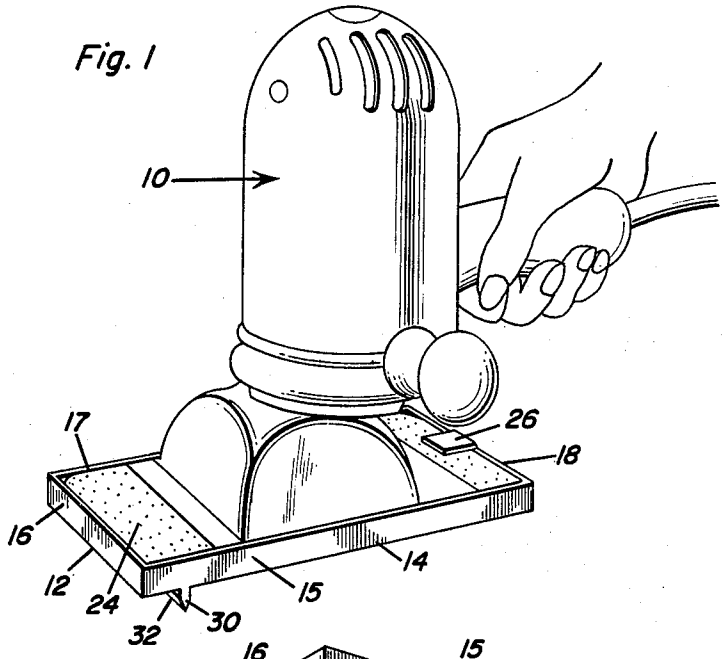
Sept. 6, 1960 R. W. MANN 2,951,286

VIBRATING SCRAPER

Filed May 12, 1959

Fig. 1



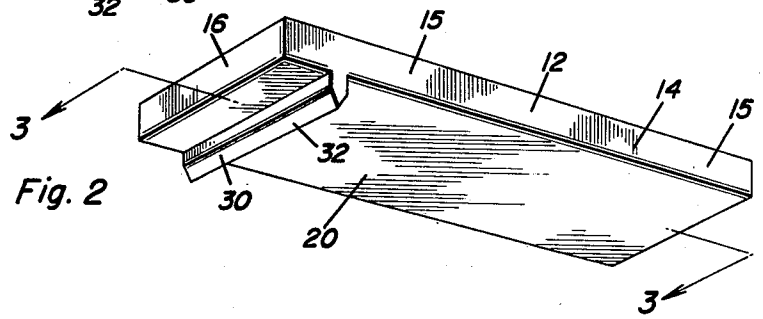


Fig. 2

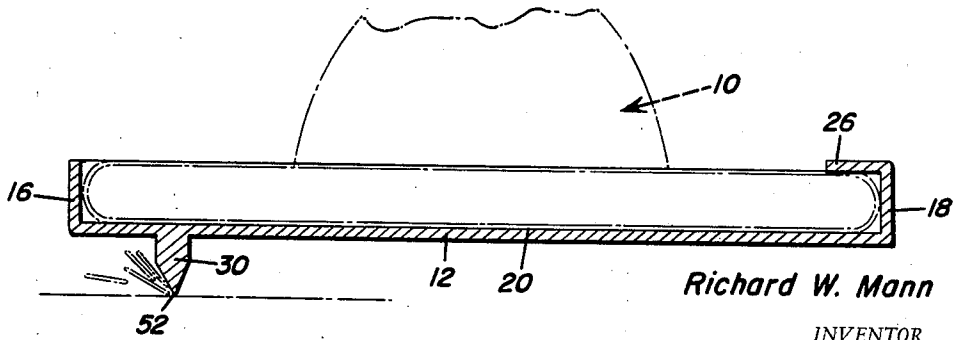


Fig. 3

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VIBRATING SCRAPER

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3 Claims. (Cl. 30—169)

This invention relates to scrapers and more particularly to a device to convert an electric vibratory sander to a scraper.

An object of the invention is to provide a mechanically simple attachment for a conventional vibratory sander which very easily and quickly converts the sander into a scraper. In this way the owner of a single power tool that is, a vibratory sander, may have the benefit of a scraper at a very low unit cost. The scraper operates well in scraping paint, rust and numerous other substances from wood, metal or other solid materials. Although the description henceforth deals with a wood scraper conversion, it is understood that this is by way of example only, and it may be used for numerous different kinds of scraping operations.

Briefly, the attachment is composed of a frame that is very quickly and easily secured to the sandpaper supporting base of a vibratory sander. The frame may be in the form of an upwardly opening receptacle to snugly receive the base of the sander or may be of other configurations. However, in each instance the frame has a blade connected with it and which is vibrated with the frame to perform the scraping operation.

These together with 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 drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of the scraper shown attached to a conventional sander.

Figure 2 is a bottom perspective view of the scraper attachment in Figure 1.

Figure 3 is a longitudinal sectional view taken on the line 3—3 of Figure 2.

In the accompanying drawing there is an electric vibratory sander **10** with which an attachment **12** is adapted to be used. The attachment has a frame **14** made in the form of an upwardly opening tray or receptacle. Therefore, it has four side walls **15**, **16**, **17** and **18** connected together at right angles, together with a bottom wall **20** joined to the lower edges of all of the side walls. The part of the sander **10** which ordinarily supports sandpaper **24** that is, the base of the sander, is received reasonably snugly within the upwardly opening receptacle or tray and held in place by means of a clamp **26**. The clamp consists of a short plate at the center upper edge of wall **18** and protruding toward wall **16** whereby the base of the sander is capable of being nested and gripped between the clamp plate **26** and the bottom **20** of the attachment frame.

A transverse blade **30** is attached to the bottom **20** of the frame and preferably extends the full width of the attachment. The blade has sharpened lower edge **32** which rests on the work-piece surface, for instance a wooden workpiece during normal use of the attachment. Although blade **30** may be made integral with the bottom wall **20**, it is within the contemplation of the invention to have a blade holder in place of the rigid blade and to use a detachable blade in the blade holder. This would add to the cost of the attachment, but would have the companion advantage of renewing the blade by replacement rather than merely renewing the edge **32** by sharpening.

In use and operation attachment **12** is secured to the base of the sander **10** by fitting the base of the sander into the upwardly opening receptacle formed by the frame construction. The rear edge of the base of the sander is gripped by clamp **26** and the sander is ready to be used by merely placing it on a workpiece with attachment **12** interposed between the base of the sander and the workpiece.

When the sander is energized the sander base vibrates. This vibratory motion is transmitted to attachment **12** causing the blade of the attachment to vibrate and chip away the surface of the workpiece (see Figure 3) to perform the scraping function. There are many uses for the attachment that is, all uses of any other scraper. It may be used for scraping paint, scraping the actual surface of the workpiece or for any other purpose. Further, although one type of conventional vibratory sander is illustrated in the drawings, it is understood that any vibratory tool may be substituted.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. For use with a sanding machine having a vibratory base with top and bottom surfaces, a scraper attachment comprising an upwardly opening receptacle having a bottom wall and an upstanding peripheral wall completely enclosing the entire marginal area of said bottom wall and rising throughout its length to a point coincident with the top surface of the base, said peripheral wall being adapted to surround and engage the marginal portions of the vibratory base to prevent horizontal shifting movement of said receptacle relative to said base, a rigid tongue-like clamp mounted on an upper marginal edge portion of said peripheral wall and extending inwardly therefrom in spaced parallelism relative to said bottom wall, said clamp being adapted to frictionally engage the top surface of said base, and a scraper blade secured to and depending from the underside of said bottom wall.

2. For use with a sanding machine provided with a vibratory base having top and bottom surfaces and forward and rear end portions, a scraper attachment comprising a substantially rectangular open top receptacle adapted to receive a major portion of said base within its confines, said receptacle comprising a bottom wall and upstanding end walls joined together by upstanding side walls, said end walls extending substantially the entire width of said receptacle and said side walls extending substantially the entire length of said receptacle, each of said end walls and side walls rising to a point coincident with the top surface of said vibratory base, a rigid tongue-like clamp mounted on an upper marginal edge portion of one of said end walls and extending inwardly therefrom in spaced parallelism relative to said bottom wall, said clamp being adapted to overlie and frictionally engage the top surface of the rear end portion of said base, and an elongated scraper blade secured to and depending from the underside of said bottom wall.

3. The combination of claim 2, said end walls and side walls being lineraly straight throughout their respective lengths and of the same height throughout said respective lengths, and said depending scraper blade being disposed wholly beneath said forward end portion of said receptacle and extending transversely of said bottom wall from one side edge of said wall to the other side edge thereof.

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