Dec. 6, 1949 R. E. CASAZZA 2,490,254

PECKING HAMMER

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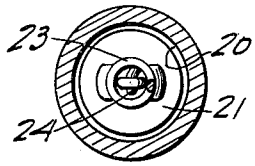


FIG. 3

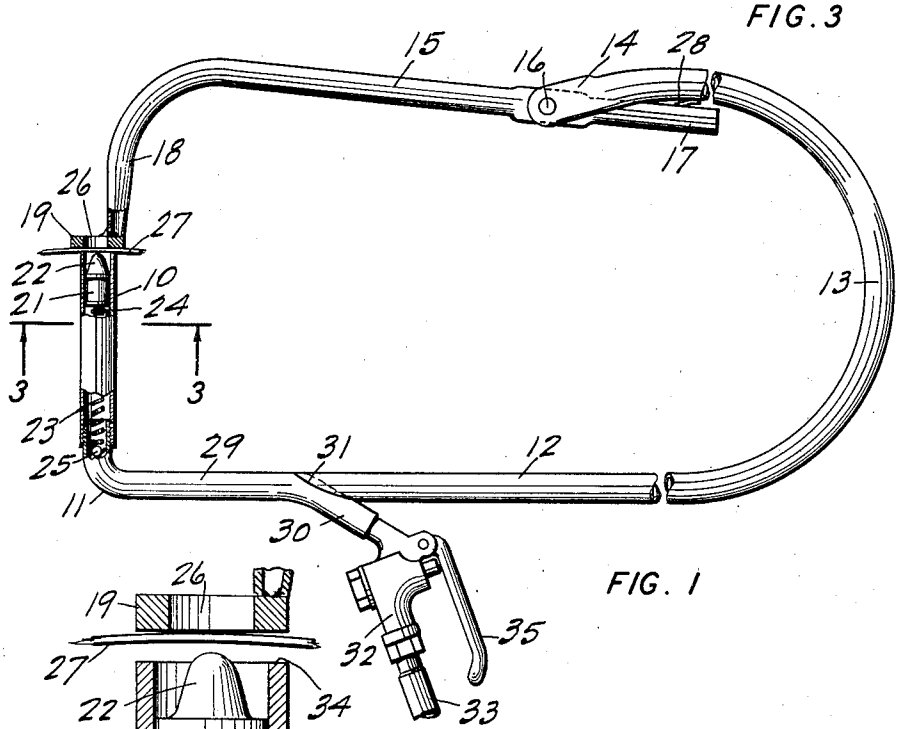


FIG. 1

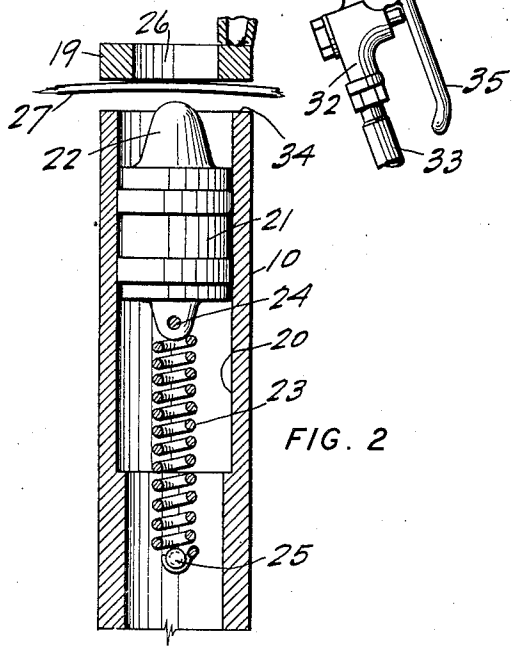


FIG. 2

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PECKING HAMMER

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2 Claims. (Cl. 153—32)

1

This invention relates to improvements in automobile body straightening devices and particularly to devices for straightening or lifting small dents or ridges which cannot be straightened by conventional straightening tools.

For straightening door panels, fenders and the like, various types of rollers and hammers are used. These types of tools are very effective in straightening large dents which are free of ridges or wrinkles but do not straighten tiny dents, ridges or wrinkles, which are ground down after the straightening operation has been completed to the extent of which the specific tools are capable. In grinding these ridges, wrinkles and tiny dents, the metal at those points is ground through or almost through, requiring patching, or a previous peining job must be carried out before grinding, and which is slow and laborious and not too exacting because in such jobs the work is being carried out rather blindly, with an anvil on one side and the peining carried out on the other.

With my invention tiny wrinkles and dents are easily straightened because the dent, ridge or wrinkle is under direct observation during the operation. The tool can be located exactly for the tiniest dent or sharpest ridge, and due to constant observation the tool can be progressed along the ridge to straighten the ridge completely. The tool is capable of operating under pressure or by tapping and is under constant control of the operator. It is made to span any part of the body, doors, or fenders of an automotive vehicle, and opens up sufficiently to pass any obstructional part such as a door frame.

The objects and advantages of the invention are as follows:

First, to provide a pecking hammer for straightening narrow ridges and small dents in sheet metal parts.

Second, to provide a hammer as outlined in which the ridge or dent is constantly observable during the straightening operation.

Third, to provide a hammer as outlined which may be used to stroke a blow or to create a pressure for straightening dents and the like.

Fourth, to provide a hammer as outlined with sufficient gap to pass over and engage any area on an automotive fender, door or the like.

Fifth, to provide a hammer as outlined which opens sufficiently wide to pass obstructions such as door frames and the like.

Sixth, to provide a hammer as outlined with an anvil incorporating a sight and centering means.

2

Seventh, to provide a hammer as outlined which is simple in construction and operation and relatively light in weight.

In describing the invention reference will be made to the accompanying drawings, in which:

Fig. 1 is a side elevation of the invention shown partly in section.

Fig. 2 is an enlarged sectional elevation through the hammer and anvil.

Fig. 3 is a section taken on line 3—3 of Fig. 1.

The invention consists of a frame consisting of a section of tubing having a vertical portion 10 which is bent at right angles at 11 continuing into a horizontal portion 12 which in turn continues through a return bend 13 terminating in a fork 14 into which is intermediately pivoted a second section of tubing 15 as indicated at 16 leaving a handle portion 17 with the other end continuing substantially parallel to the straight section 12 when the tool is closed, and continuing in a dependent portion 18 to the end of which is affixed an anvil 19.

The portion 10 is bored as indicated at 20 for the piston 21 which terminates in a ball pein 22, and which constitutes the hammer, and this hammer is retracted by a tension spring 23 one end of which is attached to the hammer as indicated at 24 and the other end anchored in the tube on a pin 25.

The anvil 19 has a sight opening 26 which functions as a locating and centering means for exactly locating the dent on the sheet metal 27 such as a fender or door of an automotive vehicle.

The gap between the sections 12 and 15 when the tool is closed as shown is sufficient to span any portion of an automotive vehicle such as a fender or door, and the span between the sections 10—18 and 13 is sufficient to reach any portion of such parts.

A leaf spring 28 (partly broken away because of the break in the frame) urges the tool to open.

The portion 12 is actually made in two parts, the part 10, 11, 29 and 30 being continuous, with the part 12, 13 and 14 welded to the bend as indicated at 31, and the part 30 is bent down and terminates in a connection for a suitable manually controlled valve 32 which is connected to a suitable source of fluid under pressure through a conduit 33.

In operation the lower portion with the valve drops down out of the way, The anvil is placed over the dent which is sighted through the opening 26 and centered therein. The lower portion is then raised to bring the end 34 into contact with the metal 27, and the valve is then operated

to cause the hammer **22** to strike the dent under the pressure in the line **33**.

In this case the valve is operated for each stroke, the valve being of the well known type in which depression of a button or lever **35** admits fluid and when released, the fluid supply is shut off and the actuating fluid is released, the spring returning the hammer to its retracted position.

As will be noted, gripping across the handle **17** and portion **14** closes the tool, or, the tool can be held close to the portion **18** by one hand while the other hand grips the portion **12** and operates the valve, or may be held by the valve.

I claim:

1. A pecking hammer comprising; a first tubular member having a rightangle portion at one end and a return bend at the other end and sealed at its terminal end and terminating in a fork, and having a hammer including a piston slidable in said rightangle portion, and a spring for retracting said hammer, and a fluid connection and a valve therefor for controlling fluid under pressure to said rightangle portion for operating said hammer; a second tubular member intermediately hinged in said fork and having a rightangle portion offset axially relative to the right-angle portion on said first tubular member and terminating in an anvil having a sight passage in axial alignment with said rightangle portion of said first tubular member for centering work to be operated upon by said hammer.

2. A pecking hammer comprising; a first tubular element forming a conduit and bent upward at right angles at its forward end and having a cylindrical bore formed therein, and formed into a return bend projecting upwardly, at the other end, and terminating in a fork, said first tubular element having a fluid connection including a manually controlled valve intermediate the length of the intervening horizontal portion between the bent upward and return bend portions, and with said tubular element sealed off on the return bend side of said connection; a piston type hammer operative in said cylindrical bore, and a tension spring for normally retracting said hammer; a second tubular element having a hinged connection in said fork and extending rearwardly inside of said return bend to form a lever for gripping in connection with the terminal portion of said return bend, and terminating at the other end in a depending portion bent at right angles with its axis parallel to and rearwardly offset relative to the bent upward portion and having a shoe projecting forwardly with a sight passage formed in line with said hammer, with said hammer striking a single blow and holding pressure each time the valve is manually actuated.

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