Jan. 22, 1963 C. ERICKSON, JR 3,074,694

ROOF-NAIL SPUD

Filed Feb. 24, 1961

FIG. 1.

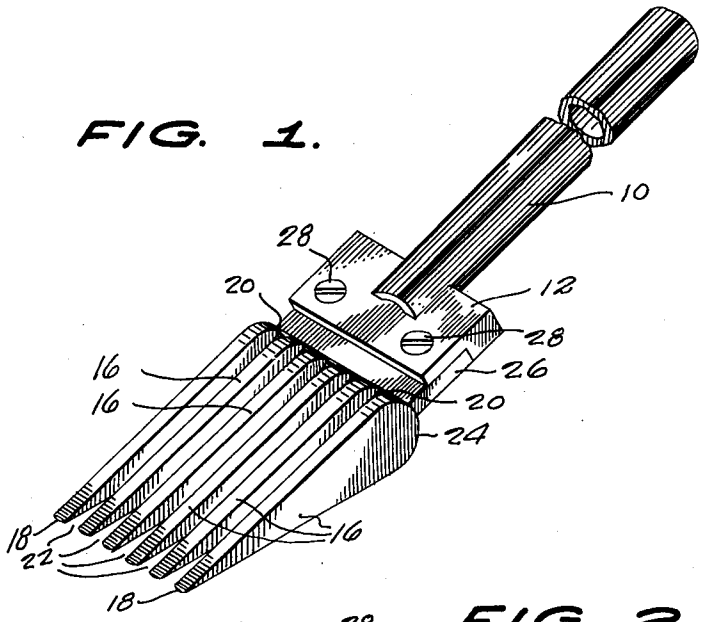


FIG. 2.

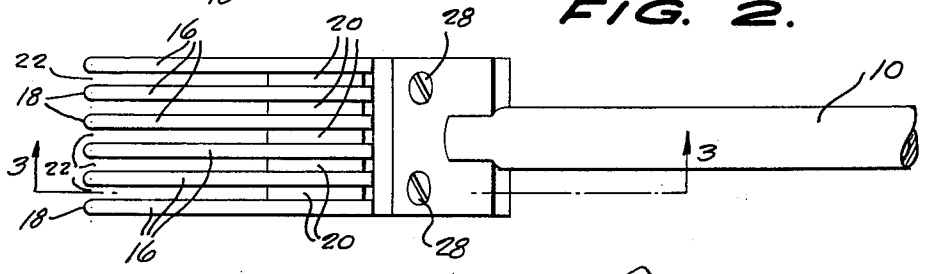
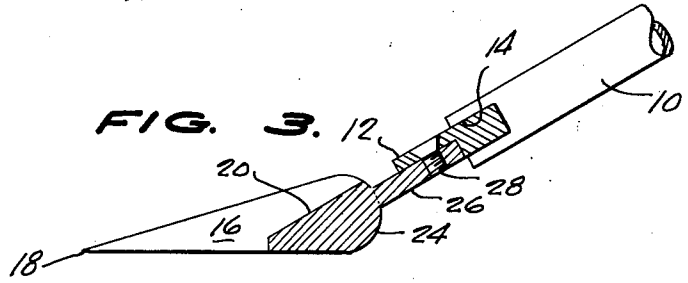


FIG. 3.



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ROOF-NAIL SPUD

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This invention relates to tools in general, and in particular to a prying tool for removing roofing material along with its securing nails, in a single operation. Customarily, removal of roofing paper or any pliable roof covering is accomplished following an initial operation of removing the individual nails with a common tool, such as a claw hammer or wrecking bar. Obviously, this is wasteful of energy, as in the bending of nails on withdrawal, and is unduly time-consuming, as well as destructive to the underlying roof sheathing. Furthermore, the general untidiness which necessarily results, makes for inefficiency in general.

It is therefore an object of the present invention to accomplish the separation of roofing and nails in a single operation. A further object is to achieve the foregoing while removing a plurality of nails simultaneously. More particularly it is an object to remove roofing and nails in a predominantly sliding and wedging action, as contrasted with the conventional lever action. A still more particular object is to provide for ready location of the nails by the tool, for engagement.

These and other objects, which will be apparent to those skilled in the art, are attained by the present invention, which may be briefly described as comprising a working head carried by an elongate handle, the head being made up of a series of parallel, wedge-shaped plates or teeth, held in laterally spaced relation, as by spacer plates, and partaking of the general, toothed form of a comb, with relatively sharp apices at the leading edge, and the teeth being inclined at any angle to the line of the handle for sliding action along a roof surface.

For a more detailed description of the tool, reference is made to the following specification, as illustrated in the drawing, in which:

FIGURE 1 is a perspective view of the tool, as a whole, with the handle foreshortened,

FIGURE 2 is a top plan view of the tool of FIGURE 1, and

FIGURE 3 is a sectional view taken along the line 3—3 of FIGURE 2.

Referring to the drawing by characters of reference, there is shown a tool having a handle 10, preferably tubular, for lightness and strength, which may be permanently secured to the tool head, but which preferably is detachably secured by means of a joining plate 12, fixed as by welding in a diametral slot 14 in the end of the handle.

The tool head comprises a series of sector-shaped plates 16 of acute angle providing a relatively sharp, leading edge 18, the plates all being of identical size and shape, and joined together, in spaced, parallel relation by means of spacer plates 20, such that the forward part of the assembly resembles a comb, with the plates 16 separated by spaces 22. The latter, as determined by the thickness of spacer plates 20, will be sufficient to clear the shank of a roofing nail but less than the diameter of the head thereof, and the wedge plates 16 will have a thickness which places the center lines of the spaces 22 in a pattern approximating the center lines of the roofing nails as ordinarily encountered.

In order to minimize harm to person or property by accidental contact, the rear edges of the sector plates are rounded, as in circular arcs, indicated by the numeral 24, and to these rear edges there is attached, as by welding, a stub plate or extension 26, having a pair of threaded bores, receiving screws 28 passing through

countersink bores in connector plate 12, thus effecting attachment of the handle to the working head.

In use it is merely necessary to slide the tool head under a free edge of the roofing with the spaces 22 generally lined up with the row of nails. In order to avoid undue hunting, or hindrance to the progress of the tool, the forward apices 18 of the sector plates are formed arcuate in profile, as clearly seen in FIGURES 1 and 2. It will also be observed that the rear shank plate 26 of the head is arranged at an angle upwardly of the central radius of sector plates 16, for convenient location of the handle 10 in moving the head with the bottoms of the sector plates riding the roof surface. As the tool progresses, the low edge angle achieves a slow, steady, lifting action of great force which not only raises the roofing material bodily over a substantial area, but also withdraws the nails, in plurality, slowly and surely, and without bending of the nails or gouging of the sheathing or the roofing material. In the case of a particularly stubborn nail, the form of the tool is such that a gentle leverage action may be employed from time to time, as required, but in general this should not be necessary, and even if resorted to will be so subsidiary to the general, pushing and wedging action as to be scarcely noticeable.

While the wedge plates have been shown as six in number, obviously the number may be varied over reasonably wide limits consistent with the smoothness and simplicity of the wedging action, the desired pulling power and the avoidance of piece-meal mutilation of the roofing material. Likewise, the shape, size and angle of the wedge plates are susceptible of reasonable variation. As shown, the wedge angle is about 20° but may be varied downward, or upward toward 45°, depending upon the work requirements. Also, whereas the leading edges of the wedge plates are shown as arcuate in profile, the form may be varied, and in particular the edges may be sharply toothed. These and other modifications will be apparent to those skilled in the art, in the light of this disclosure, and the invention should not, therefore, be deemed as limited, except insofar as shall appear from the spirit and scope of the appended claims.

What is claimed is:

1. A dismantling tool adapted for the removal of spaced rows of roofing nails and roofing material secured by the nails from sheathing, the dismantling tool comprising:

(*a*) a working head including a plurality of identical, parallel, elongated wedge plates;

(*b*) each wedge plate having an upper edge and a lower edge arranged at an angle of approximately 20° relative to one another and meeting in a sharp leading edge, the lower end edge being flat and being adapted for sliding, planar contact along said sheathing;

(*c*) spacer plates between adjacent wedge plates and spaced from the leading edges thereof whereby there is provided a toothed leading end;

(*d*) said wedge plates having arcuate forward end edges;

(*e*) a shank plate carried by the working head on the end thereof remote from said leading end at an angle acute to the lower end edges of the wedge plates;

(*f*) an elongated, tubular handle having a slotted end;

(*g*) a connector plate mounted in the slotted end; and

(*h*) means securing the connector plate to the shank plate.

2. A dismantling tool adapted for the removal of spaced rows of roofing nails and roofing materials se-

cured by the nails from sheathing, the dismantling tool comprising:

(*a*) a working head including a plurality of elongated wedge plates;

(*b*) each wedge plate having an upper edge and a lower edge angularly arranged relative to one another and meeting in a sharp leading edge, the lower end edge being substantially flat and being adapted for sliding, planar contact along said sheathing;

(*c*) spacer plates between adjacent wedge plates and spaced from the leading edges thereof whereby there is provided a toothed leading end;

(*d*) said wedge plates having arcuate forward end edges;

(*e*) a shank plate carried by the working head on the end thereof remote from said leading end; and

(*f*) handle means secured to said shank plate.

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