June 29 , 1926. 1,590,342

I. M. ABRAM

SURFACER

Filed July 9, 1924

Fig. 1.

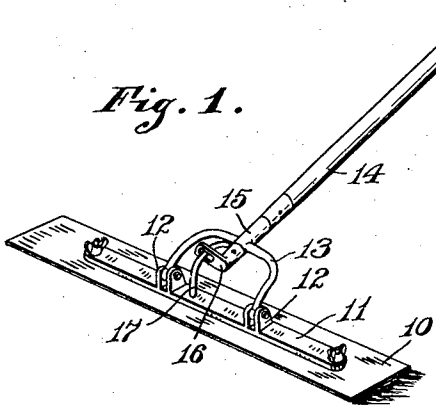
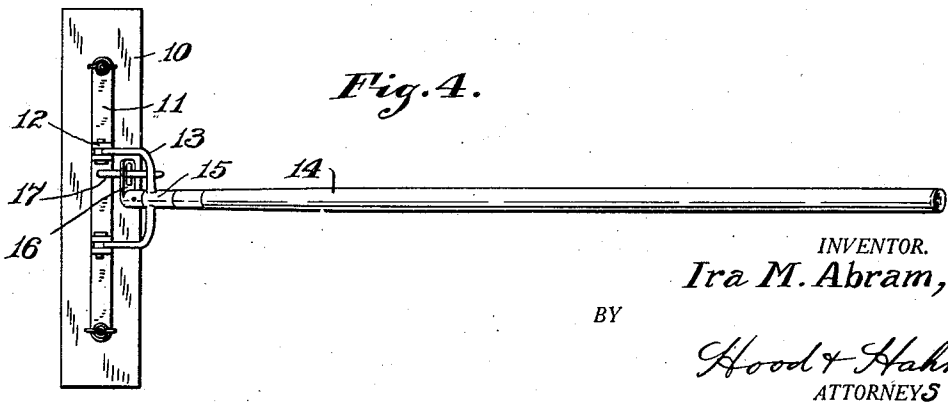


Fig. 2.

Fig. 3.

Fig. 4.



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UNITED STATES PATENT OFFICE.

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SURFACER.

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The object of my invention is to produce a surfacing tool, more particularly one for working plastics into proper shape such, for instance, as cement, plaster, etc., the construction being such that the working face of the tool may be readily tilted to a proper angle relative to the surface being worked upon.

The accompanying drawings illustrate my invention. Fig. 1 is a perspective view embodying my invention; Fig. 2 a side elevation; Fig. 3 an end elevation and Fig. 4 a plan.

In the drawings 10 indicates the surfacing plate such, for instance, as a trowel, 11 a brace bar, formed integral with or attached to plate 10, 12, 12 suitable ears carried by bar 11, to which is pivoted a handle yoke 13, and 14 a handle journaled in yoke 13 on an axis at right angles to the axis of the pivotal connection between ears 12 and yoke 13. Handle 14 is journaled in, and projected through the barrel 15 of the yoke 13 and at its lower end is provided with a slotted crank arm 16 through which is projected a curved finger 17 carried by bar 11, the arrangement being such that rotation of handle 14 in barrel 15 will cause crank arm 16 to engage finger 17 in such manner as to swing bar 11 on its pivotal connection with yoke 13 and thus tilt the plate 11 in either direction, as indicated in dotted lines in Fig. 2.

It will be readily understood that any form of connection between handle 14 and bar 11 which will permit rocking of bar 11 on yoke 13 by a rotation of handle 14 in yoke 13 will embody my invention. It will also be understood that if finger 17 is arranged in an arc having pivotal axes between ears 12 and 13 as a center, yoke 13 may be swung on ears 12 without causing any rotation of handle 14 in barrel 15 and that of finger 17 is not so concentric, a swinging of yoke 13 on its pivotal connection with ears 12 will be accompanied by a rotation of handle 14 in barrel 15 so that, if it is desired to change the angle of inclination of handle 14, relative to the surface of plate 11, without changing the angle of plate 11 relative to the surface being worked upon, freedom of rotation of the handle must be permitted, but it will also be understood that the above mentioned variations in the shape of finger 17 would nevertheless embody my invention, said invention residing fundamentally in a connection between the trowel plate and the handle, of such character that rotation of the handle upon its own axis, or movement of an element carried by the handle yoke, will produce a swinging of the trowel plate upon an axis substantially at right angles to the handle.

I claim as my invention:

A surfacing tool comprising a surfacing plate, a handle yoke hinged to said plate, a rock shaft journaled on the handle yoke on an axis substantially at right angles to the axis of the surfacing plate, a slotted crank arm carried by said rock shaft, and a curved finger carried by the plate and projected through said slot.

In witness whereof, I have hereunto set my hand at Dugger, Indiana, this 7th day of July, A. D. one thousand nine hundred and twenty-four.

IRA M. ABRAM.