

Sept. 1, 1931.

M. H. TONCRAY

1,820,925

NAME PLATE ATTACHING MEANS

Filed Dec. 5, 1929

2 Sheets-Sheet 1

Fig. 1

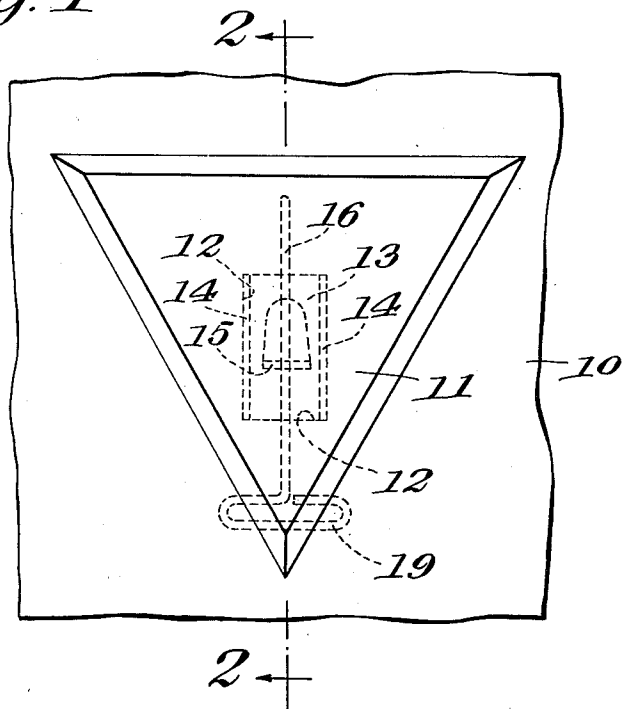


Fig. 2

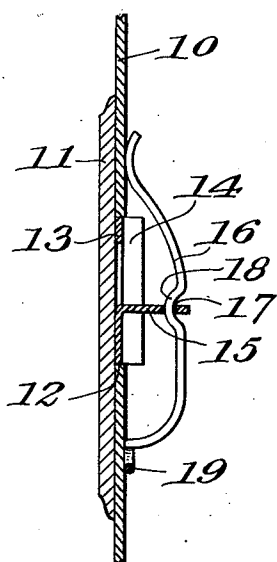
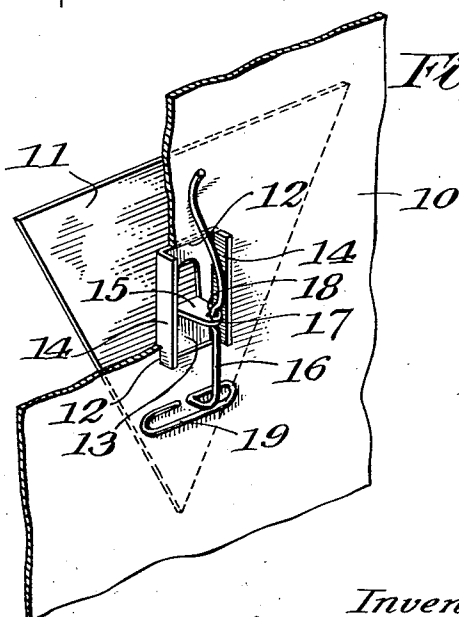


Fig. 3



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Fig. 4

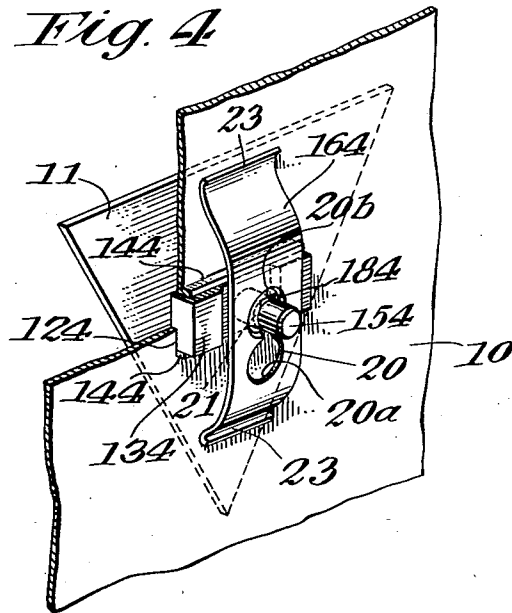
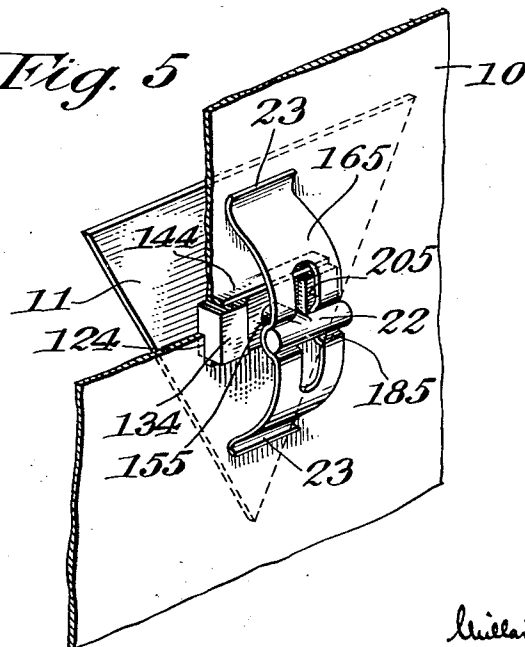


Fig. 5



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UNITED STATES PATENT OFFICE

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NAME PLATE ATTACHING MEANS

Application filed December 5, 1928. Serial No. 411,809.

This invention relates to improved means for securing an object, such as a radiator name plate, to a wall or sheet, such as a radiator shell of a motor vehicle. It has for its object to provide simple and inexpensive but effective attaching means whereby the name plate or other article may be accurately positioned on and firmly secured to the wall or shell against rattling or accidental disengagement.

The more particular objects of the invention, together with means whereby the latter may be carried into effect, will best be understood from the following description of certain forms of embodiments thereof illustrated in the accompanying drawings. It will be understood, however, that the particular constructions described and shown have been chosen for purposes of exemplification merely, and that the invention, as defined by the claims hereunto appended, may be otherwise embodied without departure from the spirit and scope thereof.

In said drawings:

Fig. 1 is a front elevation of a portion of an automobile radiator shell having a name plate secured thereto.

Fig. 2 is a vertical section taken substantially on the line 2-2, Fig. 1.

Fig. 3 is a perspective view, partly broken away, and looking from the rear of the shell.

Figs. 4 and 5 are views similar to Fig. 3 illustrating modifications.

In the drawings the radiator shell is shown at 10 and the name plate to be attached thereto at 11. As shown in Figs. 1 to 3, the shell 10 has formed therein a preferably rectangular or other non-circular aperture 12, while the name plate 11 has brazed or otherwise secured to its rear face a plate 13 of such form and dimensions as to fit said opening, and therefore adapted, when seated in the latter, to position the name plate on the face of said shell both angularly and transversely. The plate 13 is preferably formed at two opposite edges with flanges 14 to engage the corresponding edges of the aperture 12, thereby further assisting in accurately positioning the name plate. Between the flanges 14 the attaching plate 13 is formed with a projec-

tion, preferably in the form of an integrally struck-up ear 15. Cooperating with the projection 15 at the rear of the wall 10 is a bowed resilient locking member 16, said projection and locking member having interengaging means whereby the name plate is secured to the wall. As shown, said interengaging means comprises a transverse opening 17 in the projection 15 and through which the locking member 16 extends, and a depression 18 in said locking member at substantially the middle or summit of the bow in which the portion of the projection 15 adjacent said opening is seated. The locking member 16, which is preferably composed of resilient wire, is formed at one end with a T-shaped head 19 adapted, by engagement with the inner face of the wall 10, to hold said member against rotation in either direction about an axis parallel to said wall and thereby maintain the same with its bowed portion in an erect position in a plane substantially perpendicular to said wall.

In order to attach the name plate to the shell, the projection 15 is passed through the opening 12 and the plate 13 with its flanges 14 is seated in said opening. Thereafter the end of the locking member 16 opposite the head 19 is inserted through the opening 17 and said member moved longitudinally in a direction substantially parallel to the wall into the position shown in the drawings, whereupon the opening 17 and depression 18 will be interengaged to resist withdrawal of said locking member. The form and proportions of the locking member are such that the movement above described thereof into locking position tends to place said member under tension with its ends in yielding engagement with the rear or inner face of the wall 10 at opposite sides of the aperture 12, thereby resiliently holding the name plate against rattling as well as positively locking it against removal, while the engagement of the T-shaped head 19 with the inner face of the wall maintains said locking member against rotation in this position, as above described.

In the construction shown in Fig. 4, the locking member 164 is in the form of a bowed leaf spring or spring plate, while the coop-

erating projection 154 is in the form of a stud extending rearwardly from the attaching plate 134 which is secured to the rear face of the name plate 11 and fits the non-circular opening 124 in the radiator shell 10. In this form of the invention the positioning flanges 144 are formed on the edges of the opening 124 rather than on the attaching plate as in the form of the invention first described. The bowed spring locking member 164 is formed intermediate its ends with a key-hole slot 20 to cooperate with the stud 154 which is formed with an annular groove 21 forwardly of the free end or head portion thereof, the spring 164 being preferably formed with a depression 184 to receive said head portion when the parts are in locking position.

In accordance with this form of the invention, the plate 11 is attached by passing the stud 154 through the opening 124 and seating the plate 134 in the latter, whereupon the spring locking member 164 is placed with its ends in engagement with the inner face of the wall or shell 10 at opposite sides of the opening 124 and with the larger end 20a of the key-hole slot 20 opposite the end of said stud. Said spring is then compressed to cause said stud to pass through said opening and bring the smaller end 20b of said slot opposite the groove 21 in the stud, whereupon the spring is moved longitudinally, in a direction parallel to the wall or shell 10, to cause said smaller portion of the slot to embrace the reduced portion of the stud in the rear of its head which is thereupon seated in the depression 184.

The construction shown in Fig. 5 is similar to that shown in Fig. 4, but in this instance the stud 155 is formed with a T-shaped head 22, while the bowed leaf spring locking member 165 is formed with a longitudinal slot 205 and with a depressed portion 185 disposed transverse to said slot.

In applying this form of the invention, the slot 205 in the locking member 165 is passed over the head 22 of the stud 155, said spring locking member being compressed during this operation and being thereafter turned through an angle of 90° in a direction parallel to the wall 10 to bring the slot 205 transverse to the head 22 which is thereupon seated in the depression 185.

It will be observed that in the forms of the invention shown in Figs. 4 and 5, the spring locking members are formed with squared ends 23 which, by engagement with the inner face of the wall 10, serve to hold said members against rotation in either direction about axes parallel to said wall and thereby maintain said members with their bowed portions in erect positions in planes substantially perpendicular to said wall in the same manner as the head 19 of the lock-

ing member 16 in the form of the invention first described.

Having thus described my invention, I claim:—

1. The combination with a wall having an aperture therein, of an object having a projection extending through said aperture, and a bowed resilient locking member having its ends engaging the inner face of said wall, said projection and locking member having interengaging means rendered operative by relative movement in a direction substantially parallel to said wall to secure said object to said wall and to hold said member under tension.

2. Means for attaching an object to a wall having an aperture therein, said means comprising a projection on said object extending through said aperture, and a bowed resilient locking member having interengagement intermediate its ends with said projection and engaging at its ends the rear face of said wall at opposite sides of said aperture, said locking member having an end portion adapted, by engagement with said wall, to hold said member against rotation in either direction about an axis parallel to said wall and thereby maintain the same with its bowed portion in an erect position in a plane substantially perpendicular to said wall.

3. The combination with a wall having an aperture therein, of an object having a projection extending through said aperture, and a bowed resilient locking member having its ends engaging the inner face of said wall, said projection and locking member having interengaging means rendered operative by a longitudinal movement of said locking member to secure said object to said wall and to hold said member under tension.

4. The combination with a wall having an aperture therein, of an object having a projection extending through said aperture, and a bowed resilient locking member having its ends engaging the inner face of said wall, said projection and locking member having interengaging means including a depression in said locking member at substantially the middle or summit of the bow in which a portion of said projection is seated.

5. Means for attaching an object to a wall having an aperture therein, said means comprising a projection on said object extending through said aperture and having a transverse opening therein, and a bowed resilient locking member extending through said opening and engaging at its ends the rear face of said wall at opposite sides of said aperture, said locking member having an end portion adapted by engagement with said wall to hold said member against rotation in either direction about an axis parallel to said wall and thereby maintain the same with its bowed portion in an erect position in a

plane substantially perpendicular to said wall.

6. Means for attaching an object to a wall having an aperture therein, said means comprising a projection on said object extending through said aperture, and a bowed resilient locking member having interengagement intermediate its ends with said projection and engaging at its ends the rear face of said wall at opposite sides of said aperture, said locking member having at one end a transverse T-shaped head.

7. The combination with a wall having a non-circular aperture therein, of an object having secured thereto a plate shaped to fit said aperture and seated therein, a projection extending rearwardly from said plate, and a bowed spring locking member resiliently engaging at its ends the rear face of said wall at opposite sides of said aperture and interengaged intermediate its ends with said projection.

8. The combination with a wall having a non-circular aperture therein, of an object having secured thereto a plate shaped to fit said aperture and seated therein, one of said parts having positioning flanges engaging the edges of the other, a projection extending rearwardly from said plate, and a bowed spring locking member resiliently engaging at its ends the rear face of said wall at opposite sides of said aperture and interengaged intermediate its ends with said projection.

9. Means for attaching an object to a wall having an aperture therein, said means comprising a plate secured to the rear face of said object, said plate having flanges to engage the edges of said aperture and a struck up projection between said flanges, and a locking member cooperating with said projection and engaging the rear face of said wall.

In testimony whereof I affix my signature.
MILLARD H. TONCRAY.

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