G. A. WELLS, Jr.

ANTIRATTLING DEVICE.

APPLICATION FILED DEC. 23, 1919.

1,351,453.

Patented Aug. 31, 1920.

2 SHEETS—SHEET 1.

Fig. 1.

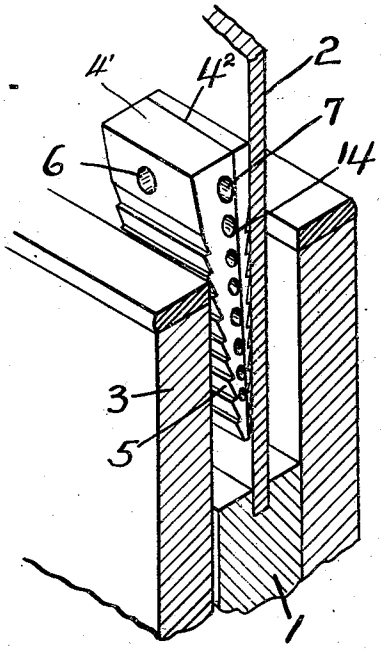


Fig. 2.

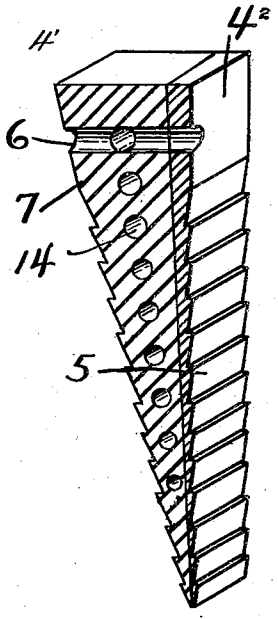


Fig. 4.

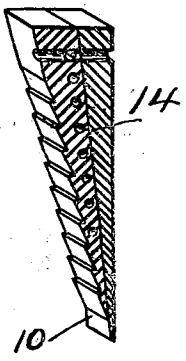
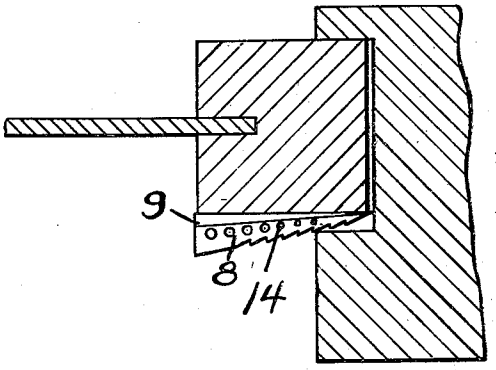


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 5.

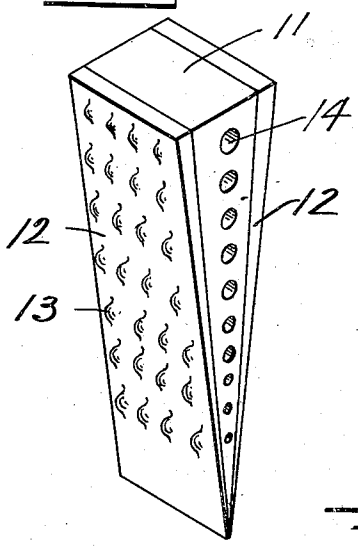


Fig. 7.

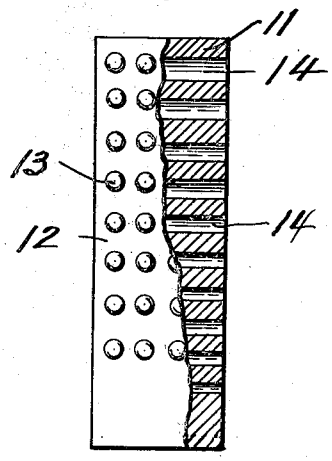
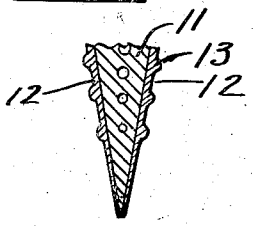


Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE A. WELLS, JR., OF NEW YORK, N. Y.

ANTIRATTLING DEVICE.

1,351,453. Specification of Letters Patent. Patented Aug. 31, 1920.

Application filed December 23, 1919. Serial No. 346,816.

To all whom it may concern:

Be it known that I, GEORGE A. WELLS, Jr., a citizen of the United States, residing at city, county, and State of New York, have invented a certain new and useful Improvement in Antirattling Devices, of which the following is a full, clear, and exact description.

My invention relates to an anti-rattling device and has for its object to provide a yielding, non-metallic anti-rattling wedge device for use in preventing the rattling and squeaks of windows, mud guards, running boards, hoods, wind shields, and other parts of automobiles and other vehicles, and also the rattling of windows in dwelling houses and the like. It also has for its object to provide a wedge for producing these results which will remain in place under adverse conditions. It also has for its object to produce a wedge which will not mar the parts with which it is in contact. It also has for its object to provide a wedge having at least one hard face for the purposes above referred to.

The following is a description of an embodiment of my invention, reference being had to the accompanying drawings, in which,

Figure 1 shows in perspective one form of my device in use in connection with the window of an automobile for preventing its rattling;

Fig. 2 shows a section of the same;

Fig. 3 shows another form of my device inserted between the jamb and sash of a window to prevent its rattling, while,

Fig. 4 shows a section of this second form of device.

Fig. 5 shows in perspective another form of plug embodying my invention.

Fig. 6 being an end view of the lower portion of same, and

Fig. 7 being a front view of the same partially broken away.

Referring more particularly to the drawings, 1 is the sash of a window carrying the glass 2. 3 is the frame in which the sash moves up and down. Between the frame 3 and the glass 2 is a rubber wedge embodying my invention in one form. This wedge has its body 4′ made of soft rubber of a character such as is commonly used in the manufacture of rubber heels, and is about two inches in length, having a thickness of about one-half inch and a breadth of about three-quarters of an inch at its larger end, from which it tapers to a line. One side is provided with a rubber facing 4^2. The two wedging sides are provided with transverse saw-toothed corrugations 5 constituting holding projections and the upper end of the wedge is provided with perforations 6 and 7 through which can be passed a cord for securing the wedge to the jamb adjacent to the window or hanging it upon a convenient hook, or a screw can be passed through the hole 6 for holding the wedge securely in place.

In use this form of wedge is placed between the glass 2 and the frame 3 and being forced rather tightly into place the corrugations 5 tend to prevent its working outward, or it can be forced into any opening between two parts, one or both of which vibrates so as to rattle or squeak. The material being of soft rubber, there is little likelihood of the glass 2 being broken on account of vibrations or shocks to which it may be subjected when the wedge is in place.

In the form shown in Figs. 3 and 4, the wedge is made up of a soft rubber wedge-shaped facing 8, similar to the rubber used in connection with the wedge 4′, and a somewhat flexible hard rubber backing 9, similar to that used in making hard rubber combs. The hard rubber backing extends beyond the soft rubber facing as at 10, so as to provide a hard point. This form of wedge is particularly adapted to be forced between the window frame and the jamb, as shown in Fig. 3, so as to prevent rattling. It is particularly adapted for use in connection with windows in dwellings and the like.

In making the form shown in Fig. 4, the portions forming the facing and the backing are made of the proper compositions well known to those skilled in the art for manufacturing hard and soft rubber, the two masses being laid one upon the other so that they adhere when cured simultaneously in a manner familiar to those skilled in the art. The masses for making the hard and soft rubber portions are each preferably tapered as shown in cross-section before curing, and formed into sections of considerable length from which a plurality of wedges of the desired length, width and thickness may be made by cutting.

In the form shown in Figs. 5, 6 and 7,

the wedge is provided with a soft rubber core 11 on both faces of which is a hard rubber surface 12, the soft rubber core and hard rubber surfaces preferably all tapering and extending to the point of the wedge, as shown in Fig. 6. The hard rubber surfaces are provided with projections or protuberances 13 which are arranged in transverse rows, alternate rows being staggered so that they are also arranged in diagonal rows inclined in two directions. These projections serve the same function as the corrugations 5 constituting holding projections assisting in holding the wedge in place when it is inserted.

In all the forms above described the central portions of the wedge are of soft rubber and are provided with holes or openings 14 which increase the compressibility of this soft rubber portion.

As will be evident, the size or form of the corrugations 5 can be modified as desired and the wedge may be otherwise modified without departing from the spirit of my invention or the scope of the appended claims.

What I claim is:

1. An anti-rattling device composed of a wedge-shaped soft rubber face portion and a hard rubber backing therefor integral therewith.

2. An anti-rattling device composed of a wedge-shaped soft rubber face portion and a hard rubber backing therefor integral therewith, said soft rubber portion having projections on the face thereof.

3. An anti-rattling device comprising a wedge-shaped soft rubber portion and a hard rubber facing therefor, said soft rubber portion having perforations extending from side to side thereof.

4. An anti-rattling device comprising a wedge-shaped soft rubber portion, and a hard rubber facing therefor, said soft rubber portion having perforations extending from side to side thereof, said device having projections upon both faces thereof.

GEO. A. WELLS, JR.