame-members of a traveling bag or similar article, and which are hinged together at their ends (not shown) so as to close one upon the other in the well known manner, with the upper flange 6′ of the inner frame-member telescoping within the outer frame-member so as to underlie the upper flange 5′ of the latter. Said frame-members may be each provided with an enveloping covering 7 of leather. Said frame-members 5 and 6 may be made in any conventional form, and suitable for either riveting or sewing attachment of the bag-body 8 thereto; the drawings showing, however, the form of frame structure adapted to receive sewn attachment of said bag-body thereto. In practice the upper flange 6′ of the inner frame-member is made narrower than the upper flange 5′ of the outer frame-member, so that when the former is in closed relation to the latter, the free edge portion of the upper flange 6′ thereof underlies the outer or free marginal portion of the upper flange 5′ of the outer frame-member.

Centrally disposed in connection with the upper flange 5′ of said outer frame-member is any desired form of center-lock 9 adapted to receive and cooperate with the hasp-members or locking elements 10 with which the inner frame-member is provided.

Mounted on the upper flange 5′ of said outer frame-member, so as to be respectively positioned adjacent to the respective ends of said center-lock 9 are handle-loop bearing

devices, each comprising a body-member 11 provided intermediate its ends with a transversely disposed bearing opening 12 to receive and pivotally support a coupling ring or loop 13. Connected by its respective ends to the respective coupling rings or loops 13 of the handle-loop bearing devices, so as to extend therebetween, is any suitable form of hand grip or bag-handle 14. Integrally connected with each end of the body-members 11 so as to project downwardly therefrom and through perforations provided for their reception in the upper flange 5′ of said outer frame-member, are clinching tongues or lugs 15.

Arranged beneath the upper flange 5′ of said outer frame-member, in vertical alignment with each handle-loop bearing device, is a combined supporting and aligning bracket with which the upper flange 6′ of the inner frame-member cooperates when moved into closed relation to said outer frame-member. Each supporting and aligning bracket comprises a base-plate 16 longitudinally disposed against the underside of said upper flange 5′, said base-plate having adjacent to its respective ends suitable perforations or openings 17 through which may extend the free ends of the clinching tongues or lugs 15 of the associated handle-loop bearing device. When said clinching tongues or lugs 15 are thus extended through said base-plate 16, the free end portions thereof are turned or clinched over upon the underside of the base-plate 16, thereby operatively uniting the associated handle-loop bearing device and combined supporting and aligning bracket with the outer frame-member 5 and respectively upon the upper and under sides of the upper flange of the latter. Integrally formed with said base-plate 16 in connection with its outer longitudinal edge is a depending stop-flange 18 against which the free edge of the upper flange 6′ of the inner frame-member abuts, so as to stop the latter in proper aligned relation to the outer frame-member when closed upon the latter. Integrally formed with said stop-flange 18, so as to project outwardly and horizontally from its lower end in a plane parallel to but spaced downwardly from the plane of the upper flange 5′ of said outer frame-members, is a supporting flange 19, over and upon which the upper flange 6′ of the inner frame-member passes, when the latter is closed relative to the outer frame-member; such engagement serving to interengage the upper flanges of the respective frame-members together, so that the same are mutually supported and reenforced against vertical separation or distortion when the weight of the closed bag is suspended from the bag-handle 14. The free marginal edge portion of said supporting flange is downwardly turned or curved to provide a guide-lip 20 to engage and guide the upper flange 6′ onto the supporting flange when said inner frame-member is closed upon said outer frame-member.

From the above description it will be readily understood that the combined supporting and aligning brackets possess a two-fold function, viz they both retain the closed frame-members interengaged and reenforced against vertical separation or distortion, thus assuring an equal distribution of the weight of the bag and its content relative to both frame members, especially at and adjacent to the point of suspension of the bag by the handle thereof, but they also serve as aligning stops to longitudinally align the inner frame-member relative to the outer frame-member and at the same time stop or restrain any inward movement of the inner frame-member beyond that which is desirable to properly engage the hasp-members or locking elements 10 with the center-lock device 9 when closing the bag, thus preventing any undue straining or distortion of the hasp-members or locking elements, or the surrounding portions of the inner frame-member from which they spring, which might tend to disturb or interfere with the proper cooperation thereof with the center-lock device.

Said combined supporting and aligning brackets, therefore, serve both to relieve the center-lock device 9 and cooperating hasp-members 10 from all undue strain or stress arising out of the application of unnecessary pressure in closing the bag, as well as to relieve such parts entirely from the dead weight of the bag and its content.

While I have described and shown in detail the preferred form and arrangement of means for interengaging and aligning the members of hinged bag-frames, it is to be understood that I do not thereby limit my invention to the precise features shown and described, as I am aware that many mechanical changes and modifications may be made therein without departing from the spirit and scope of the invention as set forth in the claim appended hereto.

Having thus described my invention, I claim: —

In combination with the outer and inner frame-members of a bag-frame, longitudinally spaced handle-loop bearings on said outer frame-member, said handle-loop bearings having depending clinching lugs to pass through the body of said outer frame-member, combined supporting and aligning brackets having perforate base portions disposed against the underside of said outer frame-member and through which said clinching lugs of said handle-loop bearings also extend, said clinching lugs being clinched over said base portions to thereby rigidly and mutually secure said handle-

loop bearings and combined supporting and aligning brackets in aligned relation respectively above and below said outer frame-member, said base-portions having stop-flanges depending from their outer marginal edges against which the free edge of the inner frame-member abuts when the frame is closed, and outwardly projecting horizontal supporting flanges extending from the lower free edges of said stop-flanges over and upon which the free marginal portion of said inner frame-member is engaged when the frame is closed.

In testimony, that I claim the invention set forth above I have hereunto set my hand this 19th day of October, 1926.

FRANK T. STUART.