Jan. 9, 1923.

1,441,920.

P. A. GSTALDER.

GRAINING TOOL.

FILED APR. 16, 1921.

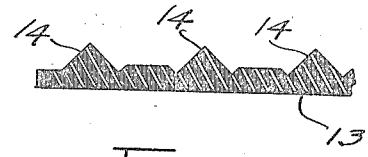


FIG. 4

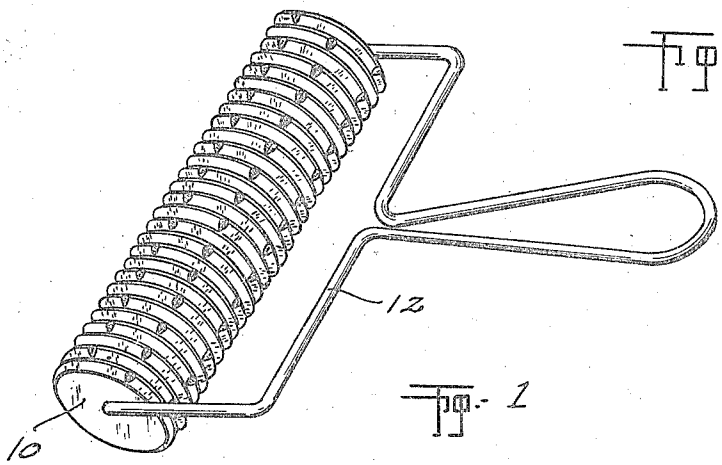


FIG. 1

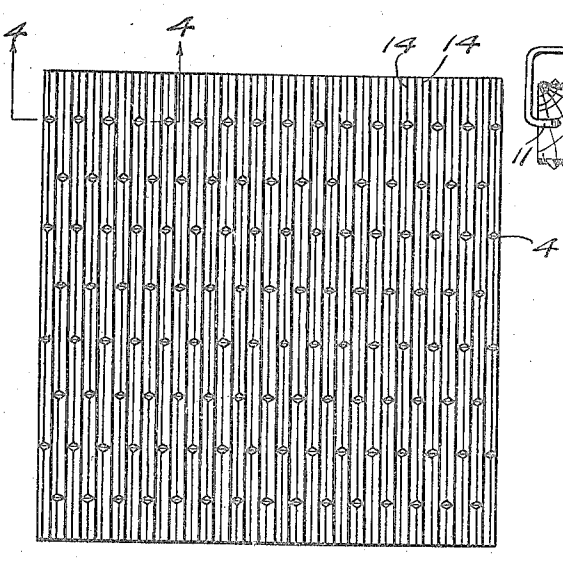


FIG. 3

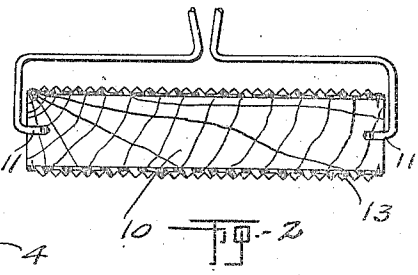


FIG. 2

INVENTOR,
Paul A. Gstalder
BY Davis & Macklin,
ATTORNEYS.

Patented Jan. 9, 1923. 1,441,929

UNITED STATES PATENT OFFICE.

PAUL A. GSTALDER, OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR TO THE OHIO VARNISH COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

GRAINING TOOL.

Application filed April 16, 1921. Serial No. 461,972.

To all whom it may concern:

Be it known that I, PAUL A. GSTALDER, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Graining Tools, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

This invention relates to graining appliances, and is primarily concerned with the provision of a tool adapted for use in forming interrupted lines in a graining compound applied to the surface to be grained.

A method heretofore employed for graining various surfaces embodies the application of a distemper coat over a ground coat of flat paint on the surface to be grained, and the subsequent manipulation of such distemper coat by means of a grain forming tool. Frequently the character of the lines so formed are too sharply defined, and to reduce this appearance it is customary to draw a comb over the surface subsequent to the grain forming operation. I have found, however, that the employment of a comb requires considerable skill and frequently does not produce satisfactory results in that the grain structure formed is still unduly regular and repetitional in appearance.

Accordingly, one of the objects of my invention is the provision of a tool which may be employed in lieu of a comb and still avoid regularity in the effect produced.

Another object is the provision of a tool which is adapted to be moved rapidly across the surface to be grained and which does not require much skill or experience for its efficient use.

In accomplishing the above objects, I provide a graining tool which is shown in the form of a rotary member, which is arranged to be conveniently operated by means of a handle. For producing the desired results, I provide a working surface which comprises a series of ribs having the contact faces thereof interrupted by notches on that part thereof which is arranged to be brought into direct contact with the surface to be grained.

The means for accomplishing the above objects will be more fully set forth in the following description which relates to the drawings, and the essential characteristics of my invention will be set forth in the claim.

In the drawings; Fig. 1 is a perspective of a graining tool embodying features of my invention; Fig. 2 is a longitudinal section taken through the center of such a tool; Fig. 3 is a developed working surface of a graining tool constructed in accordance with my invention; Fig. 4 is a section taken on the line 4—4 of Fig. 3.

My invention contemplates, in general, the provision of a rotary tool which is adapted to be rolled over a surface to be grained, for breaking up the regularity of the lines which are left on the distemper coat by the grain forming tool. Accordingly, in Figs. 1 and 2, I have shown a rotary tool as embodied in a core 10 which is preferably a cylindrical member, rotatably supported at 11, in the free ends of a handle 12. This handle is shown as comprising a single strip of wire bent to a U-shape, the intermediate portion thereof comprising a handle which may be conveniently held in the hand of the operator.

To provide a working surface for effecting the results desired, I have shown a sheet of flexible material 13, which is arranged to be secured to the cylindrical portion of the core and to extend entirely around the periphery thereof. This sheet preferably comprises a strip of rubber having a series of saw tooth ribs 14 which may be formed into the sheet during the molding thereof. These ribs are preferably positioned parallel to each other and arranged on the strip so as to extend around the periphery of the core, in planes perpendicular to the axis thereof.

The graining effect for avoiding the regularity of lines, is obtained by interrupting the ribs. Accordingly, I provide a series of notches on each rib and have shown such notches as being staggered on adjacent ribs. The form of notches, and the method of positioning them is simply illustrative, however, because it is possible to effect the same results by providing a series of ribs interrupted in other form. I have found that

the regularity of interruption as shown in Fig. 3 does not produce any undesirable repetitional effect in the work, since the graining coat has already been varied by the grain forming tool.

In operation, this tool is rolled across the surface to be grained after the grain forming tool has been moved over such surface by the usual combined rocking and dragging motion. Since the core is free to rotate on the ends of the handle, it results that the working surface of the tool leaves a series of interrupted lines on the distemper coat, which lines are spaced similarly to the lines on the working surface. The points of the various ribs separate the distemper material, and the interrupted portions of such ribs leave the distemper coat undisturbed. I have found that a surface acted upon by such a tool, breaks up the sharp edges left by the grain forming tool and provides a surface which is a very good representation of the actual grain.

Having thus described my invention, I claim:

A graining tool comprising a cylindrical body portion, a handle secured thereto, a graining pad secured upon the said body portion, said pad comprising an integral resilient structure comprising a base portion having a plurality of upstanding parallel ribs thereon, said ribs extending entirely around the body portion of the cylinder, a series of notches in said ribs, said notches in each rib being arranged in staggered relation with those in adjoining ribs, whereby the line of contact between the ribs and the surface to be grained is interrupted.

In testimony whereof, I hereunto affix my signature.

PAUL A. GSTALDER.