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R. M. BRUNDIDGE

VULCANIZER FOR PNEUMATIC TUBES

Filed June 28, 1926

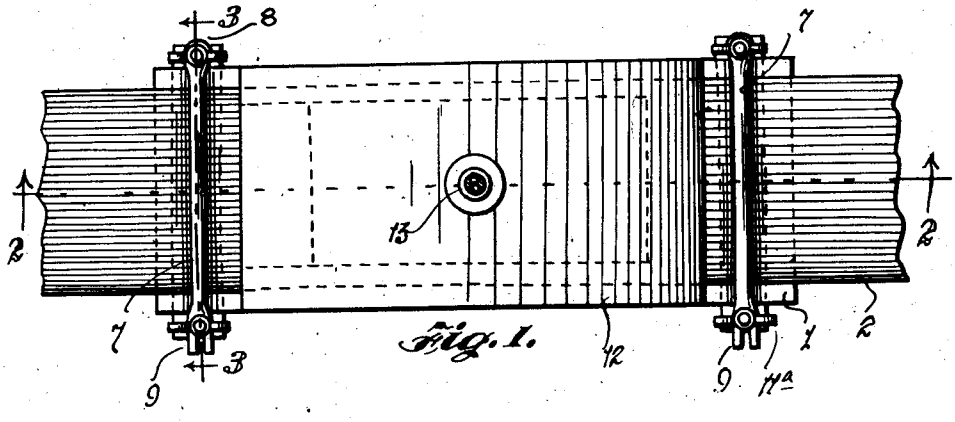



Fig. 1.

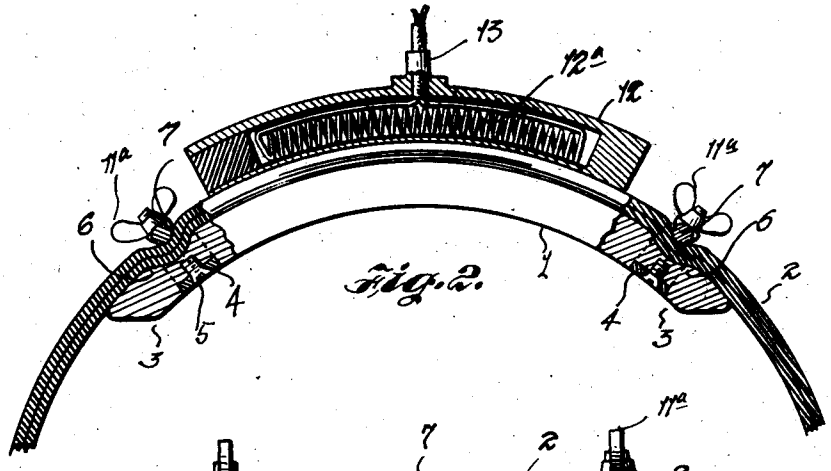



Fig. 2.

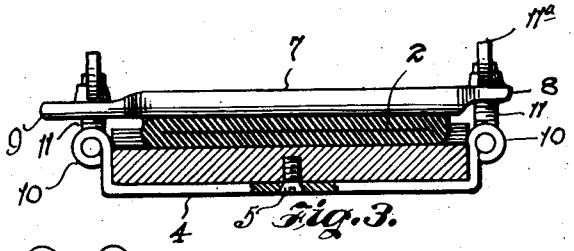



Fig. 3.

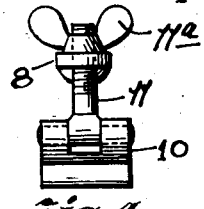



Fig. 4.

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# UNITED STATES PATENT OFFICE.

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## VULCANIZER FOR PNEUMATIC TUBES.

Application filed June 28, 1926. Serial No. 118,951.

This invention relates to improvements in tube holders and vulcanizers for mending automobile tubes and has for its object to provide a simply arranged and economically constructed device of this character.

Another object of the invention is to provide an electrically operated tube holder and mender wherein the heat is supplied by electric current in the vulcanizing operation.

With the above and other and further minor, yet important objects, in view the invention will be better understood from a perusal of the following detailed description in connection with the accompanying drawings forming part hereof and in which—

Figure 1 is a top plan view of the tube holder and mender and illustrating a portion of a pneumatic tube in operable position thereon.

Figure 2 is a longitudinal sectional view along the line 2—2 of Figure 1.

Figure 3 is a cross-sectional view along line 3—3 of Figure 1; and

Figure 4 is a detail view of a preferred form of clamping arrangement for holding the tube in operable position.

Proceeding in accordance with the drawings wherein numerals are employed to point out the various parts, 1 denotes a metallic circular plate of a curvature of such radius as to conformably receive a deflated tube 2 which is to lie flat upon the plate 1 when being repaired. The plate 1 is of such width as to easily receive the tube 2. Usually such patches or repairs to be made to the tube are not of any great width or size, hence the plate is of such dimensions as will not make it inconvenient or bulky.

Secured to opposite ends 3 of the plate 1 and at right angles thereto are strips 4 fastened thereto by screws 5 or in any preferred manner. Adjacent the strips and on the opposite side of the plate 1 are transversely arranged grooves 6. These grooves and strips are for the purpose of holding the tube in place when repairs are being made by vulcanization, the tube being forced into the grooves by clamps comprising rods 7. These rods two in number have an opening in one end 8 and the opposite end 9 is forked. In Figure 3 it will be seen that the ends of the strips 4 are curved into a circle at 10 and into these curved portions is placed T members 11. When the rods 7 are placed over the T members 11, butterfly nuts $11^a$ are screwed down thereupon. This causes the tube to be depressed into the grooves and the tube is held in place. When thus arranged the tube is ready for vulcanization.

For vulcanizing the tube there is provided a metallic plate 12 of such curvature as to be conformably received and seated upon the tube. Arranged within the plate 12 is an electrical resistance coil $12^a$ of common type which receives heat by means of the wires from an electric source of power. The wires are connected to the posts 13.

From the foregoing it will be understood that the device provides a simple and effectual means for vulcanizing a tube of this nature. It should be understood that modifications may be made in the arrangement and construction of the invention in keeping with the appended claims.

What is claimed is:

1. A vulcanizing device for pneumatic tubes comprising a semi-circular lower plate and a semi-circular upper plate, said lower plate including transverse grooves at either end thereof; a strip at each end of said lower plate below said grooves, a T-shaped element swingably connected to each end of said strips, a nut on each T-shaped member, a rod for each of said grooves and clamp means for compressing each rod in said grooves to hold the rods in said grooves when the vulcanization is made.

2. A vulcanizing device as set out in claim 1, and wherein said upper plate includes an electric resistance coil, said upper plate conformably receivable upon the lower plate, the tube being compressed between the plates during the vulcanization thereof; said upper plate being independently disposed with respect to the lower plate.

In testimony whereof I affix my signature.

ROBERT M. BRUNDIDGE.