G. MEYERS.
TROWEL.
APPLICATION FILED MAR. 31, 1904.

NO MODEL. Fig.1. 21 Fig. 2. 21 Fig. 5. **3**1 Fig. 3. 22 22 Uniuti 21 Inventor Witnesses George Meyers adelaide Kearne Hawalsh!

UNITED STATES PATENT OFFICE.

GEORGE MEYERS, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO E. C. ATKINS & COMPANY, OF INDIANAPOLIS, INDIANA, A CORPORATION OF INDIANA.

TROWEL.

SPECIFICATION forming part of Letters Patent No. 761,242, dated May 31, 1904.

Application filed March 31, 1904. Serial No. 200,862. (No model.)

To all whom it may concern:

Be it known that I, George Meyers, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Trowels, of which the fol-

lowing is a specification.

In the making of cement floors and walks in order to properly shape the edges of the walks and to form the grooves or seams which divide the sections, as is usually the case where the surface is thus divided, special tools are required. It is the object of my present invention to provide attachments which may be removably secured to the ordinary trowel whereby this work may be accomplished instead of having separate complete tools for the purpose, as has ordinarily been the case, the trowel used by me in-carrying out my invention being itself suitable for regular trowel use when the attachments are removed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar 25 parts, Figure 1 is a perspective view of a trowel of the variety in question ready to be provided with attachments in accordance with my invention; Fig. 2, a similar view when the trowel is provided with one of my edging 30 attachments; Fig. 3, a similar view when the trowel is provided with one of my grooving attachments; Figs. 4 and 5, transverse sectional views of the structure illustrated in Figs. 2 and 3, respectively; and Fig. 6, a de-35 tail sectional view illustrating the means of securing the attachment to the trowel.

The blade 21, the handle-support 22, and the handle or grip 23 are, generally speaking, of the usual and well-known form, except that 40 the handle-support 22 is formed with two notches in the under side next to the trowel-blade, which when the parts are assembled form orifices through which the arms of the attachments may extend and wherein they 45 may be securely clamped by means of clamping-screws, as 24.

The attachments may be of any desired

form to accomplish the work required. I have illustrated in this application two such attachments by means of which the trowel may be 50 converted, respectively, into an edging-tool and into a grooving-tool. Each of these attachments is provided with arms adapted to extend through the orifices above described and be therein firmly held by suitable clamps, 55 as screws 24.

The edging-tool, as is best shown in the sectional view Fig. 4, consists of two pieces of sheet-steel riveted or otherwise firmly secured together, one of which, 31, is adapted to lie 60 closely along one edge of the trowel-blade and extend thence (in the shape desired) outwardly and downwardly, so that it may be used in properly shaping the edge of a cement walk or other like structure. The other part, 65 32, lies on top of this part 31 and overlaps the joint between the part 31 and the trowel-blade 21 and has arms 33, which extend out on top the blade 21 through the orifices between said blade and the handle-support 22 and are adapt- 70 ed to be held firmly in said orifices by the clamping-screws 24, which are threaded into the part 22 and are adapted to bear against said arms 33 and force them down tightly against said blade or such other suitable clamp- 75 ing means as may be provided. The outer edge of this part is turned upwardly at 34, the turned-up portion serving to rest against the guide-strip, which is placed alongside where the work is being done for the purpose of 80 guiding the tool, as is usual and well known.

The grooving attachment is composed of a grooving-strip 41 of the cross-sectional size and shape of the groove which it is desired to form and the ends of which are prolonged 85 and adapted to extend up over the ends of the trowel and be there secured to a structure 42, having arms 43,(similar to the arms 33 on the other attachment,) and which enter the orifices in the same way and are secured there- 90 in by the same means. At the outer edge this structure 42 has the turned-up portions 44, which serve as guides to bear against a guide strip or support in the usual and well-known

manner, as in the other case. As a matter of construction, I prefer to cut out a considerable portion of the sheet metal forming this structure, leaving a narrow strip 45 at the 5 outer side, and to stiffen this strip by putting on a small bar 46, as this makes rather a more rigid and consequently better construction than to use merely the sheet metal alone.

By means of my invention I am enabled to 10 provide a trowel in which merely by the use of interchangeable and removable attachments I embody not only a common trowel, but all the various other tools required in the laying of cement walks and floors, thus not only saving 15 the operator something in the way of expense, but (what is more important) enabling him to have a set of tools of considerably less weight and bulk, and thus more easily carried and handled.

Having thus fully described my said inven-

tion, what I claim as new, and desire to secure by Letters Patent, is-

The combination, in a trowel, of the blade, a handle-support secured to said blade and having recesses formed in its under side where- 25 by orifices are provided between said blade and said handle-support, clamps mounted in said handle-support and adapted to bear upon parts inserted in said orifice, and an attachment to the trowel provided with ears adapted 30 to enter said orifices and be held therein by said clamps, substantially as and for the purpose set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 35

28th day of March, A. D. 1904. GEORGE MEYERS. [L. s.]

Witnesses: CHESTER BRADFORD, James A. Walsh.