Dec. 22, 1970 J. DI CANDILO 3,548,505

TILE FITTING TOOL

Filed Jan. 7, 1969

FIG. 1.

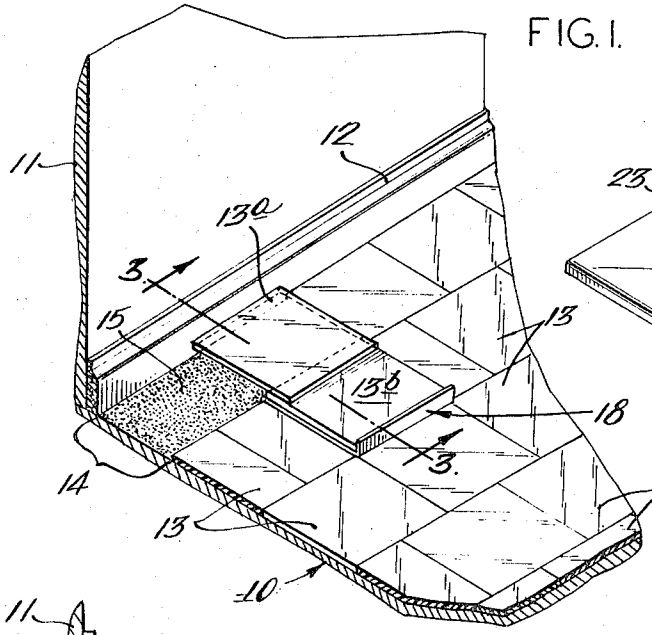
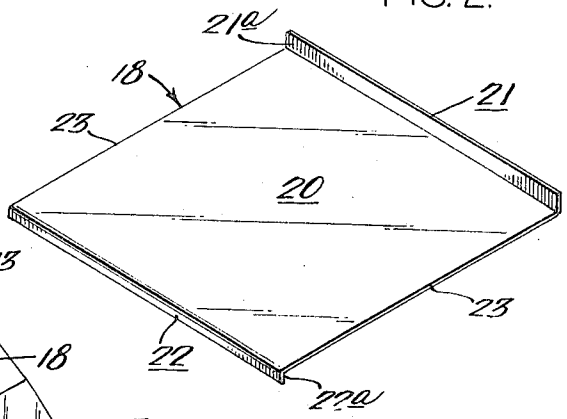


FIG. 2.



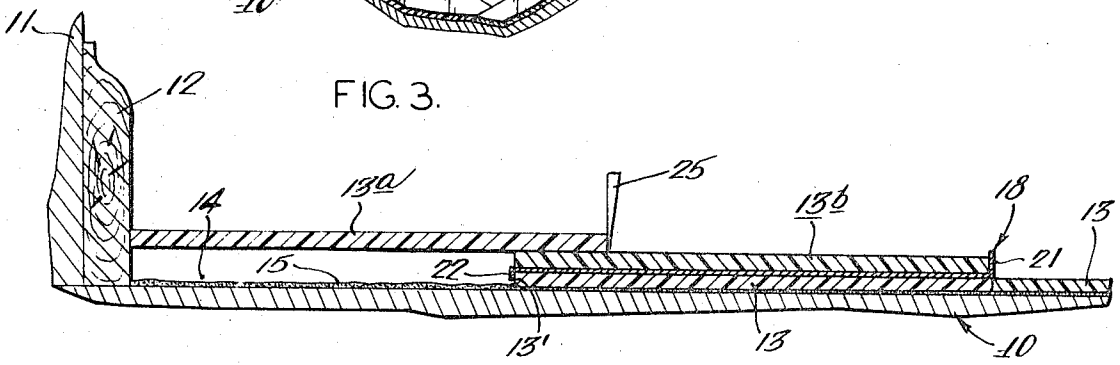


FIG. 3.

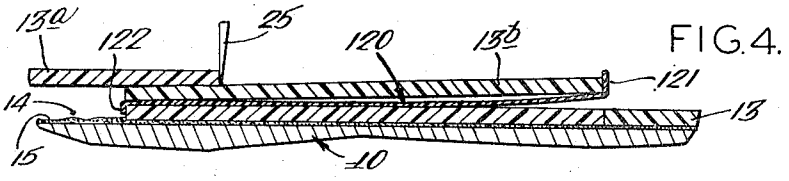
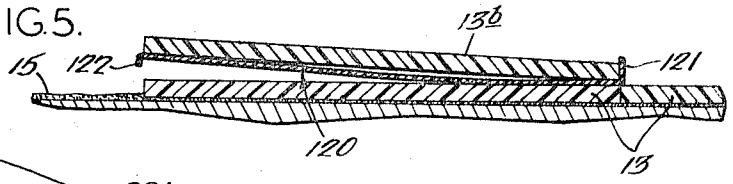


FIG. 4.

FIG. 5.



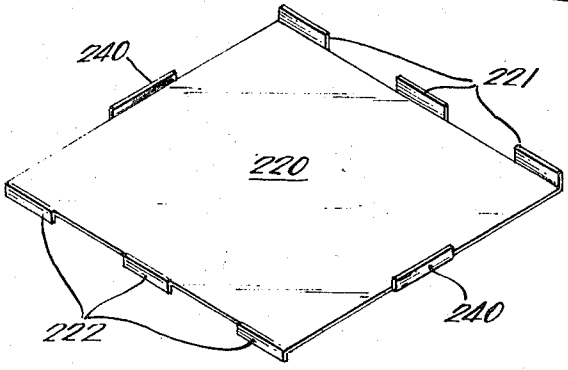


FIG. 6.

INVENTOR
JOHN DI CANDILO

BY Howson & Howson

ATTYS.

United States Patent Office 3,548,505 Patented Dec. 22, 1970

3,548,505

TILE FITTING TOOL

John Di Candilo, 231 Bella Vista Road, Devon, Pa. 19333

Filed Jan. 7, 1969, Ser. No. 789,440
Int. Cl. G01b 3/14
U.S. Cl. 33—174 5 Claims

ABSTRACT OF THE DISCLOSURE

A tile fitting tool having a square, tile-shaped configuration with an upturned lip along one edge and a downturned lip along an opposite edge is disclosed for use in gauging the amount of material to be cut from a loose tile to permit it to be laid on a narrow untiled floorspace between a wall and a contiguous tiled floor area. In use, a loose tile is placed on the tool in engagement with the upturned lip, and the downturned lip is engaged against the outer edge of a laid tile in the tiled area when the tool is positioned on the laid tile. A gauge is placed on top of the loose tile and is butted against the wall to provide an accurate measurement of the amount of material to be cut from the loose tile.

The present invention relates to the art of laying floor tiles, and more particularly, the present invention relates to a tool which is useful in fitting tiles to be laid on a narrow floorspace along a wall.

In laying floor tiles it is sometimes necessary to cut and lay a series of tiles on a relatively narrow floorspace extending along a wall or other obstruction. At present, professional tile setters do this by aligning one edge of a loose tile with the outer edge of an underlying tile in the tiled floor area. An identically shaped gauging tile is then laid on top of the loose tile with one of its edges butted against the wall or obstruction. The underlying loose tile is then scribed along the opposite edge of the gauging tile to permit it to be cut to provide a wall-engaging edge and the cut tile is laid on the floorspace in the customary manner.

A primary disadvantage of the aforementioned technique is that time is required to properly align the loose tile to permit it to be scribed and cut accurately, since improper fits may result if not done carefully. In addition, the tile setter's fingers may become covered with adhesive from the untiled floorspace while aligning the loose tile, and the adhesive may thereby be transferred to other tiles, requiring their extensive cleaning after the job is completed. Furthermore, the tile setter's production may be slowed becaues of the necessity for continually cleaning his fingers. Also, it should be apparent that the foregoing disadvantages are even more pronounced when the tile setter does not possess the skill of a professional, for example, when he is a so-called "do-it-yourselfer."

In view of the foregoing, it is a primary object of the present invention to provide a novel tool which may be used for quickly and accurately fitting tiles to be laid on a relatively narrow floorspace along a wall or other obstruction.

It is another object of the present invention to provide a simple and inexpensive tile fitting tool which may assist inexperienced persons in fitting floor tiles.

As a further object, the present invention provides a tile fitting tool which tends to reduce the soiling of tiles by adhesive to thereby increase the productivity of its operator.

These and other objects, features and advantages of the present invention will become apparent from the following description when taken in conjunction with the accompanying drawing in which:

FIG. 1 is a fragmentary perspective view of a partially tiled floor on which a tool embodying the present invention is shown being used to gauge a loose tile prior to its bing cut and laid on an untiled portion of the floorspace;

FIG. 2 is a perspective view of the tile fitting tool illustrated in FIG. 1;

FIG. 3 is a sectional view taken along line 3—3 of FIG. 2 to illustrate a gauging tile overlying a loose tile which is being gauged and scribed;

FIGS. 4 and 5 are transverse sectional views of a modified embodiment of the present invention showing its use; and

FIG. 6 is a perspective view of another modified embodiment of the present invention.

Referring now to the drawings, there is illustrated in FIG. 1 a room having a floor **10**, a wall **11**, and a baseboard **12** projecting upwardly from the floor **10** and extending along the base of the wall **11**. A plurality of square tiles **13**, **13**, laid on substantially the entire floor area **10** in the customary staggered pattern, define a relatively narrow untiled floorspace **14** between their outer edges **13***a*, **13***a* and the confronting upright surface of the baseboard **12** (see FIG. 3). The tiles **13**, **13** are permanently bonded to the floor **10** by a suitable adhesive **15** which is normally spread over the entire floor area **10** and which is exposed in the untiled area **14** before tiles are laid thereon.

As noted heretofore, the fitting of tiles to be laid on the narrow floorspace **14** is a slow process, and ordinarily a skillful tile setter is required to ensure proper fits. In addition, there is a tendency for the tile setter to transfer adhesives from the untiled floor area to the tiles, thereby necessitating their cleaning. In accordance with the present invention, a novel tool has now been provided to facilitate tile fitting by obviating the foregoing disadvantages, while still using a conventional tile as a gauging device as indicated at **13***a* for scribing the loose tile **13***b*.

To this end, the tile-fitting tool **18** of the present invention is a tileshaped plate **20** (FIG. 2) of metal or plastic construction, having an upturned rearward lip **21** extending therealong at one end and a downturned forward lip **22** extending along its opposite end. The lips **21** and **22** are parallel with each other and are spaced apart a distance (measured from their inside surfaces **21***a* and 22a, respectively) which is equal to the length of one side of the gauging tile **13***a*, so that when a loose tile **13***b* is placed thereon with its rear edge in engagement against the inside surface of the upturned lip, its opposite or front edge is aligned with the inside surface of the downturned lip. In the present instance, the plate **20** also has parallel side edges **23**, **23** which intersect the lips **21** and **22** at right angles, the distance between the edges **23**, **23** also being equal to the width of one side of the loose tile **13***b*. In conventional floor tiles, the length and width are equal, but the present invention facilitates the use of damaged or defective tiles as the loose tile **13***b*.

The tool may be kept relatively clean in use. To this end, the downturned lip **22** projects from the plate **20** a distance substantially equal to one half the thickness of the tile **13**, and the upturned lip **21** projects from the plate **20** a distance slightly greater than the thickness of the tile **13**. Thus, when the tool **20** is positioned as shown in FIG. 3, the downturned lip **22** is spaced from the adhesive **15** so that the tool and tiles used therewith may be kept relatively free from soiling by adhesive.

In use, a loose tile **13** is placed on the plate **20** with one of its edges abutting the upturned lip **21**. The side

edges of the tile are then aligned with the side edges **23, 23** of the plate. The plate **20** and tile **13** may then be positioned on a laid tile **13** (spaced from the wall **11** by the untiled floorspace **14**) with the downturned lip **22** of the plate engaging the outer edge **13'** of the underlying laid tile. A gauge, in the present instance another loose or gauging tile **13**, may then be placed on the loose tile **13** on the plate **20**. When one edge of the gauging tile is butted against the baseboard **12**, its parallel opposite edge may then be used with a scribe **25** to mark the underlying loose tile **13*b*** for subsequent cutting and laying .

An additional advantage of the present invention is realized when at least one tile has been laid on the floorspace **14** so that its outer edge extends perpendicular to the baseboard. Thus, the plate and a loose tile thereon may be aligned both parallel with and perpendicular to the baseboard by simply sliding its downturned lip along the outer edge of the laid tiles until its side edge at the downturned lip engages the tile edge extending perpendicular to the baseboard. In this manner, alignment of the tile for gauging and cutting is facilitated. This is especially useful when fitting around outside corners or irregular obstructions.

If desired, a modified tool may be provided for use in fitting tiles. As may be seen in FIGS. 4 and 5, a plate **120**, similar to the plate **20**, has an upturned lip **121** and a downturned lip **122**. In addition, the plate **120** is downwardly bowed-out slightly so that the lower surface is not planar and the tool is free to rock parallel to the lips **121** and **122**. With this structure, the tendency for the tiles to become soiled with adhesive may be reduced, since the downturned lip may be disengaged from the edge of the tile **13** by rocking the plate on its bowed surface (see FIG. 5). In this manner, the tile setter's fingers need not be brought into proximity with adhesive when removing the plate **120**.

Another modified embodiment of the present invention is illustrated in FIG. 6. In this embodiment, a flat plate **220** has a discontinuous upturned rearward lip as indicated at **221** and a like discontinuous downturned forward lip as indicated at **222**. A pair of upturned tabs **240, 240** project upwardly along the side edges of the plate **220** intermediate the lips **221** and **222**. Thus, with this embodiment additional advantages are realized, since the tabs **240, 240** cooperate to align a tile with the side edges of the plate. Furthermore, the gaps in the upturned lip **221** provide finger space to facilitate rapid insertion and removal of a loose tile from the tool.

In view of the foregoing, it should now be apparent that a simple and inexpensive tool has now been provided which facilitates the measurement of floor tiles to permit them to be cut and laid quickly and accurately with a minimum of skill on the part of an operator. Although the drawings illustrate a tool for use with a gauge consisting of a conventional tile, it is apparent that other gauges may be used if the length of the gauge corresponds to the length of the tool between the lips.

While preferred embodiments of the present invention have been described in detail, various modifications, alterations or changes may be made without departing from the spirit and scope of the present invention as defined in the appended claims.

What is claimed is:

1. A tool for use with a gauge in fitting a loose rectangular tile to permit it to be laid on a narrow untiled floorspace disposed between an upright wall surface and confronting outer edges of a plurality of like tiles laid on a contiguous tiled floorspace, the tool comprising: a plate for overlying a tile laid in the tiled floorspace and for receiving a loose tile thereon, said plate having a downturned lip for engaging said outer edge of the laid tile and an upturned lip parallel with said downturned lip and spaced therefrom for engaging an edge of said loose tile when the loose tile is positioned on the plate, one of the lips on the plate projecting outwardly therefrom a distance substantially equal to one half of the thickness of the tile and the other lip projecting outwardly a distance substantially equal to the thickness of the tile, and the distance between the lips being determined by the length of the gauge so that when one edge of the loose tile engages against the upturned lip, the amount of material to be cut from the loose tile may be determined when the downturned lip is engaged against the outer edge of the laid tile and the gauge is disposed between the wall surface and a point on the loose tile.

2. A tool in accordance with claim **1** wherein the lower surface of said plate is bowed-out downwardly to permit rocking movement parallel to the lips, whereby the downturned lip may be disengaged from the outer edge of the laid tiles by downwardly displacing the upturned lip to rock the plate on said bowed surface.

3. A tool in accordance with claim **1** wherein said plate has an edge extending between said lips and a tab projecting upwardly from said edge to facilitate alignment of a loose tile on the plate.

4. A tool in accordance with claim **1** wherein at least said upturned lip is discontinuous to provide a gap to facilitate removal of said loose tile.

5. A tool in accordance with claim **1** wherein said gauge is rectangular and corresponds to said loose tile, and said plate corresponds in length to said loose tile, whereby when said loose tile overlies said plate and one edge is engaged against said upturned lip, the opposite edge is aligned with said downturned lip.

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SAMUEL S. MATTHEWS, Primary Examiner

U.S. Cl. X.R.

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