J. F. NICHOLAS.

FINISHING TOOL.

APPLICATION FILED JULY 27, 1910.

973,688.

Patented Oct. 25, 1910.

Fig. 1.

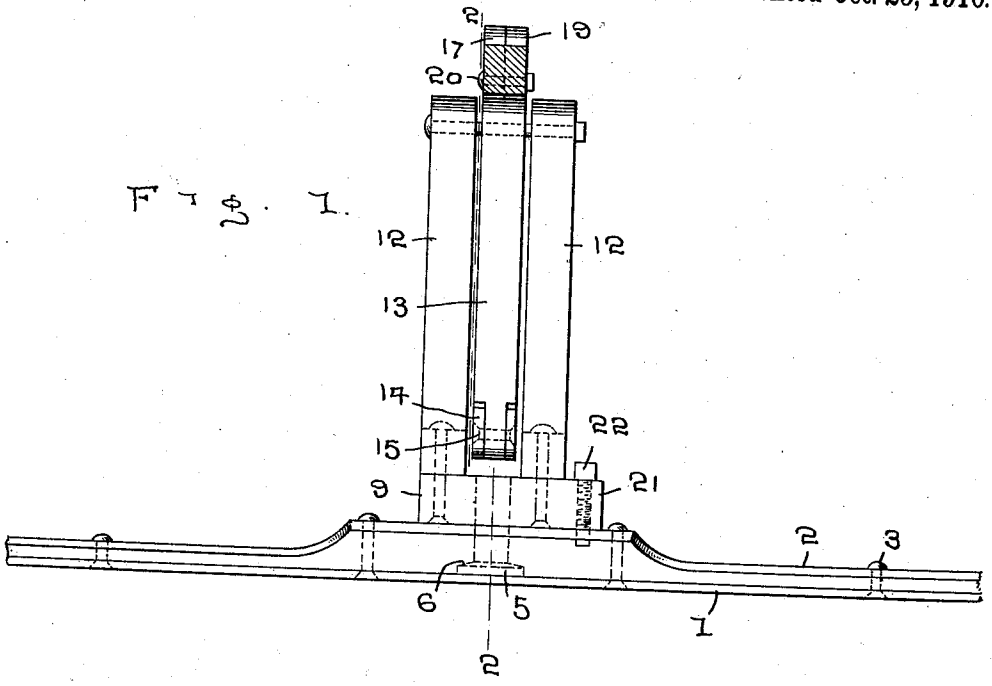
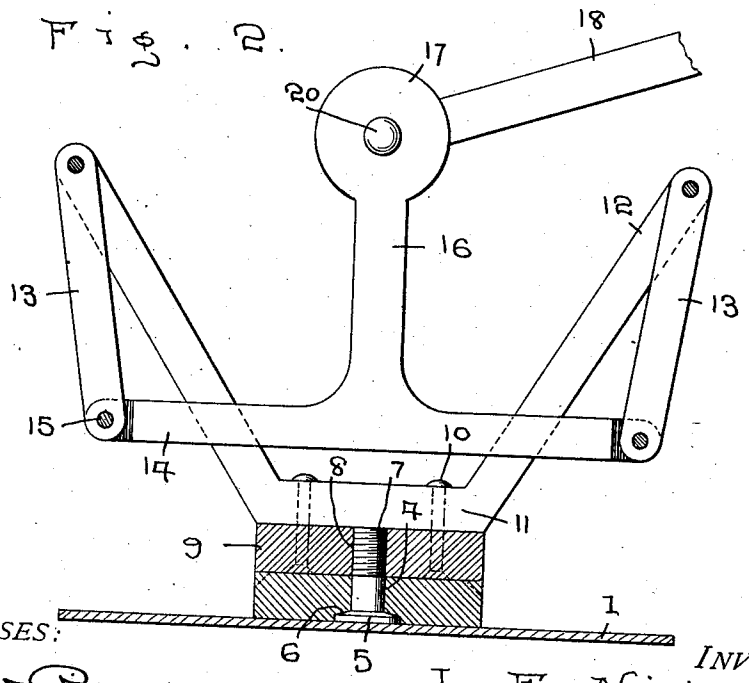


Fig. 2.



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JAMES F. NICHOLAS, OF SULLIVAN, INDIANA.

FINISHING-TOOL.

973,688. Specification of Letters Patent. Patented Oct. 25, 1910.

Application filed July 27, 1910. Serial No. 574,037.

To all whom it may concern:

Be it known that I, JAMES F. NICHOLAS, a citizen of the United States, residing at Sullivan, in the county of Sullivan and State of Indiana, have invented certain new and useful Improvements in Finishing-Tools; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in finishing tools and more particularly to that class adapted to be used for finishing surfaces of plastic material and my object is to provide a trowel, which is adapted to be moved over a surface to give the same a smooth finish.

A further object is to provide a handle for moving the trowel over the surface to be smoothed, while at a distance therefrom.

A further object is to pivotally connect the handle to the trowel, whereby the edges of the trowel may be tilted, when being moved over the surface.

A further object is to provide means for adjusting the handle to dispose the same at various angles, and, a further object is to provide means for adjustably connecting the handle portion to the trowel, whereby the trowel may be disposed at various angles with respect to the trend of the handle.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the specification hereunto annexed.

In the accompanying drawings which are made a part of this application, Figure 1 is an elevation partly in section of the trowel, and, Fig. 2 is a sectional view thereof as seen on line 2—2 Fig. 1.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates the trowel, which consists of an oblong, flat piece of metal or other material and to the upper portion of the trowel is attached a reinforcing rib 2, said rib being secured to the trowel by means of rivets 3 or other suitable manner.

Extending upwardly through the center of the rib 2 is a stud 4, the lower end of which is provided with a head 5, which enters a seat 6 in the lower face of the rib, so that when the rib is fixed to the trowel, the stud will be held against longitudinal movement. That portion of the stud projecting above the rib is provided with threads 7, which engage a threaded opening 8 in a head block 9, so that said head block may be readily attached to or removed from the trowel.

Fixed to the block 9 by means of rivets 10 or otherwise, are brackets 11, each bracket being provided with a pair of outwardly and upwardly extending arms 12, said brackets being placed an equal distance on opposite sides of the stud.

Pivotally secured between the upper ends of the arms 12 are hangers 13, the lower ends of which are bifurcated to receive a cross head 14, pins 15 being extended transversely through the arms and cross head to form a pivotal connection therebetween.

Extending upwardly from the longitudinal center of the cross head 14 is a standard 16, the upper end of the standard terminating in a disk 17 and coöperating with said standard is a handle 18, which is likewise provided with a disk 19 to coöperate with the disk 17.

A bolt 20 is extended through the axial centers of the disks and is used for clamping the disks together and if desired, the meeting faces of the disks may be provided with ribs (not shown) so as to prevent slipping of the disks, when clamped together.

The head block 9 is provided with an extension 21, through which projects a set screw 22 and by means of which the trowel 1 may be set at various angles to the trend of the handle.

In view of the hangers 13, the cross head and parts attached thereto will be given a swinging movement, when a push or pull is given to the handle to move the trowel over the surface to be smoothed and it will be readily seen that when the trowel is moved forwardly, the forward edge thereof will be caused to rise slightly from the surface over which it is passing, thereby preventing the edge of the trowel from catching into or mutilating the surface and it will likewise be seen that the same action will occur, when the trowel is moved in the opposite direction. It will further be seen that the handle may be adjusted upwardly or downwardly at various angles and that the trowel may also be swung to various angles to the trend of the handle and it will likewise be seen that by removably attaching the handle and parts carrying the same, trowels of various

sizes and contour may be used with the same handle.

What I claim is:—

1. In a finishing tool the combination with a trowel and a stud carried thereby, of a head block removably attached to said stud, means to hold the head block in adjusted positions on the stud, brackets carried by the head block, hangers pivotally attached to said brackets, a cross head pivoted to the opposite ends of said hangers and a handle adjustably attached to parts of said cross head.

2. In a finishing tool, the combination with a trowel having a rib thereon and a stud projecting upwardly therefrom, of a head block removably attached to said stud, brackets having upwardly and outwardly extending arms thereon, a cross head, hangers pivoted to said arms and cross head, whereby the cross head will have a swinging movement and a handle adjustably attached to parts of said cross head.

3. In a finishing tool, the combination with a trowel, of a head block removably and adjustably attached thereto, brackets carried by the block having upwardly and outwardly extending arms, hangers pivoted between the upper ends of the arms, a cross head pivoted to the lower ends of the hangers, a standard extending upwardly from the cross head and a handle adjustably attached to the standard.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES F. NICHOLAS.

Witnesses:

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