Oct. 18, 1955 O. C. ECKEL 2,720,920

DOOR BODY

Filed Sept. 27, 1952

Fig. 1.

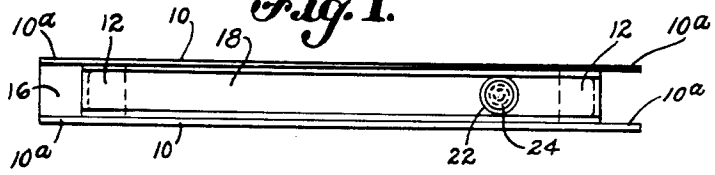


Fig. 2.

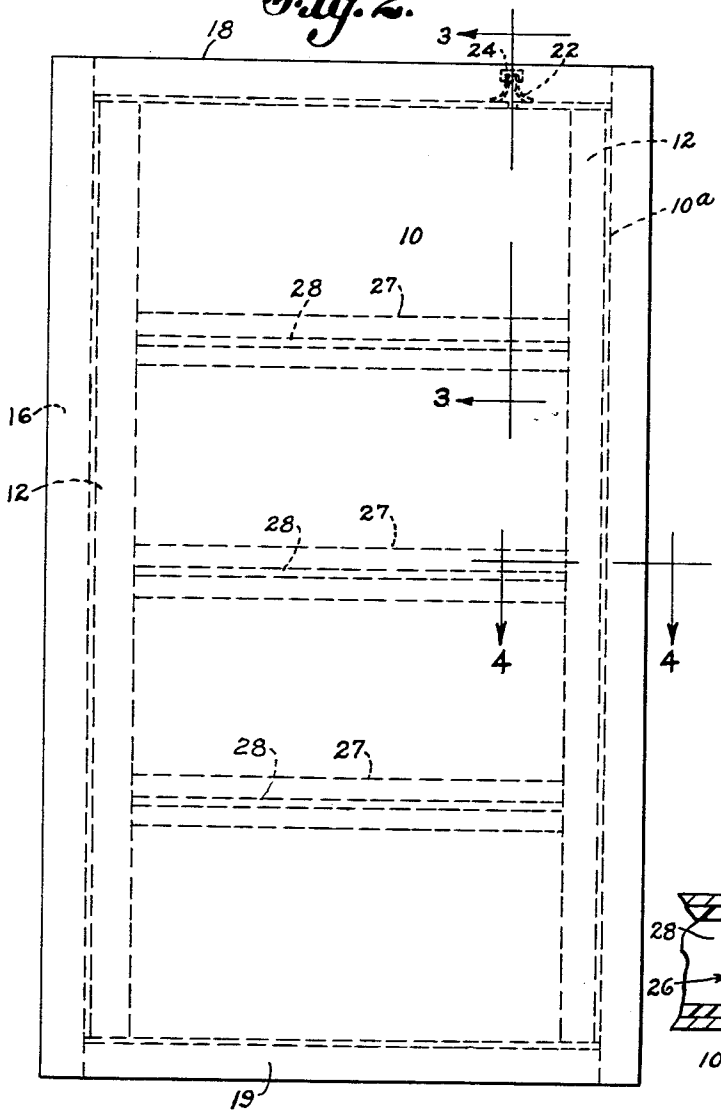


Fig. 3.

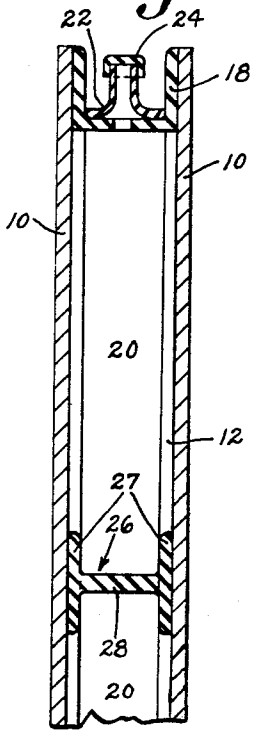
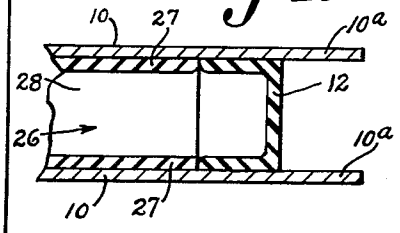


Fig. 4.



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DOOR BODY

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6 Claims. (Cl. 160—354)

This invention relates to a door body.

One object of my invention is to provide a door body of a construction that is firm, yet is sufficiently compliant when struck vigorously to absorb most of the shock, and thus avoid damaging the door or its hinges.

Another object is to provide such a door body that is simple in construction, economical to manufacture and durable.

The foregoing and other objects which will appear as the nature of the invention is better understood, may be accomplished by a construction, and arrangement such as is disclosed by the drawings. The nature of the invention is such as to render it susceptible to various changes and modifications, and therefore, I am not to be limited to the construction disclosed by the drawings nor to the particular parts described in the specification; but am entitled to all such changes therefrom as fall within the scope of my claims.

In the drawings:

Figure 1 is a top plan view of my door body.

Figure 2 is a front elevational view thereof.

Figure 3 is an enlarged, sectional view taken on the line 3—3 of Figure 2.

Figure 4 is an enlarged, sectional view taken on the line 4—4 of Figure 2.

As illustrated, my door body has an outside cover **10**, there being one each at the opposite face surfaces of the body commonly referred to as the front and rear. It is made of material, such as sheet plastic, yet sufficiently compliant that it is not damaged when struck vigorously, as by a moving truck, or merchandise carrier of the type used in stores and warehouses.

Spaced inwardly from opposite outer side edges of said outside covers **10**, and located at opposite sides of said door body, and attached to said covers, as by cement, are perimeter members shown in the form of channel members **12**. They are made of a compliant material such as rubber or a rubber composition, the web or connecting portions of said channel members **12** being at the outside in each instance, as shown in said Figure 4. Since said outside covers **10** extend at their outer sides beyond said side channel members **12**, they have side extensions **10***a*. Those extensions **10***a* at one side, which are to be fastened to a door jamb or frame, may have, as shown, a filler **16** of strong material, such as wood, occupying the space between them.

At the top and bottom of said door body are perimeter members between said covers **10**, which, as shown, are in the form of channel members **18** and **19** respectively, each of which is attached at its sides to said face covers **10**, and extends across said door body to said side channel members **12** to which they are attached, as by cement. Said upper member **18**, lower member **19** and side members **12** provide a sealed perimeter that, together with said covers **10**, enclose a space **20** forming the interior of said body, and which is naturally occupied by air, unless it contains a filler.

In order to equalize the pressure of air in said space **20** with the atmosphere surrounding the door, and thus prevent any breathing movement where conditions make it desirable, I provide a vent member **22** attached to said upper channel member **18**, and having a removable closure cap **24**.

In the said space **20**, to assist in making said door body firm, I provide one or more separators **26** preferably made of rubber or a rubber composition. These extend across said door body between, and are attached to, said plastic covers **10**. They absorb some of the shock when the door body is struck, as by a truck, as well as serving to keep said body rigid. The front and rear flanges **27** of said separators **26**, as shown, are considerably wider than the connecting or web portion **28**; but they could be made the same width.

Said interior space **20** may be filled with a cushioning material such as fibrous glass to absorb said shock and to assist in providing a firm door body.

What I claim is:

1. A door body comprising two sheets of compliant material at the front and rear of said door body spaced apart, channel members of flexible and resilient material between said two sheets at perimeter portions of the top, bottom and two sides of said door body, and a separator member of flexible and resilient material extending crosswise of said door body from and laterally between the two channel member sides and intermediate of and spaced from the top and bottom of said door body and extending between and attached to said sheets.

2. A door body comprising two sheets of compliant material at the front and rear of said door body spaced apart, channel members of flexible and resilient material between said two sheets at perimeter portions at the top, bottom and two sides of said door body, and a separator member of flexible and resilient material extending crosswise of said door body intermediate of and spaced from the top and bottom of said door body and extending between and attached to said sheets, said separator member embodying front and rear flange portions attached to said sheets and a web portion of substantially less width than and between said flange portions.

3. A door body comprising two sheets of compliant material at the front and rear of said door body spaced apart, channel members of flexible and resilient material between said two sheets at perimeter portions of the top, bottom and two sides of said door body enclosing the space between said sheets, a separator member of flexible and resilient material extending crosswise of said door body within said enclosure and intermediate of and spaced from the top and bottom of said door body and extending between and attached to said sheets, a vent member in said channel member having an opening therein, and a removable closure member adapted to close said vent member.

4. A door body comprising two sheets of compliant material at the front and rear of said door body spaced apart, channel-shaped perimeter members of flexible and resilient material at the top, bottom and two sides between said sheets, and a separator member of flexible and resilient material extending crosswise of and spaced from the top and bottom of said door body and attached to said sheets, said sheets extending beyond said perimeter members at both sides of said door body.

5. A door body comprising two sheets of compliant material at the front and rear of said body spaced apart, and a plurality of separator members of flexible and resilient material spaced apart and embodying front and rear flange portions attached to said sheets and a web portion between and connecting said flange portions at an intermediate point thereof, said separator members extending continuously laterally of said door body.

6. A door body comprising two sheets of compliant

material at the front and rear of said body spaced apart, and a plurality of separator members of flexible and resilient material spaced apart and embodying front and rear flange portions attached directly to said sheets and a web portion integral with and between and connecting said flange portions, said separator members extending continuously in a lateral direction crosswise of said body.

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