United States Patent

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[54] **MULTIPLE PURPOSE HAND TOOL**
3 Claims, 11 Drawing Figs.

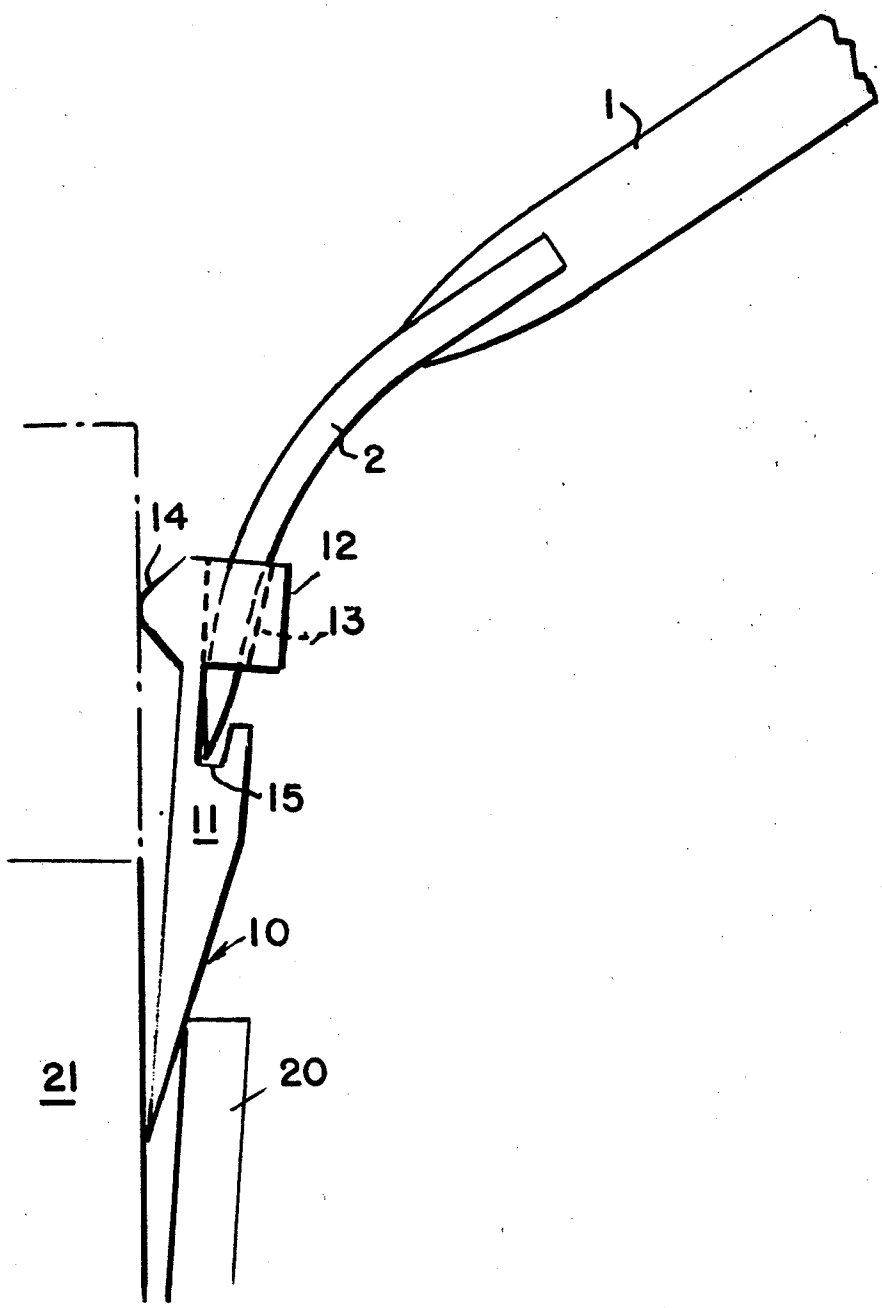
[52] **U.S. Cl.** 7/12, 145/1, 254/131
[51] **Int. Cl.** **B25f 1/02**
[50] **Field of Search** ..... 7/12; 254/21, 25, 104, 120, 131; 145/21, 1—2

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ABSTRACT: A handtool including a pry bar with interchangeable accessories to render the tool additionally useful as a ram wedge, and by similar attachments, including lobed surfaces, to effectively increase the load arm lever advantage of the tool when so used.



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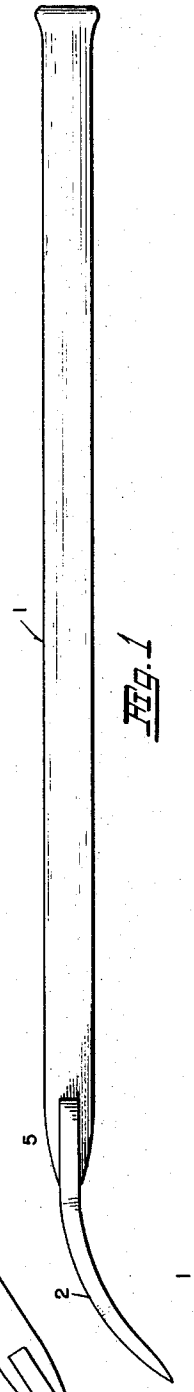


Fig. 1

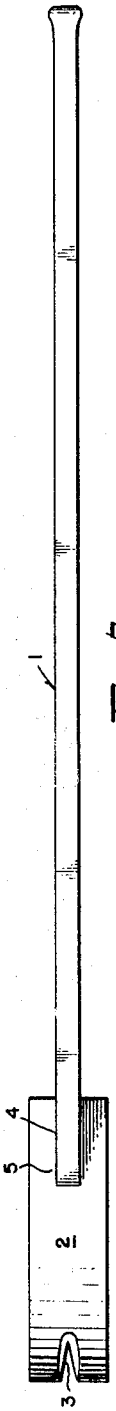


Fig. 2

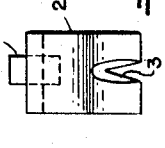


Fig. 3

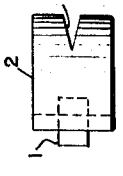


Fig. 4

Fig. 5

Fig. 6

Fig. 7

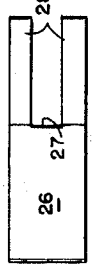


Fig. 8

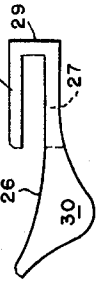


Fig. 9

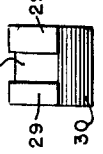


Fig. 10

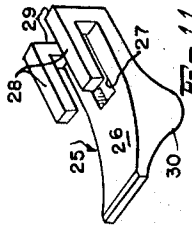


Fig. 11

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MULTIPLE PURPOSE HAND TOOL

This invention relates generally to a multiple purpose handtool and more particularly to a device for releasing and aligning concrete forms and the like and including attachments for selective use as a ram wedge, pry bar, wrecking and stripping bar, claw bar, and similar accessories, each with a self-contained fulcrum so disposed as to effectively increase the load arm lever advantage of the tool.

The objects of the invention are:

To provide a tool of the character described having various types of attachments with inherent means for quick, convenient and secure attachment to the tool and adapted for selective use as a wrecking bar, pinch bar and the like adapted to engage against the back of siding, for example, and having a pivot adapted to engage the studding thereby permitting a force to be applied against the board for removing the same from the studding.

To provide a bar with accessories that can either remove the boards toward the operator, away from the studding, directly in front of or below or beneath him or force the boards away from both the operator and the studding.

To provide a wrecking bar that is readily adapted for removing forms from concrete walls and the like.

To provide an accessory which serves a dual purpose of a combined ram wedge and fulcrum wherein the fulcrum is designed to withstand hammer blows or those of a sledge for driving the wedge.

The foregoing and other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawing forming a part hereof and in which:

FIG. 1 is an elevational view of a tool made in accordance with my invention.

FIG. 2 is a side elevational view of FIG. 1.

FIGS. 3 and 4 are end elevational views respectively of FIGS. 1 and 2.

FIG. 5 is a side elevational view of an accessory in the form of a ram wedge adapted for operative engagement with the tool shown in FIG. 1.

FIG. 6 is a top plan view of FIG. 5 with the tool of FIG. 1 removed.

FIG. 7 is a fragmentary elevational view similar to FIG. 1 showing a modified form of accessory applied to the tool.

FIGS. 8 and 9 are top and side elevational views respectively of the accessory shown in FIG. 7.

FIG. 10 is an elevational view of the right-hand end of FIG. 9 and FIG. 11 is a perspective view of the same.

With continuing reference to the drawing wherein like reference numerals designate like parts and particularly FIGS. 1—4 thereof, numeral 1 indicates an elongated handle which may be of bar stock or hollow tubular form if desired.

A spring steel pry bar 2, of arcuate shape as shown in FIG. 1, is notched as at 3 at its forward end and bifurcated as at 4 at its opposite end to receive the forward end of the handle 1 for welded securement thereto as at 5.

The ram wedge indicated generally at 10 in FIGS. 5 and 6 is of cast metal with its main body portion of wedge shape 11 extending upwardly into a hollow rectangular top end 12 having at least one downwardly tapering inside wall 13 and a lobed front wall to serve as a fulcrum 14.

The ram wedge is removably secured to the pry bar 2 by insertion of the bar's forward end downwardly through the hollow top end of the wedge unit. The tip of the pry bar comes to rest within a limit stop in the form of an upwardly opening notch 15 at the top of the wedge 11. By means of this assembly the tool and its accessory 10 can be used conveniently and effectually in prying, for example, boards 20 of a wall, or of concrete forms or the like from their studding indicated at 21 by a downward swing of the handle 1 whereby its lever advantage when serving as a load arm is increased by the length of the wedge 10.

The fulcrum accessory also attachable to the pry bar 2 as illustrated in FIG. 7, is a unitary metal casting whose main body indicated generally at 25, as shown in FIGS. 8—11, has a top surface 26 of arcuate shape matching the outside curvature of the pry bar 2, and is bifurcated as at 27 at its rearward end to straddle the working end of the handle 1. This end of the handle extends below the bifurcation as shown in FIG. 7, while two spaced apart parallel members 28 of the main body straddle the handle 1 above the pry bar 2 with the vertical portions 29 and members 28 embrace the square rearward end of the pry bar. The bottom surface of the main body is lobed as at 30 to serve, among many others, the purpose shown in FIG. 7.

From the foregoing it will be readily apparent that the fulcrum accessory may be quickly and conveniently attached to the pry bar and firmly held against lateral displacement by the members 28 and the bifurcation 27, during a rearward pull on the handle 1. Forward displacement is prevented by the nesting effect of the curved pry bar within the curved top surface 26 of the attachment.

I claim:

1. A multiple purpose hand tool comprising in combination,
an elongated metal handle,
a pry bar of metal unlike that of the handle permanently secured to one end of said handle,
an accessory including a fulcrum,
means removably attaching said accessory to the end of said pry bar whereby the effective length thereof and its lever advantage as a load arm under working conditions is increased.

2. A handtool as claimed in claim 1 wherein said accessory is of wedge shape subjacent its attachment to the pry bar.

3. A handtool as claimed in claim 1 wherein said accessory is a casting including a receptacle cast united with said wedge portion superjacent the top end thereof and including an abutment for the terminal end of said pry bar.