

G. C. SMITH.
TROWEL.
APPLICATION FILED AUG. 9, 1920.

1,370,060.

Patented Mar. 1, 1921.

Fig 1.

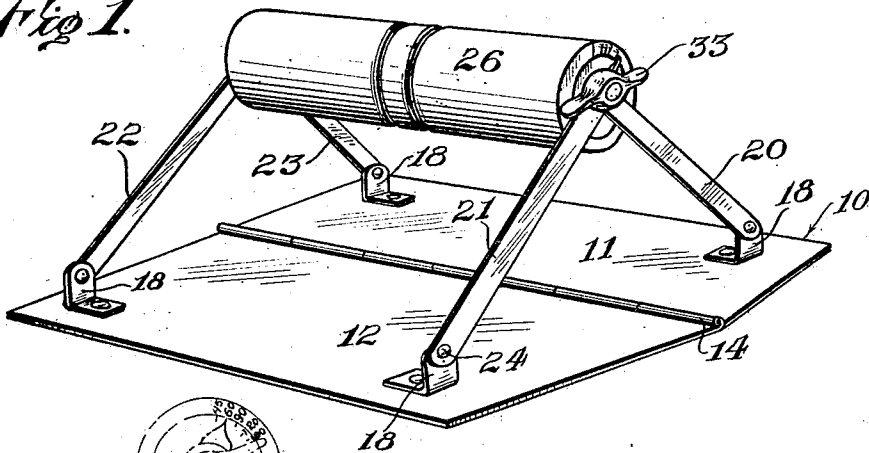


Fig 2.

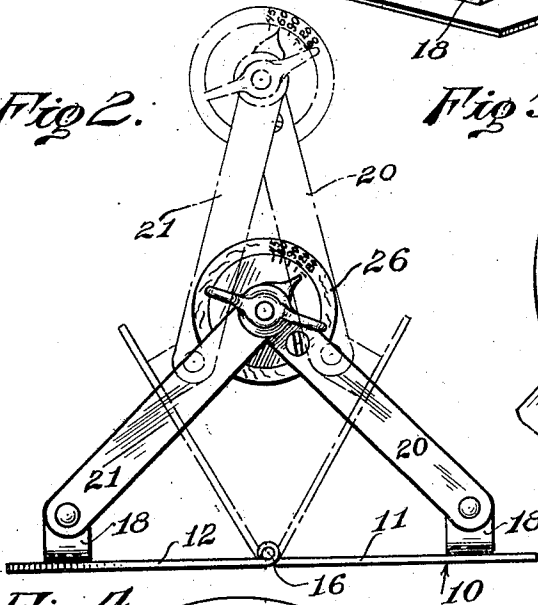


Fig 3.

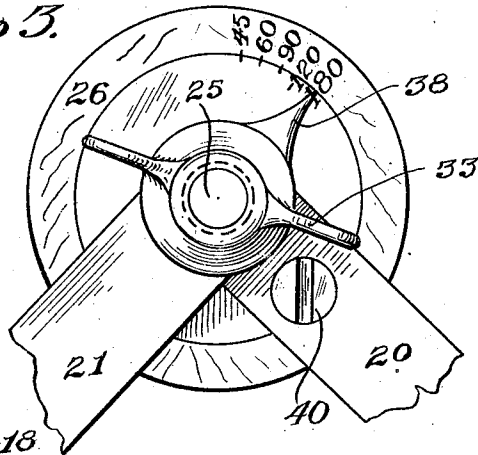


Fig 4.

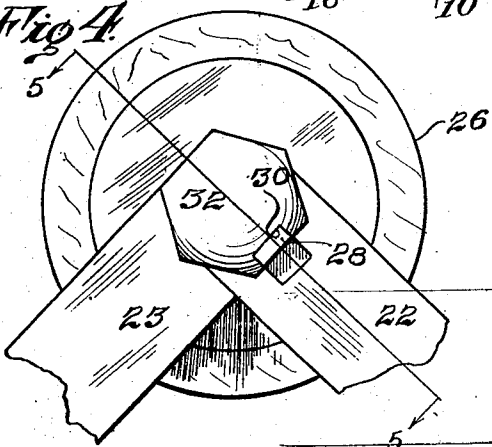
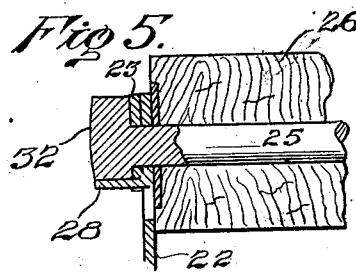


Fig 5.



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TROWEL.

1,370,060.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GAYLORD C. SMITH, a citizen of the United States, residing at Rogers, in the county of Presque Isle and State of Michigan, have invented certain new and useful Improvements in Trowels, of which the following is a specification.

This invention relates to improvements in trowels especially adapted for use by plasterers though not necessarily restricted to such use.

An important object of this invention is to provide a trowel having a blade formed of a pair of hingedly connected sections which may be readily and conveniently adjusted at any desired angle with relation to each other whereby the trowel may be used in inside corners.

The invention aims to provide an adjustable trowel having reliable means for indicating the angular positions of the sections of the blade with relation to each other.

An important object of the invention is to provide a trowel wherein the sectional blade of the tool is adjusted so as to decrease the angle between the sections of the blade, the distance between the handle and the apex of the blade being increased so that the hand of the workman will not be likely to scrape against the wall.

A further object of the invention is to provide a device of the class described which is simple to adjust, desirable in use, and cheap to manufacture.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawing forming a part of this application and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a perspective of the improved trowel in use,

Fig. 2 is an end elevation of the same,

Fig. 3 is an enlarged detail elevation of the trowel, the view illustrating the indicating means for the blade,

Fig. 4 is an enlarged detail elevation of the trowel, the view illustrating the means for supporting the handle,

Fig. 5 is a detail sectional view taken on line 5—5 of Fig. 4.

In the drawing wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numeral 10 designates the blade of the improved trowel

which blade comprises sections 11 and 12 having their adjacent longitudinal edge portions formed with hinge barrels 14 receiving a hinge pin 16. The inner longitudinal edge of each section of the blade is beveled between the spaced barrels so as to snugly contact with the barrel of the other section regardless of the adjustment of the blade. Therefore, when the trowel is set for working in a 45° corner the point or apex of the blade will not be too pointed but will be possessed of sufficient roundness to provide a good finish to the wall. As illustrated in Fig. 1 of the drawing, one end portion of the blade may be somewhat pointed.

As illustrated in Fig. 1, the blade is provided on its upper side with a plurality of L-shaped lugs 18 to which are pivotally connected links 20, 21, 22, and 23 by means of pivot elements 24. The upper portions of the links are crossed and are formed with openings which receive a pivot bolt 25 also extended through a wooden handle 26. The link 22 is, as illustrated in Figs. 4 and 5, provided with a struck-up lip 28 which is adapted to fit within a notch 30 in the head 32 of the bolt 25 so that the bolt is prevented from rotating when the wing nut 33 is tightened. Therefore, when it is desired to tighten the wing nut 33 for securing the sections of the blade in a set position, it is not necessary to hold the head 32 of the bolt 25 with a wrench or even with the fingers since the same is absolutely prevented from rotating.

In adjusting the improved trowel, the sections 11 and 12 may be set at the desired angle and may be held in this position by tightening up on the wing nut 33. Assuming that it is desired to set the sections of the blade at an angle of 45° with relation to each other the pointer 38 formed at the upper end of the link 21 may be alined with the 45° mark on one end of the handle. The device is capable of a variety of adjustments and the position of the blades with relation to each other may be readily ascertained by looking at the dial formed at one end of the handle. The handle is rigidly connected to the link 20 by means of a screw so that the dial formed at one end of the handle is constantly held in proper position.

One of the chief points of advantage of this tool is the fact that the links 20, 21, 22, and 23 are straight so that when the angle between the sections 11 and 12 is decreased

the handle 26 will be moved outwardly a considerable distance so that the hand of the workman will not be likely to engage and mar the wall. This also allows the trowel to be worked with greater freedom by the operator. Previous tools along this line do not have the straight links but have inwardly curved links which draw the handle inwardly as the angle between the sections of the blade is decreased and therefore the device may not be conveniently operated with the handle close to the blade.

With reference to the foregoing description taken in connection with the accompanying drawings, it will be apparent that a trowel constructed in accordance with this invention may be readily and conveniently adjusted to the desired angle and when adjusted may be conveniently operated for finishing corners of the wall. The device may of course be used for flat work as well as for corners.

Having thus described the invention, what is claimed as new is:—

1. A trowel comprising a blade inclusive of a pair of hingedly connected sections, links connected to said sections, a handle connected to said links, a dial on one end of said handle, and a pointer on an adjacent link coöperating with said dial to indicate the angular positions of the sections of the blade.

2. A trowel comprising a blade inclusive of a pair of hingedly connected sections, links pivoted to the said sections, one of said links being provided with a pointer at its end remote from the blade, a handle connected to said links, and a dial on one end of the handle over which said pointer operates for indicating the angular positions of the sections of the blade.

3. A trowel comprising a blade inclusive of a pair of hingedly connected sections, pairs of links pivoted to the said sections, a handle connected to said links at the ends thereof remote from the blade section, said links being straight whereby the distance between the hinge connection of said sections and the handle is increased as the space between the free edge portions of the sections

is decreased, and coöperating means on one end of the handle and an adjacent link to indicate the angular relation of the sections of the blade.

4. A trowel comprising a blade inclusive of a pair of swingingly connected sections, lugs mounted on the sections of said blade, straight links connected to said lugs, a bolt passed through the outer portions of said links, one of said links being provided with a lip securely engaging said bolt, and a handle mounted on said bolt between said links.

5. A trowel comprising a blade inclusive of a pair of hingedly connected sections, links pivoted to said sections and having their outer portions crossed, a bolt passed through the crossed outer portions of said links, one of said links being formed with a lip securely engaging the head of said bolt to hold the same against rotation, and an adjusting nut threaded on said bolt.

6. A trowel comprising a blade inclusive of a pair of hingedly connected sections, pairs of links hingedly connected to the blade sections and having their outer portions crossed, a bolt passed through the crossed outer portions of said links, means on one of said links to prevent relative rotation of the said bolt, a handle mounted on said bolt between said links and provided at one end with a dial, and a pointer formed at the adjacent end of one of said links and playing over said dial.

7. A trowel comprising a blade inclusive of a pair of hingedly connected sections, pairs of links hingedly connected to the blade sections and having their outer portions crossed, a bolt passed through the crossed outer portions of said links, means on one of said links to prevent relative rotation of said bolt, a handle mounted on said bolt between said links and provided at one end with a dial, a pointer formed at the adjacent end of one of said links and playing over said dial, and means rigidly connecting one of said links with said handle.

In testimony whereof I affix my signature.

GAYLORD C. SMITH. [L. S.]