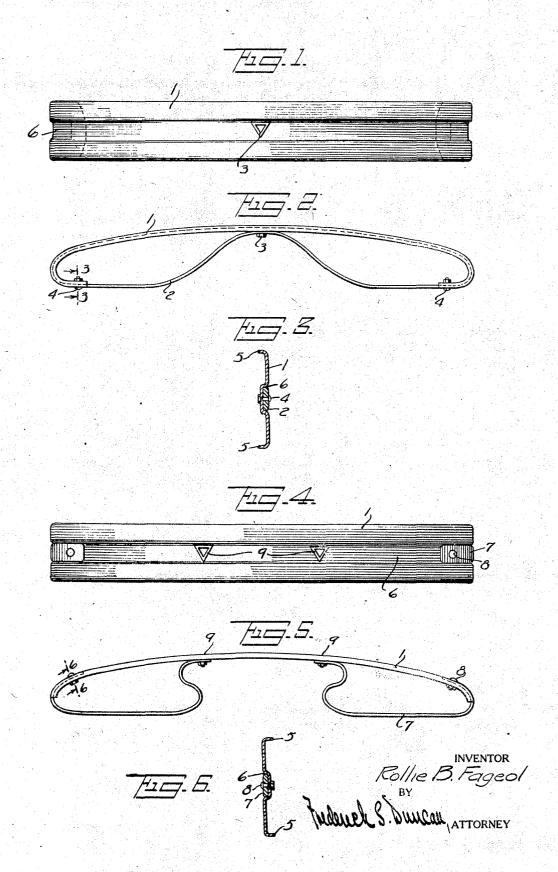
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Filed April 27, 1927

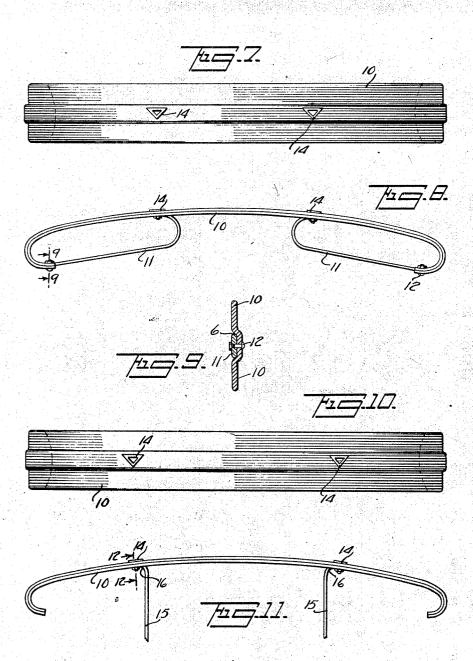
2 Sheets-Sheet 1

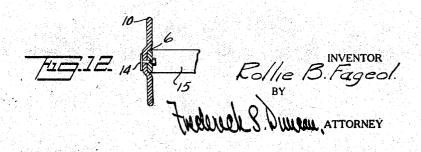


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2 Sheets-Sheet 2





UNITED STATES PATENT OFFICE.

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BUMPER.

Application filed April 27, 1927. Serial No. 186,846.

bumper and more particularly to a type of in the shape as shown in Fig. 3, having bumper having an impact bar of consid- flanges 5 at the top and bottom and a longierable width formed to give the appearance of a multi-bar bumper.

As is well known in the art, it has been the practice heretofore to secure the end of the attaching bar or bars and the impact section of a bumper together by means of a clamp or plurality of bolts. It is the principal object of this invention to provide an impact bar with a longitudinal channeled groove therein to facilitate the alignment and attachment of the attaching bar to the 15 impact section by the use of one bolt, thereby

lessening the number of parts. Another object is to provide a bumper formed of relatively thin material which may be rolled into the desired shape inexpensively and permit expeditious assembly of the parts and be pleasing to the eye.

A clear conception of the construction and further objects of the invention may be had from the following specification in conjunction with the accompanying drawings in which

Fig. 1 discloses the invention in front protruding clamps and fixtures. elevation.

Fig. 2 is a plan view of Fig. 1.

Fig. 3 is a cross-section through 3-3 of

in front elevation.

Fig. 5 is a plan view of Fig. 4.

Fig. 6 is a cross-section through 6-6 of

Fig. 7 discloses a modified form of attachment for the rear bar.

Fig. 8 is a plan view of Fig. 7.

Fig. 9 is a cross-section through 9-9 of

Fig. 10 discloses a further modified method of securing the rear bar.

Fig. 11 is a plan view of Fig. 10; and Fig. 12 is a cross-section through 12—12 of Fig. 11.

shown in Figs. 1 and 2 comprises an im- manufacture and assemble. pact member 1 and a rear or attaching bar 2. The rear bar is formed as shown with

This invention relates to an automobile of relatively thin strip steel, which is rolled tudinal groove 6 extending along the middle of the bar. The grooved portion 6 is pref- 60 erably left unfinished except for a coating of enamel while the two remaining faces of the bar are ground and nickeled or finished in any desired manner. The impact member is formed with loop ends as shown, 65 thereby bringing the groove 6 to the rear of the bumper. The rear bar 2 is of a width equal to the groove 6 and fixed therein and is held by a bolt such as 4. Due to the fact that the bar 2 is heated in the groove 6 70 for a considerable portion and fits snugly therein, it is held in horizontal alignment with the impact bar without the necessity of using clamps, thereby giving fewer parts to be assembled. The bolt 3 has a flat emblematic head which, due to its shape and size, is seated in the recess 6 and is held by the edges of the recess from turning. It is of such a thickness that it lies in back of the plane of the face of the impact bar, thereby 80 forming a bumper face without the usual

The bumper disclosed in Fig. 4 is a modified method for securing the impact member 1 to the attaching bars. As the impact 65 member in this type of bumper is the same Fig. 4 is a modified form of the invention as that described above, the same designating numerals will be used to simplify the description. The material difference lies in the shape of the attaching bar 7, which is 90 shown in two separate units, having their outer ends looped to pass around the ends of the impact member and lie in groove 6. The end of the bar 7 is secured to the impact section by means of a bolt 8 and is held in .95 horizontal alignment by means of the edges of the groove 6, into which it is snugly seated as shown in Fig. 5. The inner end of bars 7 are S-shape in form and have their ends secured to the rear of the impact section by 100 emblematic bolts such as 9. It is obvious The now preferred form of invention as that this type of bumper will be easy to

A further modification of this type of bumper and the method of securing the rear 106 its center portion drawn-forward and sebar thereto is shown in Fig. 7. In this type cured to the impact member 1 by an embumper the groove 6 is formed in the rear blem-headed bolt 3. The ends of bar 2 are of the impact bar 10 and the flanges 5 are secured to the ends of impact bar 1 by bolts preferably omitted. It is obvious, however, that the flances may be used without depart-55 4. The impact bar 1 is preferably formed that the flanges may be used without depart-

this form of bumper the groove 6 forms a bolt at each point of attachment, said bar ground and nickeled while the remainder of • the bar is enameled. The attaching bars 11 are in separate units as shown in Fig. 8 having their outer ends secured in the groove 6, which is on the inside of the impact member, by means of bolts 12. The other ends 10 of the bars 11 are also secured in the groove 6, at points intermediate of its ends, by headed bolts 14. As in the other types described above the groove 6 holds the attaching bar securely in horizontal alignment 15 with the impact bar 10 as shown in Fig. 9.

A still further modified form of the in-

vention is shown in Fig. 10. The impact bar shown in this figure is similar to that described above and shown in Fig. 7; thereused to simplify the description. The attaching bars 15 are straight strips of spring steel set on edge with their ends bent to form an angle portion 16 which fits into the groove 6 in the rear of the impact member 10 as shown in Fig. 11. The angle portion 16 is secured by bolts 14 and is held in horizontal alignment with the impact member by means of the edges of recess 6 as 30 shown in Fig. 12.

It is apparent from the above description that this type of bumper will allow for expeditious assembly and will do away with the use of clamps for rigidly aligning the attaching bars with respect to the impact

members or member of a bumper. It is also apparent that this type of bumper will present a pleasing effect to the eye.

I claim:

1. In a bumper of the type described, an impact bar having a longitudinal recess formed in one face thereof, said recess permitting the attachment and alignment of a

ing from the spirit of the invention. In rear supporting bar thereto by means of one 45 shoulder on the front of the bar which is having a longitudinal protuberance on the other face thereof corresponding in location to said recess.

2. In a bumper of the type described an ⁵⁰ impact bar having a medial longitudinal groove formed in one face thereof, a rear supporting bar having a portion shaped to conform with a portion of said impact bar, said rear supporting bar portion being of 55 a width sufficient to snugly fit said groove and a bolt for securing said portion of said rear supporting bar to said impact bar in rigid horizontal alignment, said bar having a longitudinal protuberance on the other face thereof corresponding in location to said groove.

3. In a bumper of the type described an 20 fore, the same designating numerals will be impact bar having looped ends thereon, said impact bar having a longitudinal groove formed in the middle thereof, a rear bar having its center portion bent forward and secured to the rear of said impact bar, the ends of said rear bar fitting snugly into the groove in said impact bar and being secured in rigid horizontal alignment therewith at each end by a bolt.

4. In a bumper of the type described, an impact bar having a longitudinal recess 75 formed in the impact face, said recess permitting the attachment and alignment of a rear bar in said recess by one bolt at each point of attachment.

5. In a bumper of the type described, an 80 impact bar having looped ends thereon, said impact bar having a longitudinal groove formed in the impact face thereof, a rear bar having its ends secured in said groove in rigid horizontal alignment therewith at each as end by a bolt.

In testimony whereof, I have signed this specification.

ROLLIE B. FAGEOL.