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NAIL STRAIGHTENING DEVICES

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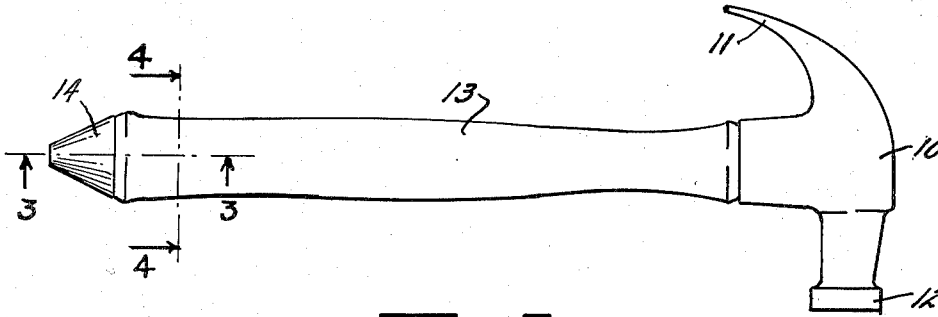


FIG. 1

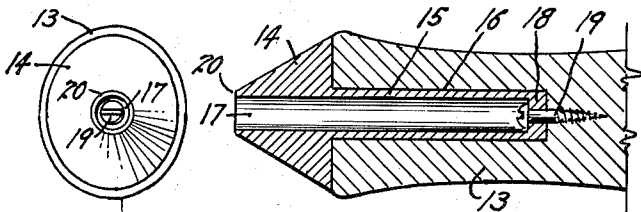


FIG. 2

FIG. 3

FIG. 4

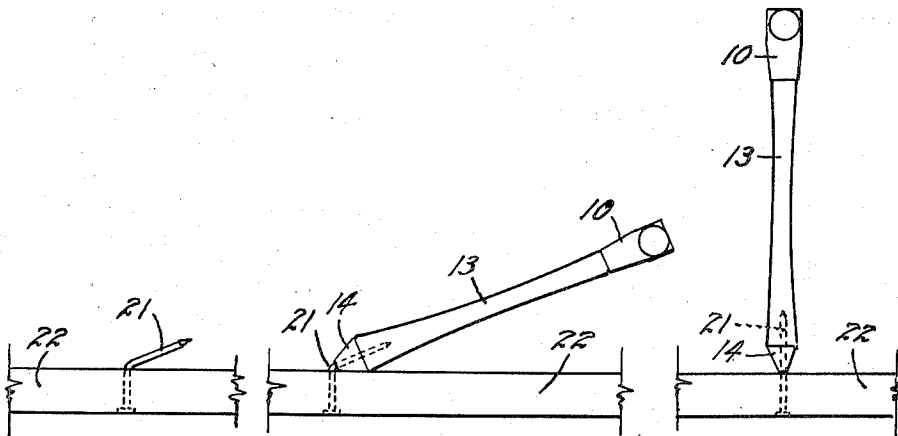


FIG. 5

FIG. 6

FIG. 7

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NAIL STRAIGHTENING DEVICES

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5 Claims. (Cl. 81—15)

This invention relates to a nail straightening device for application to and use with a carpenter's conventional claw hammer. In cleaning lumber, that is, in removing nails from used lumber, the nails are often found to be bent on the far side of the pieces of lumber so that it is difficult to withdraw these nails with the conventional claw hammer. Usually the heads are embedded so deeply that the hammer claws cannot be placed behind the head, and if an attempt is made to straighten the pointed extremities of the nails with the hammer, they will often rotate in the nail holes so that it becomes exceedingly difficult to straighten them so that they may be driven through the lumber piece for withdrawal from the near side with the hammer claws.

The principal object of this invention is to provide a nail straightening device which can be applied to or formed on the handle of a conventional carpenter's claw hammer, and which can be driven over or slipped over the pointed extremity of a bent nail and the latter quickly and easily brought to a straightened position so that it may be driven through the lumber piece for convenient withdrawal by the hammer claws.

Another object of the invention is to provide a device of this character which will be a unitary part of the claw hammer so that the nails may be straightened, driven, and withdrawn by the use of the hammer without the loss of time which would be required to lay the hammer aside and pick up a second tool or vice versa.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention, reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 is a side view of a conventional carpenter's claw hammer, illustrating the invention applied thereto;

Fig. 2 is an enlarged end view of the handle of the hammer of Fig. 1 with the invention in place therein;

Fig. 3 is an enlarged, fragmentary, longitudinal section through the end of the handle, taken on the line 3—3, Fig. 1;

Fig. 4 is a similarly enlarged cross-section, taken on the line 4—4, Fig. 1;

Fig. 5 is a diagrammatic view illustrating a typical bent nail in a piece of lumber;

Fig. 6 is a similar diagrammatic view illustrating the invention applied to the bent nail of Fig. 5; and

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Fig. 7 is a similar diagrammatic view illustrating the nail as straightened by this improved nail straightener.

In Fig. 1 a conventional hammer head is illustrated at 10 provided with the usual nail pulling claws at 11 and nail driving face at 12. The hammer is illustrated provided with a conventional hardwood hammer handle 13.

The invention comprises a metal cone 14, the conical external front face of which has a diameter and an external contour similar to that of the extremity of the handle 13. The rear face or base of the cone 14 is substantially flat and lies in a plane at right angles to the axis of the cone. A nail tube 15 is formed on or applied to the flat rear face of the cone 14. A nail socket 17 extends concentrically through the cone 14 and into the nail tube 15, terminating adjacent the extremity of the latter to form a bottom 18 herein. The bottom is drilled for the passage of an attachment screw 19. The inclined face of the cone 14 terminates closely adjacent the periphery of the nail socket 17 so as to provide a relatively sharp, circular edge 20 around the entrance of the nail socket.

The improved nail straightener is applied to the hammer handle 13 by drilling a socket 16 in the extremity of the handle and forcing the nail tube 15 therein until the flat rear face of the cone rests against the handle extremity. The screw 19 is then inserted through the bottom 18 and screwed into the wood of the handle. In the usual installation, the screw 19 is not necessary, provided the socket 16 is drilled to tightly, frictionally engage the nail tube 15 so as to hold the latter in place. The screw, however, does provide an extra safety feature to prevent loosening of the straightening device.

In Figs. 5, 6 and 7 a typical bent nail has been illustrated at 21 driven through a lumber piece 22. To withdraw the nail with the use of the improved nail straightener, the nail socket 17 is slipped over the point of the nail and the device is driven or forced over the nail until the sharp edge 20 lies thereagainst, as shown in Fig. 6. The hammer is then raised to the vertical position of Fig. 7, completely and perfectly straightening the nail so that it may be driven through the lumber piece 22 by the hammer face 12 and withdrawn from the opposite side thereof with the use of the hammer claws 11.

While the device has been illustrated and described as an attachment for a conventional hammer handle, it would, of course, be possible to manufacture it as an integral part of the handle.

While a specific form of the improvement has been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:

1. A nail straightening device comprising: an elongated handle; a conical member on said handle; and a tubular portion on said conical member extending longitudinally of and into said handle, there being an elongated, cylindrical nail socket extending through said conical member and longitudinally of said tubular portion, the surface of said conical member approaches the inner surface of said cylindrical nail socket so as to form an annular, relatively sharp edge about the entrance of said nail socket.

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2. A nail straightening device as described in claim 1 having a bottom formed in said tubular portion, and a screw extending through said bottom and into said handle.

3. A nail straightening attachment for a hammer handle comprising: a conical portion having a substantially oval contour in cross-section; a conical forward face on said portion; a relatively flat rear face on said portion; a hollow tube extending rearwardly from said rear face; and a nail passage formed through said conical portion in alignment with the hollow interior of said hollow tube.

4. A nail straightening attachment for a hammer handle as described in claim 3 in which said conical portion has a forward conical face terminating about said nail passage to form an annular sharp edge thereabout, said

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tube being adapted for insertion into a receiving socket in said handle.

5. A nail straightening attachment for a hammer handle as described in claim 4 having means for securing said tube in said handle.

References Cited in the file of this patent

UNITED STATES PATENTS

1,357,533	Smith et al. -----	Nov. 2, 1920
1,883,692	Gillin -----	Oct. 18, 1932

FOREIGN PATENTS

171,335	Great Britain -----	Nov. 17, 1921
441,660	Germany -----	Mar. 9, 1927