Oct. 1, 1957 A. S. GALKIN 2,807,842

RUBBER DOOR MAT

Filed Aug. 2, 1955

Fig. 1.

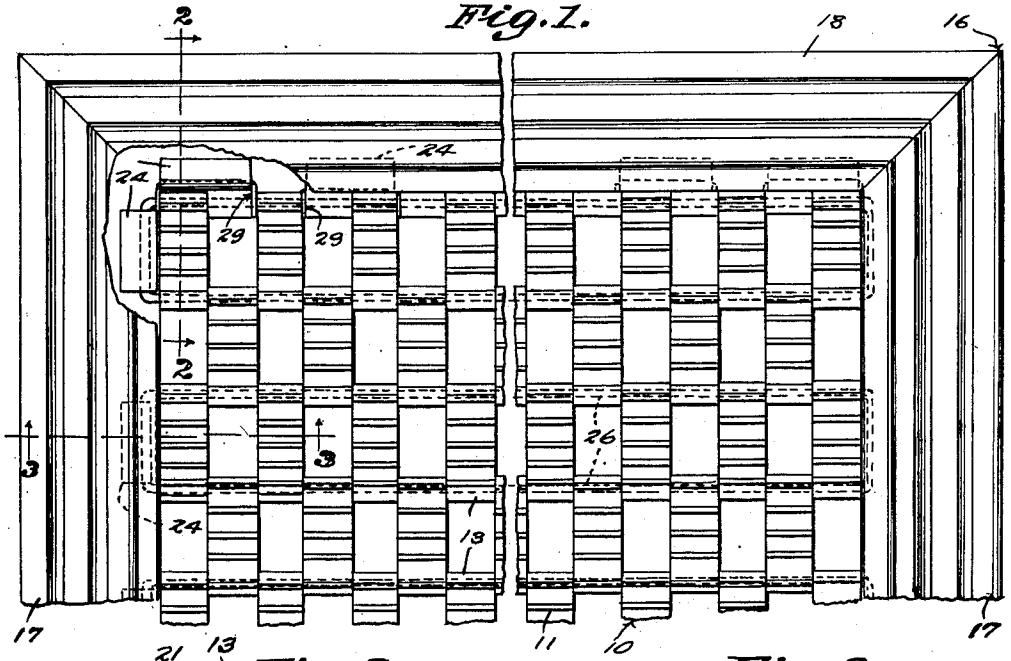


Fig. 2.

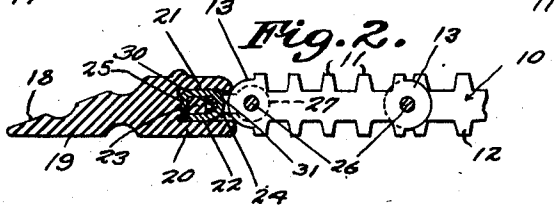


Fig. 3.

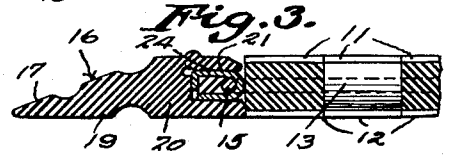


Fig. 4.

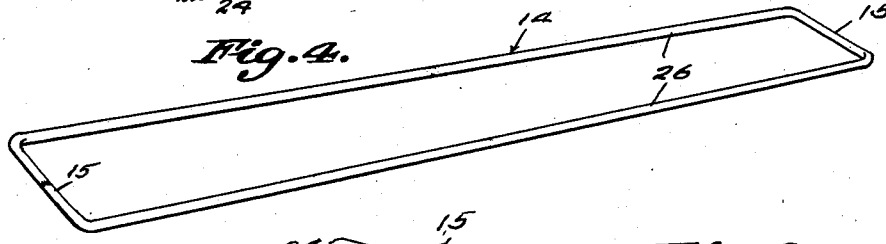


Fig. 5.

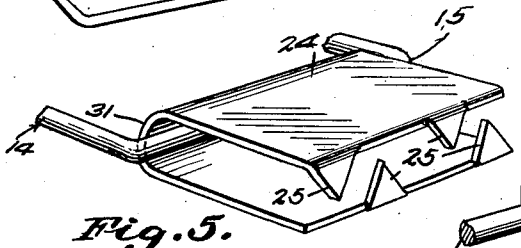


Fig. 6.

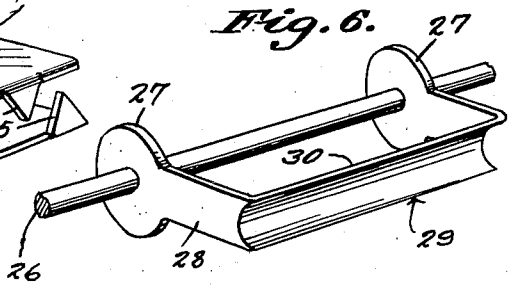
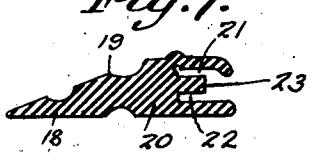


Fig. 7.



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2,807,842

RUBBER DOOR MAT

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Application August 2, 1955, Serial No. 525,963

3 Claims. (Cl. 20—78.3)

This invention relates to an improved rubber door mat.

An object of this invention is to provide in a door mat an improved means for connecting the rubber mat elements together and securing the connected mat elements in a rectangular rubber frame.

An object of this invention is to provide improved connecting means whereby the mat elements may be firmly secured within the inner marginal portions of a rubber frame without vulcanizing the attaching means to the frame.

Another object of this invention is to provide in a door mat construction improved connecting means for connecting the outer portions of the mat elements to the frame, whereby the mat elements may have relative movement with respect to the frame.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts, hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing:

Figure 1 is a fragmentary plan view of a rubber door mat constructed according to an embodiment of this invention.

Fig. 2 is a fragmentary sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a fragmentary sectional view taken on line 3—3 of Fig. 1.

Fig. 4 is a perspective view of one of the securing wires for a mat element.

Fig. 5 is a perspective view of the attaching clip for securing the outer portions of the mat structure to the frame.

Fig. 6 is a perspective view of one of the connecting members at the sides of the frame.

Fig. 7 is a sectional view of the frame structure.

Referring to the drawing the numeral **10** designates generally a ribbed mat member which is rectangular in plan. The mat member **10** is provided with upper and lower ribs **11** and **12** and the mat member at the opposite ends thereof is provided with an enlarged boss **13** through which a connecting wire **14** engages. The connecting wire **14** secures a series of oppositely extending mat members **10** together in staggered relation with one mat member extending in one direction and an adjacent mat member **10** extending in the opposite direction. The connecting wire **14** is formed into an elongated rectangular loop having ends **15**. A rectangular frame generally indicated at **16**, which is formed of rubber engages about the connected-together mat elements **10** and the frame **16** is formed of end strips **17** and side strips **18**. The side and end strips **17** and **18** are of like construction and each is formed of an upwardly and inwardly tapered body **19** which terminates at its inner end in an inner body

20. The inner body **20** is provided with a pair of spaced longitudinal slots **21** and **22** forming an intermediate longitudinal tongue **23**. In order to provide means whereby the ends **15** may be secured in the ends **17** of the frame **16**, I have provided U-shaped clips **24** which are adapted to extend over the ends **15** and project into the slots **21** and **22**. The clip **24** is provided with pairs of oppositely extending triangular tangs **25** which upon inward bending of the clip **24**, are adapted to project into the tongue **23**. The longitudinal bars **26** of the wire **14** are extended loosely through the bosses **27** which are formed at the ends of the parallel arms **28** of U-shaped members **29**. The U-shaped members **29** have a transversely arcuate bight **30** which as shown in Fig. 2, is adapted to engage on the inside of the bight **31** of clips **24**.

In the building up of the mat hereinbefore described the wire connecting members **14** are extended through the mat elements **10** and the length of the wire members **14** will determine the length of each side of the mat. The width of each end of the mat is determined by the number of wire members **14** which are connected together by alternate mat elements **10**, as shown in Fig. 14. The mitered joint between the end and side members **17** and **18** of the frame is vulcanized so that the frame will be of solid or integral frame structure formed of end and side strips. The mat members with the wires **10** are then secured within the frame by inserting the clips **24** in the slots **21** and **22** and then compressing the clips **24** so that the tangs **25** will bite into the tongue **23**.

What is claimed is:

1. A door mat comprising a plurality of mat members, each member being rectangular in plan with transverse ribs on the upper and lower faces thereof, a looped wire extending through the ends of said members, said wire disposing said members together in staggered relation, a rectangular frame about said members, the sides and ends of said frame having a pair of horizontal slots forming a horizontal tongue therebetween, a plurality of U-shaped clips extending outwardly of said wires, said wires extending through said clips on the inner side of the bights thereof, the parallel walls of said clips being disposed in said slots, and oppositely disposed tangs carried by said walls and projecting into said tongues.

2. A door mat comprising a plurality of mat members, each member being rectangular in plan with transverse ribs on the upper and lower faces thereof, a looped wire extending through the ends of said members, said wire disposing said members in staggered relation, a rectangular frame about said members, the sides and ends of said frame having a pair of horizontal slots forming a horizontal tongue therebetween, each wire forming a rectangular member with the ends thereof confronting the ends of said frame, a plurality of U-shaped clips extending outwardly of the ends of said rectangular member, the parallel sides of said clips extending into said slots, and tangs carried by said parallel sides projecting into said tongues.

3. A door mat comprising a plurality of mat members, each member being rectangular in plan with transverse ribs on the upper and lower faces thereof, a looped wire extending through the ends of said members, said wire disposing said members together in staggered relation, a rectangular frame about said members, the sides and ends of said frame having a pair of horizontal slots forming a horizontal tongue, each wire forming a rectangular member with the ends thereof confronting the ends of said frame, a plurality of U-shaped clips extending outwardly of the ends of said rectangular member, the parallel sides of said clips extending into said slots, tangs carried by said parallel sides projecting into said tongues, a plurality of U-shaped members having the parallel

arms thereof pivoted to the sides of said rectangular member, the bights of the said U-shaped members being transversely arcuate, and side clips secured to the tongues of the sides of said frame, the bights of said U-shaped members pivotally engaging the inner sides of the bights of said side clips.

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