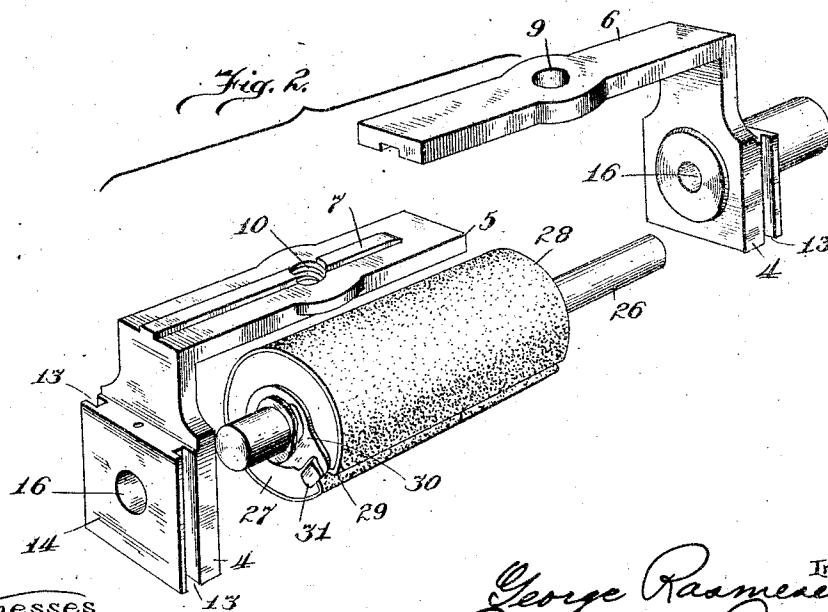
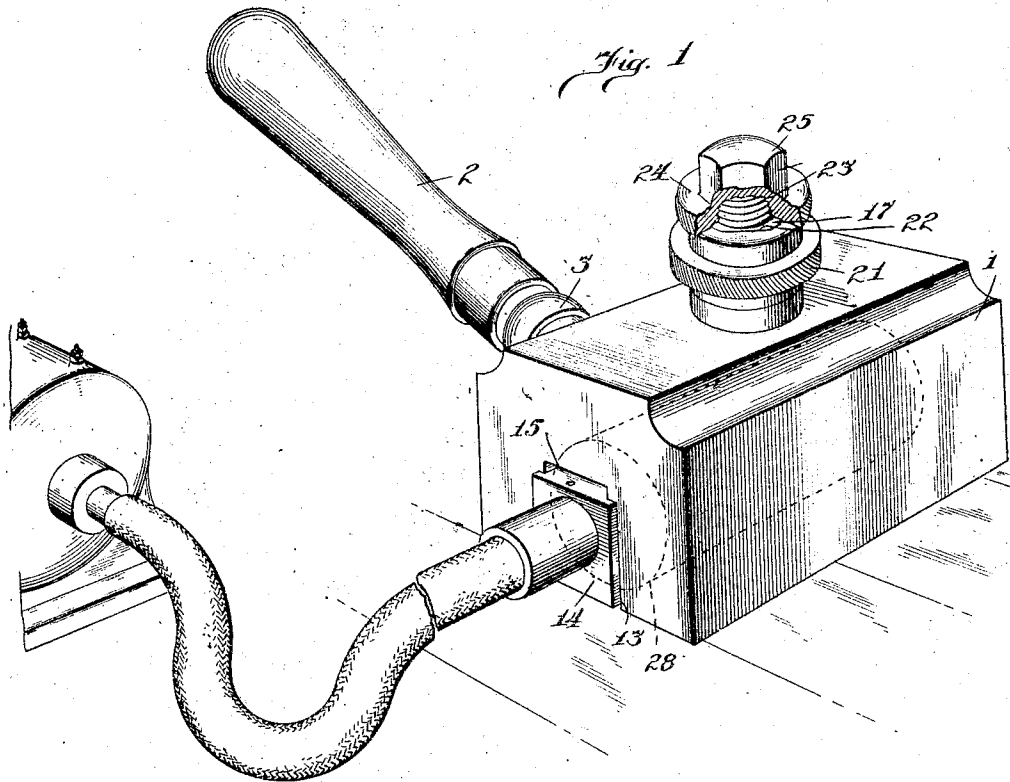


1,011,490.

2 SHEETS—SHEET 1



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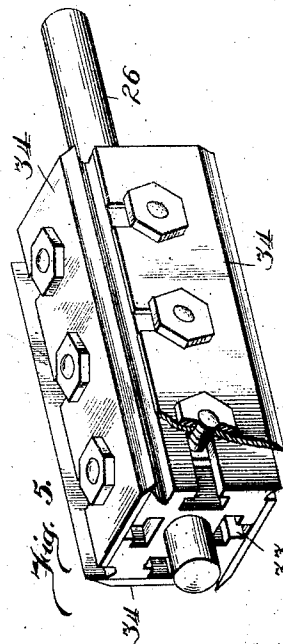
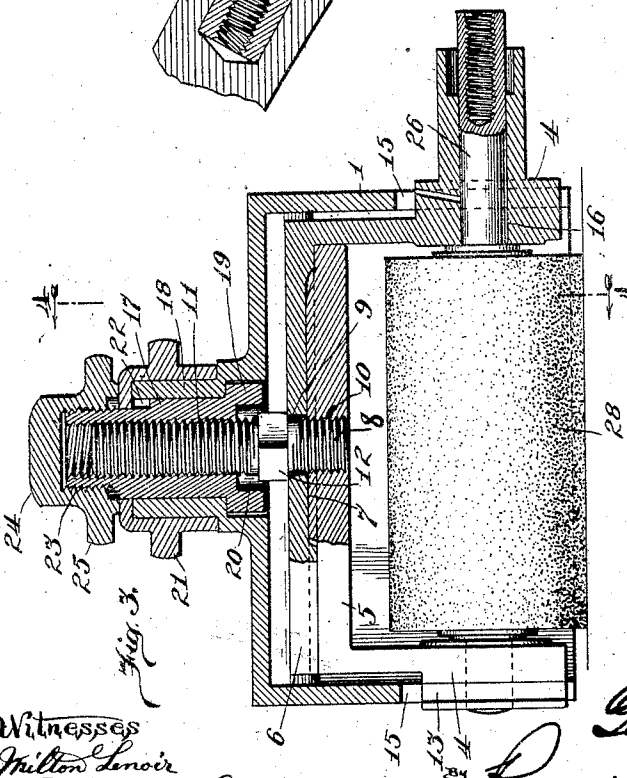
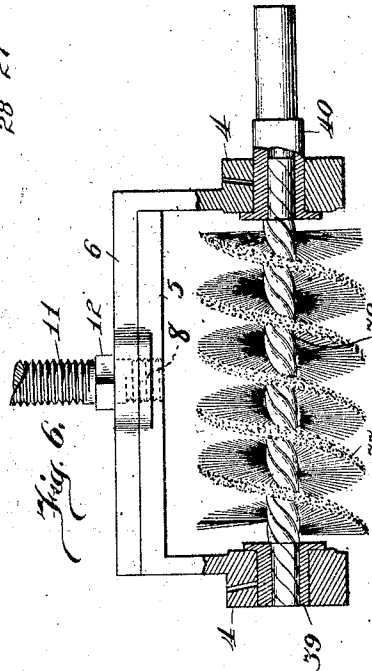
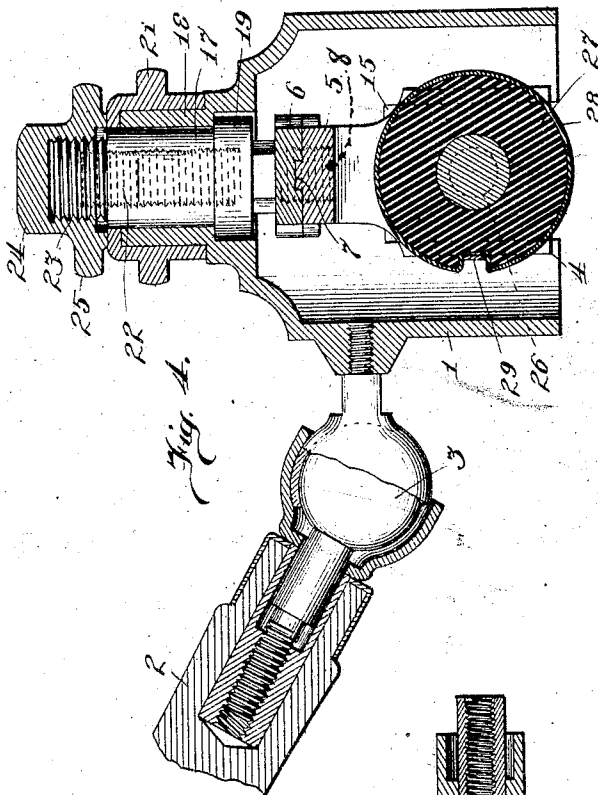
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G. RASMESSEN, JR.
PAINTER'S AND DECORATOR'S SCRAPER.
APPLICATION FILED JUNE 19, 1911.

1,011,490.

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2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

GEORGE RASMESEN, JR., OF WINNETKA, ILLINOIS.

PAINTER'S AND DECORATOR'S SCRAPER.

1,011,490.

Specification of Letters Patent.

Patented Dec. 12, 1911.

Application filed June 19, 1911. Serial No. 634,196.

To all whom it may concern:

Be it known that I, GEORGE RASMESEN, JR., a citizen of the United States of America, and a resident of Winnetka, county of Cook, State of Illinois, have invented certain new and useful Improvements in Painters' and Decorators' Scrapers, of which the following is a specification.

The main objects of this invention are to provide an improved form of painters' and decorators' scraper particularly adapted for removing from walls, floors and other surfaces, the various kinds of coatings which are usually applied for the purpose of ornamenting them, such, for example, as paint, varnishes, and the like; to provide a construction of this kind which may be easily manipulated for guiding a power driven rotary tool; to provide improved means for adjusting the tool toward and away from the surface so as to regulate the depth of cut; to provide simple means for readily removing the rotary tool from the operating handle and casing to permit various forms of tools to be substituted, one for the other, for different purposes; and to provide a construction of this kind in which the adjustment may be made by the operation of a single part, and in which the structure is such that the device can be examined, taken apart and reassembled by unskilled labor.

A specific embodiment of this invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a painter's and decorator's scraper constructed according to this invention and containing a rotary tool or operating head arranged to be driven by an electric motor through a flexible shaft. Fig. 2 is a perspective view showing the construction of one of the operating tools, and the crosshead in which it is carried, the parts being separated slightly to more clearly illustrate their construction. Fig. 3 is a longitudinal section of the scraper with the parts in their assembled relation, and illustrating the manner in which the adjustment of the operating tool is accomplished. Fig. 4 is a section taken at right angles of Fig. 3. Fig. 5 is a perspective view of a cutter head which is particularly adapted for removing thick coatings of paint, or for smoothing a surface prior to applying a coating of paint. Fig. 6 is a detail showing a form of operating tool which is particularly desirable for use in

places where the surface is ornamented by beading or the like, and having ridges and hollows into which the operating tool must reach.

In the construction shown in the drawings, the main frame of the device is a box-like casing 1 which is open at its lower face and which is provided with an operating handle 2, having an adjustable ball and socket joint 3 so that it may be set at any angle with respect to the casing 1. Mounted within the casing and slidable toward and away from the open face thereof is a crosshead comprising a pair of bearing lugs 4, having therein a pair of alined journal bearings, having rigidly secured thereto the arms 5 and 6 respectively. These arms fit one against the other and have their adjacent faces provided with an interfitting tongue and groove joint 7, which insures accurate alinement of the journal bearings in the blocks 4, although permitting said blocks to be readily separated to remove or interchange the operating tools. The arm 6 has a central aperture extending through it in the same plane with and at right angles to the journal bearings in the blocks 4 and the arm 5 has a registering aperture, which is threaded. The arms 5 and 6 are securely locked together by means of a stud 8 which has a threaded end fitting the threaded aperture 10 in the arm 5, and extending through the aperture 9 in the arm 6. A hexagonal shoulder 12 on the stud bears against the upper surface of the arm 6 and cooperates with the threaded end of said stud for locking these two arms rigidly together.

The bearing blocks 4 are each grooved at 13 at opposite sides, and the casing 1 is provided with guide slots 15 which extend at right angles to the open face of the casing 1 and are of such width that their edges fit within the grooves 13 in blocks 4. The parts of the crosshead are, of course, so constructed that the journal bearing 16 will be in accurate axial alinement with each other when the crosshead is assembled.

The stud 11 has an upwardly extending threaded shank, and there is provided a rather long sleeve 17 which is interiorly threaded to the shank 11.

The upper part of the casing is provided with an upwardly extending tubular boss 18, fitting the outer cylindrical bearing surface of the sleeve 17 and counterbored at its inner end to receive a head or shoulder 19 on the

lower end of the sleeve 17, which shoulder prevents the sleeve 17 from shifting upwardly in its bearing. The lower end of the sleeve 17 is also counterbored at 20 to provide a recess within which the hexagonal shoulder 12 of the stud may enter, thus allowing maximum vertical adjustment of the crosshead within the casing.

It is to be noted that the walls of the casing are located as closely as possible to the operating tool and crosshead, and that the arrangement of the parts just described permits the top of the casing to be comparatively low. In such a tool, compactness is of the utmost importance, as it is necessary frequently to get into confined places, and it is desirable to avoid as much as possible scraping by hand, in connection with the use of power operated tools of this kind.

The outer part of the boss 18 has a peripheral bearing surface, upon which is mounted a knurled head 21. The upper end of the head 21 extends inward over the top of the boss 18 and fits the adjacent part 22 of the sleeve 17, the joint being such that the head 21 may be readily slid into and out of engagement with the sleeve, but providing suitable flat surfaces or shoulders to prevent relative rotation. The upper extremity of the sleeve 17 is exteriorly threaded at 23 to receive a nut or head 24. This is provided with flattened surfaces for receiving a wrench, and is also provided with a knurled surface 25 so that it may be turned by hand.

Operating tools of different character are required for removing different kinds of coatings. Three different forms of such tools are shown in the drawings. In Figs. 2, 3 and 4, the tool is represented in the form of a sanding roller and comprises a shaft 26, a rubber roller 27 mounted thereon and having its outer surface covered with emery cloth or sandpaper 28. The ends of the sheet of emery cloth or sandpaper are secured by a bar 29 which fits within a longitudinal groove in the rubber body of the roller and is fastened at its ends by clamps 30, which are rotatable on the shaft and provided with hook-shaped arms adapted to engage the hook-shaped ends 31 of the bars 29. These parts are held into interfitting engagement with each other by the pressure of the resilient rubber body of the roller. The parts 30 are secured against endwise shifting on the shaft by means of shoulders 32. In the form shown, these shoulders are elliptical in form, and the apertures in the clamps 30 are also of elliptical form, so that when the clamps are turned to certain positions, they may be slid over the shoulders 32.

In the form shown in Fig. 5, the shaft 26 has a rectangular head mounted thereon, and this head is provided with T-slots 33 for receiving the heads of bolts which secure cutter blades 34 against the faces of

the head. This form of cutter head is particularly desirable for removing thick coatings of paint, paper and the like.

In the form shown in Fig. 6, the operating tool is a steel wire brush 37 trimmed to cylindrical form. In this case, the shaft of the brush is made up of twisted wires 38, and these are secured together at their ends within bushings 39 and 40 which serve as journals to fit the bearings and provide accurately aligned journals. This head is particularly useful for surfaces having irregularities which could not be effectively treated by tools like those shown in Figs. 2 and 5.

The operation of the device shown is as follows:—After selecting the type of tool which he desires to use, the operator places the journals of the tool in the bearing blocks 4 and slides the arms 5 and 6 of those bearing blocks together into their interfitting position, as shown in Fig. 6, and then inserts the stud 11 into the apertures 9 and 10. This locks the arms 5 and 6 together and secures the journal bearings in axial alignment. The operator then inserts the crosshead into the casing so that the guide grooves 13 of the bearing blocks fit the edges of the guide grooves 15 in the casing and so that the shank 12 on which the sleeve 17 has been previously mounted will enter the aperture in the boss 18. The adjusting sleeve or head 21 is now slipped into place over the outside of the boss 18 and with its flat surface fitting the flat surface 22 on the sleeve 17. Then the lock nut 24 is screwed home on the outer end of the sleeve, pulling the shoulder 19 into close engagement with the bottom of the counterbore and preventing all axial shifting of the sleeve 17, although permitting it to be freely rotated with the head 21. Thus, the rotation of the head 21 rotates the sleeve 17, and as the sleeve cannot move up or down, it will, due to its threaded relation with the shank 11, cause said shank to be shifted up or down, according to the direction of rotation of the head 21. It will be seen from the drawings that it is a comparatively simple matter to remove one tool and substitute another.

The construction of the device, in addition to affording an interchange of tools, also permits a tool to be quickly reversed so that the driving shaft may be attached at either end of the casing. This has the same effect as attaching the handle at either side of the casing, and renders the device adaptable to a great range of conditions and also suits the device to the preference of the operator as to righthand or lefthand manipulation.

Although but one specific embodiment of this invention is herein shown and described, it will be seen that numerous details of the construction shown may be altered or omitted without departing from the spirit of

this invention, as defined by the following claims.

I claim:

1. A painters' scraper, comprising a casing having an operating handle connected thereto and having an open face, a crosshead adjustably mounted in said casing, guides for said crosshead, said crosshead comprising a pair of bearing blocks having aligned journal bearings adapted to receive a shaft and support the same in said crosshead, each of said blocks having rigidly secured thereto an arm extending lengthwise of said shaft, said arms being adapted to interfit with each other to prevent lateral displacement of said journal bearings, a stud having threaded engagement with one of said arms and extending through the other and adapted to secure said arms in such interfitting engagement, and means on said casing cooperating with said stud for adjusting said crosshead.

2. In a scraper of the class described, the combination of a casing having an open face and having an operating handle, guide slots on opposite sides of said casing and open toward said open face, a pair of bearing blocks respectively mounted to slide along said guide slots, and each having rigidly secured thereto an arm, said arms being adapted to overlap each other in interfitting engagement, one above the other, a stud extending loosely through the upper said arm and having threaded engagement with the lower said arm, and having a shoulder bearing on said upper arm and adapted to clamp said arms for securing them in such interfitting engagement, said stud having a threaded shank extending upwardly from said arm and through the casing, a sleeve having threaded engagement with said shank and being journaled to rotate in said casing, means securing said sleeve against axial movement in said casing, a head rotatably mounted on said casing and having splined relation with said sleeve, and a nut carried on the outer end of said sleeve.

3. In a scraper, the combination of a casing open at the bottom and having an aperture in the top, a tubular extension on said casing extending upwardly from and concentric with said aperture, a crosshead carrying a rotary head or tool and having rigidly secured thereto a threaded shank ex-

tending upwardly through said aperture, a sleeve fitting rotatably within said tubular extension and having threaded engagement with said shank, said sleeve having shoulders thereon adapted to prevent up and down movement of said sleeve, and means at the top of said sleeve for rotating it to raise and lower said shank for adjusting said crosshead.

4. In a scraper, the combination of a casing open at the bottom and having an aperture in the top, a tubular extension on said casing extending upwardly from and concentric with said aperture, a crosshead carrying a rotary head or tool and having rigidly secured thereto a threaded shank extending upwardly through said aperture, a sleeve fitting rotatably within said tubular extension and having threaded engagement with said shank, said sleeve having shoulders thereon adapted to prevent up and down movement of said sleeve, a cup-shaped head journaled on the outside of said extension and having a part extending into engagement with said sleeve for rotating it, and a nut carried on said sleeve and coacting with said cup for preventing up and down play of said sleeve.

5. A painters' scraper, comprising a casing having an operating handle connected thereto and having an open face, a crosshead adjustably mounted in said casing, guides for said crosshead, said crosshead comprising a pair of bearing blocks having aligned journal bearings adapted to receive a shaft and support the same in said cross head, each of said blocks having rigidly secured thereto an arm extending lengthwise of said shaft, said arms being adapted to interfit with each other to prevent lateral displacement of said journal bearings, means for rigidly connecting said arms together, a shank extending upwardly from one of said arms, and means on the outside of said casing and cooperating with said shank for adjusting said crosshead toward and away from the open face of said casing.

Signed at Chicago this 16 day of June 1911.

GEORGE RASMESSEN, Jr.

Witnesses:

MAX K. MEYER,
GEORGE C. HOGE.