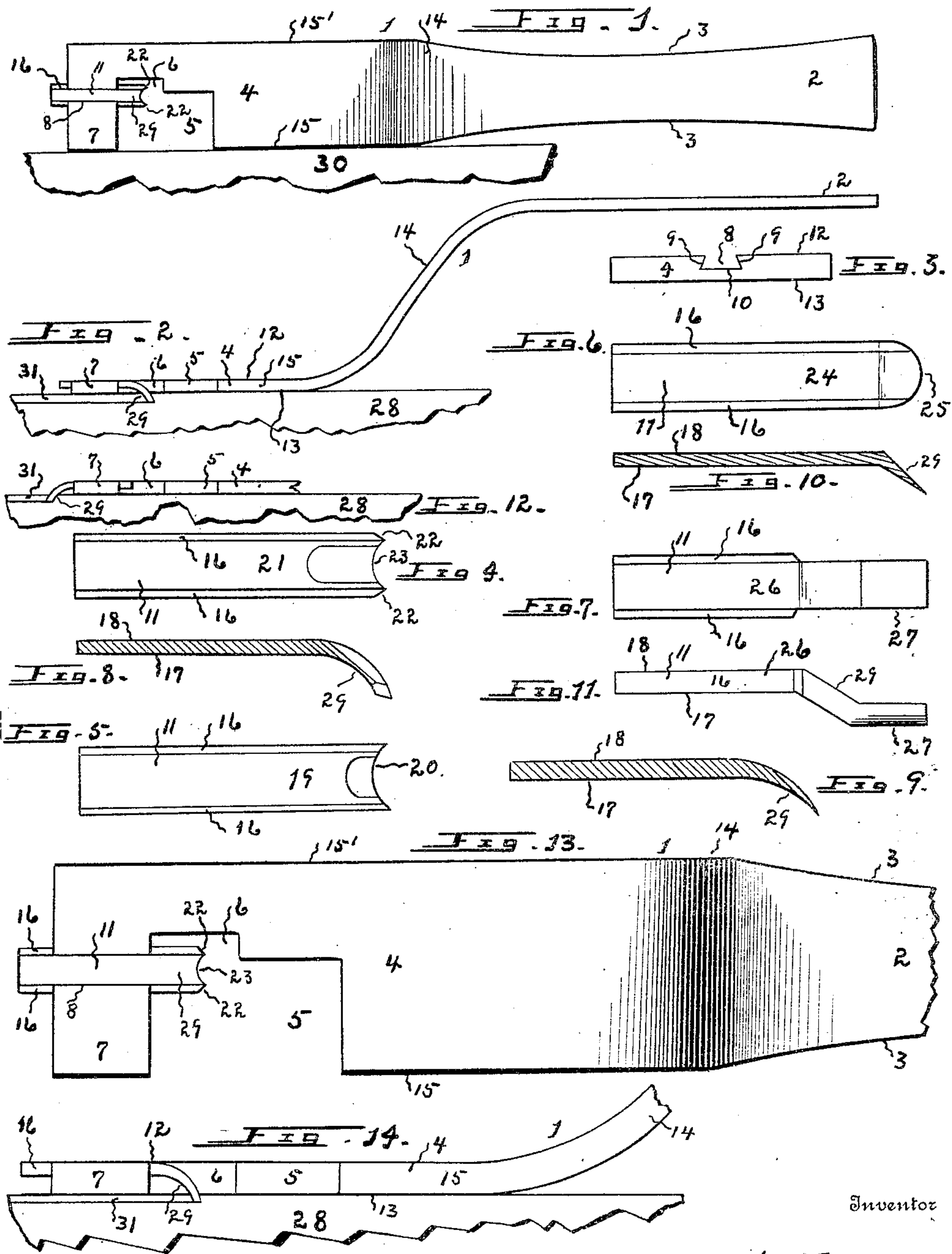


C. W. YOUNG.
ADJUSTABLE TILING TOOL.
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ADJUSTABLE TILING-TOOL.

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To all whom it may concern:

Be it known that I, CHARLES W. YOUNG, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Adjustable Tiling-Tools, of which the following is a specification.

This invention relates to improvements in adjustable tiling tools, and has for its object the provision of an adjustable hand implement for use in forming or cutting grooves upon the interior surface of building walls, to imitate tiling, which may be economically manufactured, will be reliable in operation and effective for the purposes required.

It is often desirable to decorate the walls of halls, bath rooms or kitchens by the formation of imitation tiling, as it may be done at very small expense and is neat in appearance; in such cases, if the wall plaster is hard or brittle, the implement herein shown will readily form such grooves, the cutting end of the blade being disposed in the recess of the bearing-head, as will be described hereinafter; if the plaster upon the wall is soft, as when newly laid, the implement is equally effective, the cutting end of the blade being disposed at the front of the bearing-head, and used as a follower or trailer; the effect, in either instance being that panels are formed to imitate tiling very readily, the edges and curved part of the bead or groove being smooth and perfectly formed.

The invention has reference to the formation of the handle, bearing-head, recesses and holding-groove of the implement, and to the particular formation of the blades used for cutting the various grooves or beads.

With these and other objects in view, the invention consists of the novel formation and arrangement of parts as described herein, pointed out by the claims, and illustrated by the drawing, wherein,—

Figure 1 is a plan view of my newly invented tiling tool, a broken away portion of straight-edge being shown in connection therewith. Fig. 2 is a side view of the tiling tool, a broken away portion of a building wall being also shown. Fig. 3 is a view, somewhat enlarged, of the front end of the bearing-head. Figs. 4, 5, 6 and 7 are enlarged, plan views of blades used in connection with the bearing-head, for forming the grooves. Figs. 8, 9 and 10 are views in longitudinal section of the cutting-blades

shown, respectively, in Figs. 4, 5 and 6. Fig. 11 is a side view of the forming-blade shown by Fig. 7. Fig. 12 is a broken away view, being a detail relating to Fig. 2, to show mountings of the blades when used as followers, a portion of a building wall being added. Figs. 13 and 14 are enlarged, broken away views relating, respectively, to Figs. 1 and 2, to more clearly show arrangement of parts.

Referring now to the drawing for a more particular description, numeral 1 indicates a blade-holding member, comprising a handle 2, preferably having concaved sides 3, so that the hand of an operator will be less obtrusive to a straight-edge usually employed.

A bearing-head is indicated at 4, and is formed as a plate, rectangular in cross-section, with a first or large recess 5 opening upon one of its sides. Bearing-head 4 is also provided with a second or lesser recess 6 opening upon the first recess to form a holding-flange 7 having a length equal to the width, transversely considered, of both recesses 5 and 6, and a length greater than half the width of head 4.

At the middle, transversely considered, of head 4, and extending from the front end thereof to open upon recesses 5 and 6, is formed the blade-holding groove, socket or recess 8, which is of uniform size throughout its length. This holding-groove opens longitudinally upon the upper surface of head 4 and has transverse walls 9 formed divergent from the upper surface of head 4 to the floor 10 of the groove. As thus described, groove 8 is adapted to securely retain the longitudinal body portions 11 of any of the blades, whether the cutting ends of said blades are disposed forwardly or rearwardly, since portions 11 have sides 16 formed convergent from their base 17 to their upper surface 18.

The upper surface 12 of the bearing-head, lower surface 13 thereof, and floor 10 of groove 8, are parallel; and it is important that the lower surface of head 4 be uniform or flat, so that a bearing surface may be provided to make proper contact with the wall of plaster or mortar operated upon, to prevent the formation of rough or uneven surfaces of the grooves.

Handle 2 is connected to bearing-head 4 by the curved shank 14, and when the device is used for cutting or forming grooves in walls of plaster, head 4 is firmly pressed against the wall by manually grasping han-

dle 2, and the instrument is drawn or pushed lengthwise, this depending upon the blade and situation of the blade employed, as will be explained. It is important that side edges 15 and 15', together with the intermediate groove 8, be parallel, as will be seen.

It is desirable to form a variety of grooves; cutting-blades are therefore employed which differ somewhat in form, now to be described. Blade 19, shown by Fig. 5 has the concave cutting edge 20 extending to the sides of the cutting blade. Blade 21, shown by Fig. 4 is somewhat similar to blade 19, except it has facets 22 which extend at an angle from the sides of the cutting blade to intersect the concaved wall 23 of said cutting blade. Blade 24, best shown by Fig. 6 has a convex cutting edge 25; this is used for cutting dry or hard walls. When the mortar upon the building wall is soft or newly laid, forming-blade 26, shown by Figs. 7 and 11, is used; it has a longitudinal stem 27 with a lower, convexed surface.

In operation, the device is generally drawn, but may be pushed lengthwise, the lower surface 13 of the bearing-head being in contact with the surface of building wall 28. When the body of a blade is operatively placed in head 4, the cutting edge is somewhat lower than surface 13, since the blades are formed with an intermediate inclined portion 29 extending from the longitudinal body portion 11 to the terminal, cutting edge; and the depth of the groove formed in the building wall will, of course, be measured by the distance between surface 13 of the bearing-head and the cutting edge.

A straight-edge, indicated at 30 is employed, of any suitable length, and by reason of the construction shown, the device may be moved to cut seams or grooves 31, to produce an imitation of tiling upon a wall. The seams will be uniform and there will be no uneven surfaces since the blades are adapted to cut hardened substances; and a true bearing, during operation, is secured of surface 13 of the bearing-head upon a considerable area of surface.

The function of recess 5 is to furnish a space sufficient for containing, temporarily, a part of the material cut from the wall. If head 4 is drawn rearwardly, material will be cut from the wall operated upon, and a space must be provided for the accumulation of a part, at least, of such material, and recess 5 must have a length adequate for this purpose, but, as is apparent, the length of this recess must be limited, so that the function of contact-surface 13 may be discharged, as the usefulness of the implement depends, in a large measure, upon the facility for exerting a considerable pressure thereof, to cut the seam or groove. The function of recess 6 is to contain a part of the refuse material which has been cut from the wall, and there should

be a space intervening between the blade and the side wall of this recess, as clearly shown in Figs. 1 or 13, to allow movement or passage of material as it becomes separated from the building wall by operation of the cutting-blade.

Since groove 8 is located at the middle of head 4, the implement may be employed "right" or "left handed", that is to say, either of sides 15 or 15' of the head may be in contact with the straight-edge; also on this account, the tool may be used at the corner of a room, or upon abutting walls. When working in corners of a room, the blade may be disposed to project at the front of head 4, as shown by Fig. 12, at which time the implement is moved forwardly; and when producing grooves to imitate tiling where the mortar is soft, the blade is disposed to project to the front, the implement, however, being moved rearwardly, the blade moving as a follower or trailer. By use of the implement, whether the cutting edge is disposed to the front or rear of head 4, and whether the wall is hard or soft, or obstructions encountered therein, the groove or seam may be formed of a uniform depth.

It will be noted that, by reason of the adjustable features shown, blades may be used of different patterns; these blades may be quickly placed in operative position in the bearing-head, or reversed from a front to a rearward position, as required.

The parts employed in the construction of the herein described tiling tool are few, and while there is a certain degree of exactness required in forming the several parts, the implement may be economically manufactured, and as shown and described is reliable in operation for the rapid formation of imitation tiling upon building walls.

What I claim as my invention is,—

1. An implement for the purpose described, comprising a rectangular plate flattened upon its base to form a bearing-head and having an integral portion opposite its front terminal bent upward to form a handle, said bearing-head having a part of its body incised to form a recess opening upon one of its sides; a longitudinally extending socket formed in the bearing-head opening upon its terminal and upon said recess; a cutting-blade having a shank removably disposed in said socket and extended below the plane of the bearing-head.

2. An implement as described, comprising a bar with one of its ends upturned to form a handle, its opposite end being flattened upon its lower surface, and having parallel sides, to form a bearing-head with a front terminal; said bearing-head being cut away to form a recess opening upon one of its sides; a socket formed midway between the parallel sides of the bearing-head to open upon said recess and front terminal of said bearing-head; a

plow-blade having a shank removably disposed in said socket and extended below the plane of the bearing-head.

3. In combination, a device for the purposes described, comprising a rectangularly formed bearing-head with a handle thereon, a recess formed intermediate the ends of the bearing-head and opening upon one of its sides; a groove formed longitudinally of the bearing-head midway between its sides to

open upon one of its ends and communicating with said recess; a cutting-blade removably disposed in said groove and extended below the plane of said bearing-head.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES W. YOUNG.

Witnesses:

RAYMOND G. YOUNG,
HIRAM A. STURGES.