

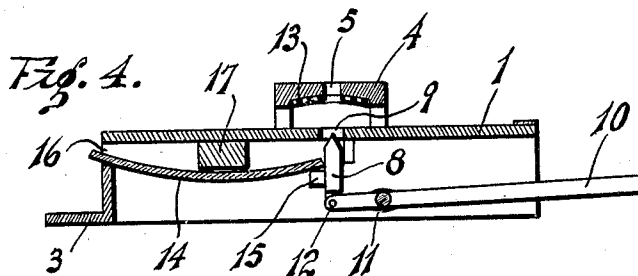
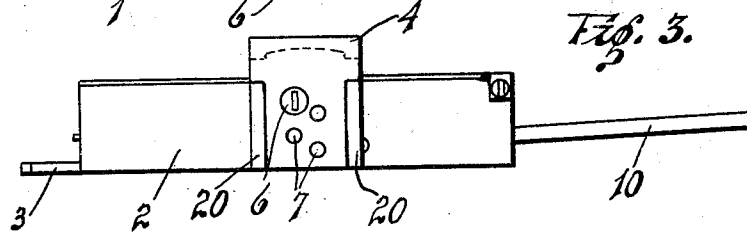
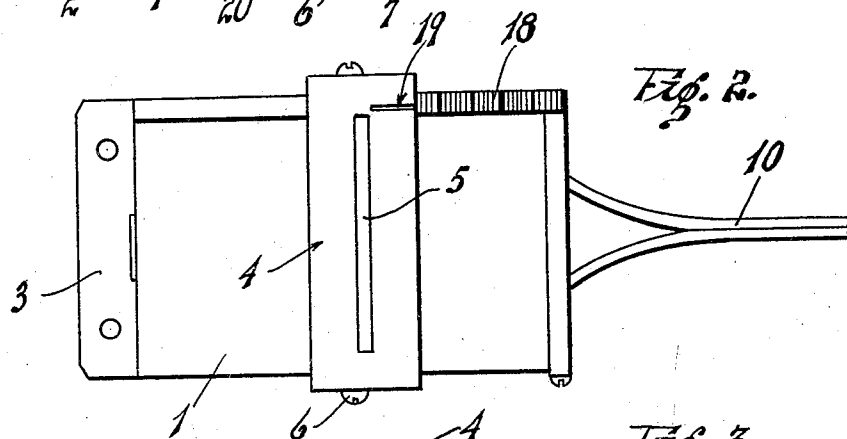
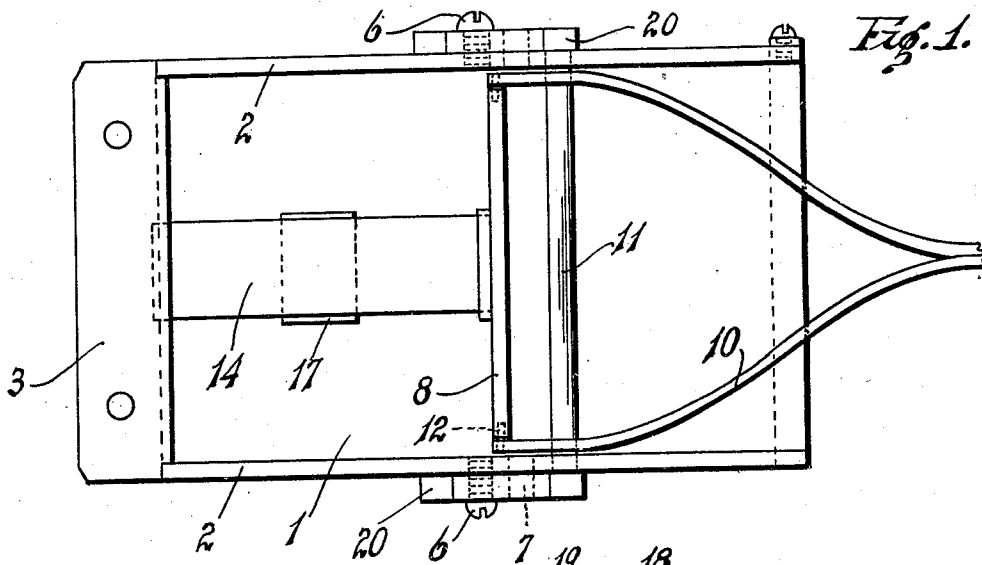
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TILE BREAKER

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TILE BREAKER

Application filed November 15, 1930. Serial No. 495,893.

This invention relates to a tile breaker whereby tile may be accurately broken to any desired length.

An object of my invention is to provide a novel means whereby the tile can be held and broken at any desired point.

A further object is to provide a tile breaker including a movable breaking plate which engages the under side of the tile at the point at which the tile is to be broken.

Still another object is to provide a tool of the character stated which is simple in construction and effective in use.

Other objects, advantages, and features of invention may appear from the accompanying drawings, the subjoined detailed description, and the appended claims.

In the drawings.

Figure 1 is a bottom plan view of my tile breaker.

Figure 2 is a top plan view of a reduced scale.

Figure 3 is a side elevation.

Figure 4 is a longitudinal, sectional view of my tile breaker, the handle and breaker plate being in elevation.

Referring more particularly to the drawings, my tool comprises a rectangular top plate 1 from which sides 2—2 depend. The top 1 and sides 2 are preferably integral. An L-shaped end wall 3 is provided, the lower horizontal lip of said wall having a plurality of bolt holes therein so that the tool can be mounted upon a board or the like if desired.

A U-shaped plate 4 extends across the top of the tool adjacent the center thereof, and this plate is provided with a slot 5 which extends transversely of the breaker. The plate 4 is adjustable vertically so that the top thereof can be spaced any desired amount from the top 1. This adjustment is accomplished by means of screws 6—6 which extend through the sides of the plate 4 and into the side walls 2. A plurality of holes 7 is provided in the plate 4 so that the desired adjustment can be made.

A breaker strip 8 extends transversely of the tool and is positioned under the top wall 1. The top of the breaker strip is preferably sharpened and a transverse slot 9 is provided

in the top wall 1 through which the breaker strip is adapted to extend. The slot 9 is directly under the slot 5 in the plate 4. The breaker strip 8 is reciprocated by means of a handle 10. The handle is pivotally mounted on a rod 11, which rod is secured in the side walls 2—2. The handle 10 is pivotally secured to the bottom of the breaker strip 8 by pins 12—12. Thus it will be seen that when the outer end of the handle 10 is pushed downwardly, the breaker strip 8 will be moved upwardly to engage the bottom of the tile and cause said tile to break at that point.

A fibrous or hard rubber strip 13 is secured to the bottom of the plate 4 so as to protect the tile and prevent the upper glazed surface from becoming marred. The breaker strip 8 is returned to its lowered position by means of a leaf spring 14, one end of said leaf spring engaging a lug 15 on the breaker strip and the other end of said spring extends through a slot 16 in the end wall 3. The spring 14 is flexed downwardly by a block 17 on the under surface of the top wall 1.

A rule 18 is mounted along one edge of the top plate 1, and this rule is also visible through a slot 19 in the plate 4. The purpose of the rule is to measure the amount which is to be cut off of the tile. A pair of guide strips 20—20 is secured to the depending sides 2—2 for the purpose of guiding the vertical adjustment of the plate 4. The depending ends of the plate 4 fit between the guides whereby said plate is accurately held and guided as it is adjusted.

The purpose of the slot 5 is to permit a sharp tool or glass cutter to be placed against the tile which is positioned under the plate 4. The purpose of the glass cutter or tool is to score the tile and thus cause it to break on a straight line. The tile is held firmly under the plate 4, the amount to be cut is determined and measured on the rule 18, the glass cutter is then drawn across the tile, then the handle 10 is depressed and the tile is broken by the breaker strip 8. The slot 5 has the further advantage of accurately guiding the scoring tool or glass cutter.

The lowered surface of the plate 4 is preferably concave as shown in Figure 4. The

reason being that the tile will more readily break on a line directly between the slots 5—9.

Having described my invention, I claim:

5 1. A tile breaker comprising a top plate and depending sides, a holding plate mounted on said first named plate and spaced from the top thereof, said last named plate having a slot formed therein, said first named plate
10 having a slot formed therein below the first named slot, a breaker strip, means mounting said breaker strip below the first named plate, said breaker strip being adapted to extend through the slot in the first named plate,
15 means to reciprocate said breaker strip whereby said breaker strip is urged through the slot in the first named plate and against the tile.

2. A tile breaker comprising a top plate and depending sides, a holding plate mounted
20 on said first named plate and spaced from the top thereof, said last named plate having a slot formed therein, said first named plate having a slot formed therein below the first named slot, a breaker strip, means mounting
25 said breaker strip below the first named plate, said breaker strip being adapted to extend through the slot in the first named plate, means to reciprocate said breaker strip whereby said breaker strip is urged through
30 the slot in the first named plate and against the tile, and yieldable means engaging the breaker strip whereby said breaker strip is urged into lowered position.

3. A tile breaker comprising a top plate and depending sides, a tile holding plate
35 spaced above the top plate, means adjustably mounting said tile holding plate, said tile holding plate having a slot therein, said top plate having a slot therein below the
40 first named slot, a breaker strip adapted to extend through the slot in the top plate, a handle attached to the breaker strip, means pivotally mounting the handle whereby said breaker strip is moved upwardly through the
45 slot in the top plate and against the tile.

4. A tile breaker comprising a top plate and depending sides, a tile holding plate spaced above the top plate, means adjustably
50 mounting said tile holding plate, said tile holding plate having a slot therein, said top plate having a slot therein below the first named slot, a breaker strip adapted to extend through the slot in the top plate, a handle attached to the breaker strip, means pivotally
55 mounting the handle whereby said breaker strip is moved upwardly through the slot in the top plate and against the tile, and a leaf spring engaging the breaker strip whereby the breaker strip is urged into lowered position.
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5. A tile breaker comprising a top plate and depending sides thereon, a U-shaped tile
65 holding plate, means adjustably securing the tile holding plate to the side walls, said tile holding plate having a slot therein, said top

plate having a slot therein below the first named slot, a breaker strip positioned below the last named slot, a handle pivotally secured to the breaker strip, means pivotally mounting the handle to the side walls, said
70 handle being adapted to be depressed to move the breaker strip through the last named slot against the tile, a leaf spring engaging the breaker strip whereby it is urged to lowered position, said tile holding plate having a concave
75 bottom surface against which the tile bears.

In testimony whereof, I affix my signature.

WILLIAM AITCHISON.

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