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J. H. FERGUSON

2,051,835

FENDER STRAIGHTENING MACHINE

Filed March 25, 1935

Fig. 1.

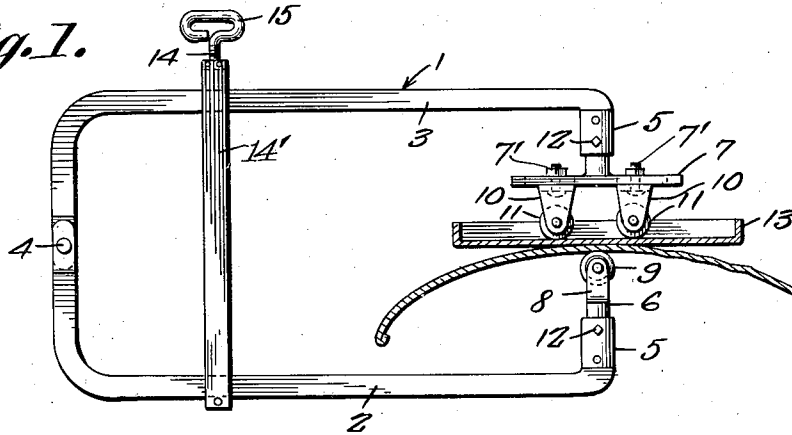


Fig. 2.

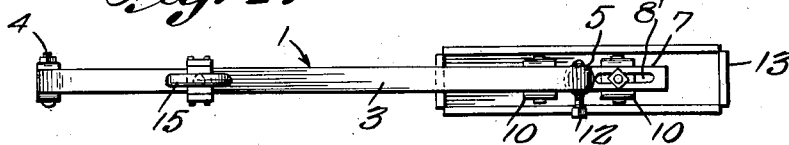


Fig. 3.

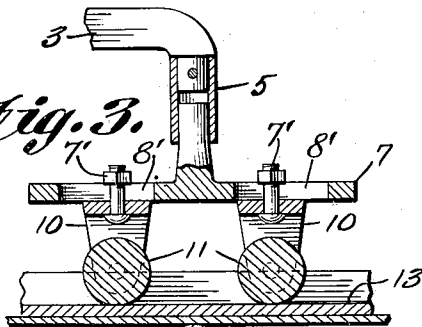


Fig. 4.

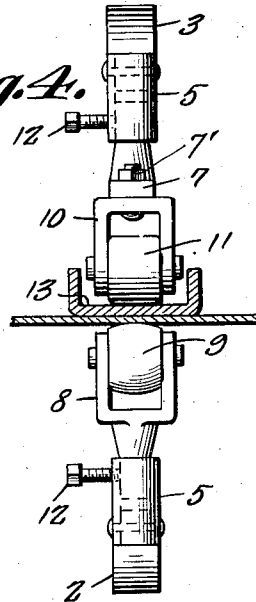


Fig. 5.

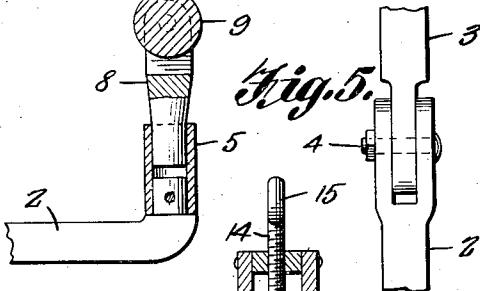
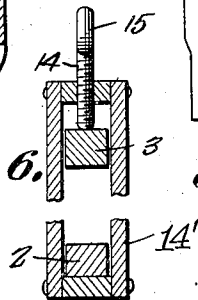


Fig. 6.



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FENDER STRAIGHTENING MACHINE

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Application March 25, 1935, Serial No. 12,952

2 Claims. (Cl. 81—15)

This invention relates to tools especially adapted for removing dents from metallic devices such as automobile fenders, and has for the primary object the provision of a device of this character which is simple, durable and compact and easy to operate and which may be manufactured and sold at a low cost.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawing, in which

Figure 1 is a side elevation, partly in section, illustrating a fender straightening device constructed in accordance with the present invention.

Figure 2 is a top plan view illustrating the same.

Figure 3 is a fragmentary vertical sectional view drawn on an enlarged scale showing the application of the device to a fender.

Figure 4 is an end view, partly in section, illustrating the same.

Figure 5 is a detail view showing the hinge connection between the members of the frame.

Figure 6 is a detail sectional view showing the means of adjusting the members of the frame.

Referring in detail to the drawing, the numeral 1 indicates a frame consisting of movable members 2 and 3 hingedly connected, as shown at 4. The free ends of the members 2 and 3 are angularly disposed and extend in the direction of each other and are in the form of sleeves, as shown at 5. The sleeves 5 removably receive stems 6, one of which is integral with a plate 7 and the other is bifurcated to form spaced portions 8 to which is journaled a roller 9. Roller supporting brackets 10 are adjustably secured to the plate 7 and have journaled thereto rollers 11 spaced from one another and arranged laterally of the roller 9. The rollers may be equipped with anti-friction bearings. The rollers 11 are capable of being adjusted towards and from one another on the plate 7. Bolts 12 are secured to the brackets 10 and extend through the slots 13 of the plate 7 to permit of said adjustment. Set bolts 14 are employed for removably securing the stems in the sleeves 5. Operating in conjunction with the rollers is an anvil 15 in the form of a flanged plate with the rollers disposed at opposite faces of the flanged plate.

A yoke 16 surrounds the movable members 2 and 3 and has threaded thereto a stem 17, one end of which bears against the movable member 3

and the opposite end of said stem is integral with a finger piece 18.

In operation, the roller 9 is brought in contact with one face of a dented metallic member and the anvil 15 brought in engagement with the opposite face of said dented metallic element with the rollers 11 in engagement with said anvil. The finger piece 18 is turned to bring about a desired pressure of the anvil and roller 9 upon the dented metallic element and by moving the device relative to the dented metallic element, the pressure of the anvil and roller 9 will remove the dents and thereby recondition the dented metallic element to its original state.

The anvil 15 presents a flat smooth surface for one face of the dented metallic member to engage and due to its surface the finish of the metallic member will not be unduly marred and permits the rollers 11 to ride thereon while pressure is being applied to the metallic member and the device moved relative thereto so that the roller 9 will iron out the dents of the metallic member. The anvil being flanged will obviate the danger of the rollers 11 moving off of the latter during the use of the device.

Having described the invention, I claim:

1. A metal working tool comprising movably connected members, a pair of rollers carried by one of said members, a single roller carried by the other member, an anvil engaging said pair of rollers and a dented metallic element with the single roller contacting said metallic element from the opposite faces thereof from the anvil, means for adjusting said pair of rollers relative to one another with the single roller arranged for operation on the metallic element out of alignment with either roller of said pair of rollers, and means for applying pressure to said movably connected members.

2. A metal working tool comprising movably connected members, a pair of rollers carried by one of said members, a single roller carried by the other member, a flanged plate providing an anvil engaging said pair of rollers and a dented metallic element with the single roller contacting said metallic element from the opposite faces thereof from the anvil, means for adjusting said pair of rollers relative to one another with the single roller arranged for operation on the metallic element out of alignment with either roller of said pair of rollers, a yoke receiving said movably connected members, a stem threaded to said yoke and engaging one of said members, and a finger piece integral with the stem.

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