Feb. 19, 1946. E. T. JONES 2,395,186

TROWEL

Filed Aug. 19, 1944

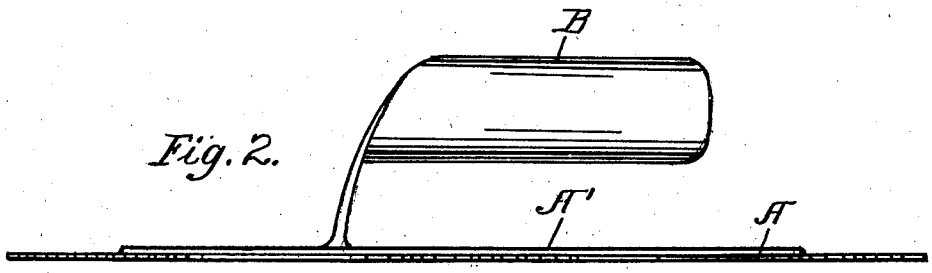


Fig. 2.

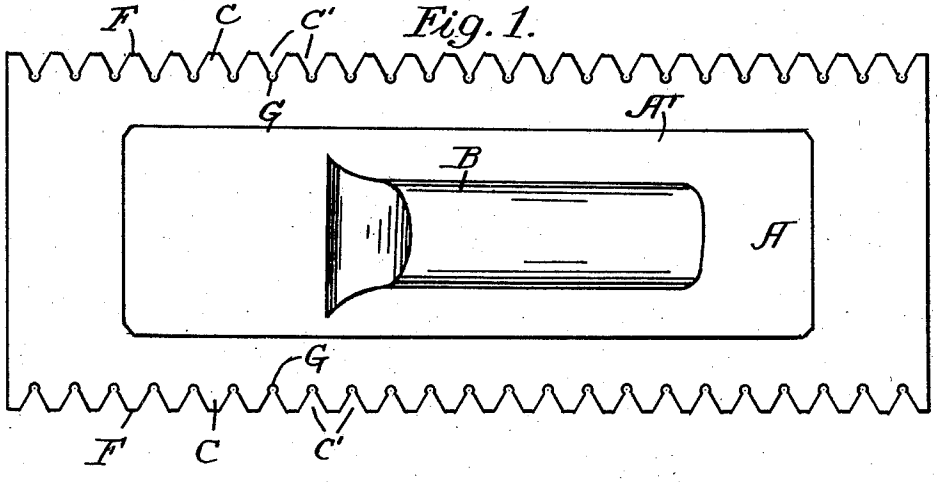


Fig. 1.

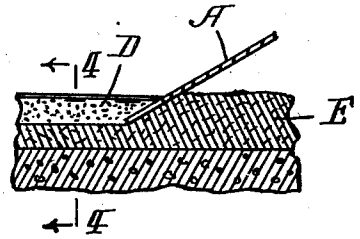


Fig. 3.

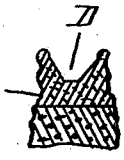


Fig. 4.

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2,395,186

TROWEL

Earl T. Jones, Ventura, Calif.

Application August 19, 1944, Serial No. 550,275

1 Claim. (Cl. 72—136)

My invention relates to improvements in trowels of that type which is employed for applying and spreading plaster, cement and plastics upon surfaces in construction work. In applying and spreading such material on a support it is desirable to first apply a scratch coat or base after the setting and curing of which a finish coat is applied thereon. It is desirable that this finish coat shall be bonded securely thereto to prevent ultimate checking and cracking. It has been common practice to scratch the surface of the primary coat after applying the same before thoroughly setting and hardening so as to provide an interlocking and bonding of the finish coat on the primary coat or base. It is the primary object of my invention to provide a trowel which has incorporated into its structure a serrate margin by which the surface of the primary coat can be simultaneously applied and spread evenly and indented with grooves by which when the base of plaster sets and hardens a finish or outer coat can be applied and most effectively bonded. The shape of the teeth provided by my improvement facilitates the simultaneous smoothing and scratching function leaving the base of plaster of substantially even thickness and evenly indented by grooves without fracturing or weakening the plaster.

In the accompanying drawing forming part of this specification, Fig. 1 is a top plan of my improved trowel; Fig. 2 is a side elevation; Fig. 3 is a transverse vertical section through a portion of my improved trowel showing its scratch edge applied in the act of spreading and simultaneously grooving a scratch or basic coat of plaster on a cementitious surface or other support, and Fig. 4 is a section of a detail taken on the line 4—4 of Fig. 3.

My improved trowel comprises a thin blade A of metal or other suitable material of any suitable shape having a handle B, by which the blade can be manipulated in the usual manner and having the usual work surface for spreading plaster on any suitable supporting base. As shown the blade is of oblong rectangular shape and its two longitudinal side edges are provided with serrate margins by which the surface of the coat of plaster which is applied can be simultaneously grooved to provide a most effective bond with a finish coat of plaster when the latter is applied. A reinforcing plate A' is secured between the neck of the handle and the surface of the blade A by welding, riveting or any other suitable fastening means.

Each serrated edge is straight and is formed by a series of teeth C. Each tooth or serration has outwardly converging side edges and the adjoining serrations form indentures by their companion inwardly tapering side edges at the root of which a circular opening G is formed as will be hereinafter described. The outer portion of each tooth terminates in a blunt end F. In the use of the trowel as depicted in Fig. 3, when applied to a scratch coat of plaster E on a supporting surface the serrated edge of the trowel leaves a channeled surface in the plaster, each channel D being bounded by a flat floor and two outwardly diverging sides as shown in Fig. 4, resulting in maximum strength of the bond between the scratched and finished coat of plaster when the latter is applied after the scratch coat has set and become hard and cured.

The companion edges of each serration C' in the trowel, terminates inwardly in a circular opening G which serves to prevent cracking of the trowel blade A due to wear of the blade by constant troweling and also due to the shape and design of the indentures. These terminal openings obviate this objection which has been found to exit if the sides of the indentures converge to a sharp point. Also the rounded openings G form rounded overhanging beads on the scratch coat of plaster when applied by the trowel and produce an interlocking connection for a rough or finish coat of plaster. Also by providing a blunt outer end on each tooth a scratch channel is formed in the coat of plaster without cutting through and weakening the coat of plaster by the pressure of the trowel.

In accordance with the patent statutes I have described the principles of operation of my invention together with the construction thereof which I now consider to represent the best embodiment thereof but I desire to have it understood that the construction shown is only illustrative and that the invention can be carried out by other means and applied to uses other than those above set forth within the spirit thereof and within the scope of the following claim.

I claim:

A trowel, comprising, a thin work blade, a reinforcing blade secured over a portion of said work blade, and a handle fastened to said reinforcing blade, said work blade having a serrate margin, each serration having a pair of outwardly diverging side edges terminating outwardly in broad ends, each pair of said converging side edges terminating inwardly in a wide open space to form an overhanging lock bead at the apex end of each ridge formed by said serrate margin in plaster.

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