

No. 744,244.

PATENTED NOV. 17, 1903.

P. SEMMER.  
APPARATUS FOR BREAKING TILE STRIPS.

APPLICATION FILED OCT. 28, 1902.

NO MODEL.

Fig. 1.

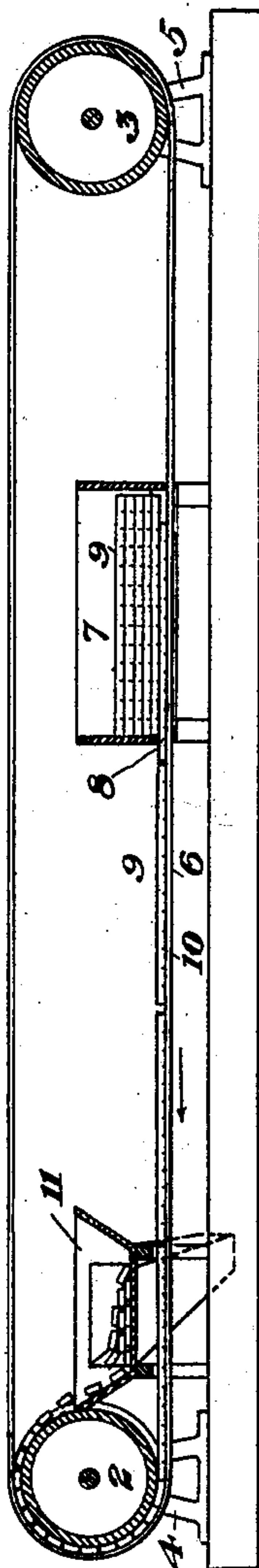
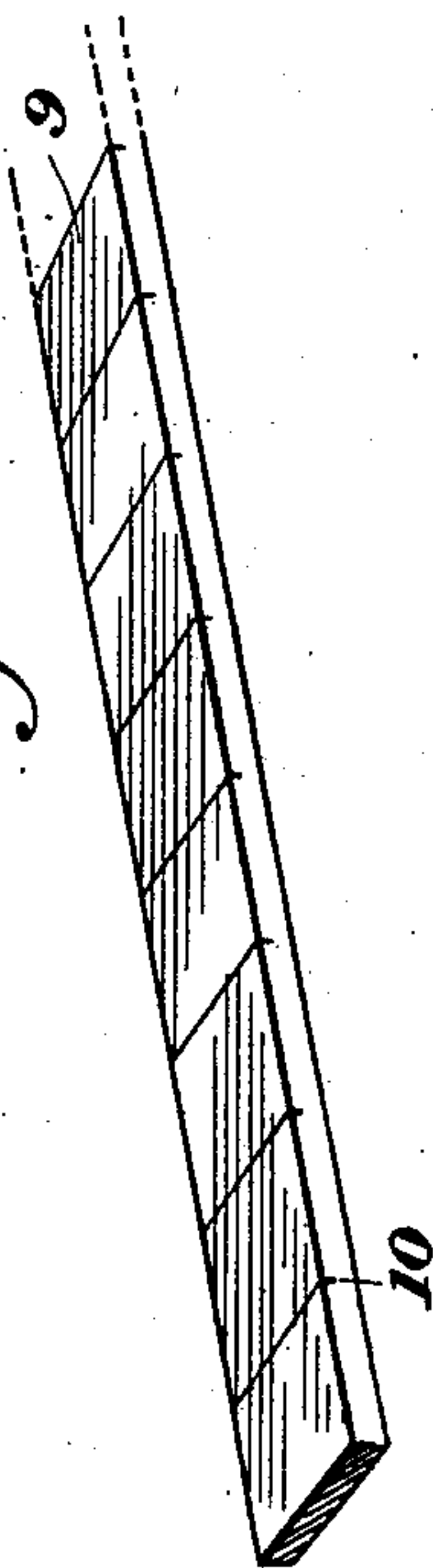


Fig. 2.



WITNESSES

A. M. Steen  
W. F. Stewart.

INVENTOR

Phillip Semmer  
by James H. Askeville  
his attorney

# UNITED STATES PATENT OFFICE.

PHILLIP SEMMER, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO THE  
ASSEMBLED TILE AND SLAB COMPANY, OF PITTSBURG, PENNSYLVANIA.

## APPARATUS FOR BREAKING TILE STRIPS.

SPECIFICATION forming part of Letters Patent No. 744,244, dated November 17, 1903.

Application filed October 28, 1902. Serial No. 129,135. (No model.)

*To all whom it may concern:*

Be it known that I, PHILLIP SEMMER, of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Apparatus for Breaking Tile Strips, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical sectional view of my improved apparatus, and Fig. 2 is a perspective view of a tile strip which has been scored ready for breaking.

In the manufacture of glass tile, and especially small pieces of tile used in mosaic work, it has been customary to cut the surface of the glass sheet with a diamond and then to break the same by hand along the lines of cut, first into long strips and then these strips into small squares of a size suitable for the work to be done. This method, however, requires so much time and labor as to render the cost of manufacture of such mosaic pieces excessive.

The object of my invention is to provide apparatus whereby the breaking of the tile strips into small pieces may be rapidly and economically accomplished.

I will now describe my invention so that others skilled in the art may manufacture and use the same.

In the drawings, 2 and 3 represent drums mounted on suitable standards or supports 4 and 5, one of which is driven by any suitable power mechanism. Extending between and passing around these two drums is an endless belt 6, which may be of leather or other suitable material, adapted to serve as a carrier for the tile strips. Situate between the two drums 2 and 3 and over the lower web of the belt 6 is a receptacle 7, made of sufficient size to receive the tile strips. The strips 9 are placed one upon another within the receptacle 7 and are adapted to be fed therefrom through the bottom 8, which is of just sufficient size to permit the passage of a single strip. When the receptacle 7 is filled with strips and the belt is caused to move in the direction of the arrow, the strips 9 are

carried one by one out of the receptacle 7 and toward the drum 2. These strips (shown in Fig. 2) are formed by cutting sheets of glass with a diamond and breaking them into strips, the sheets having been previously cut also crosswise, forming cross grooves or scores 10. The strips 9 travel with the belt 6 and pass under the drum 2 and around the same, between it and the belt. The strips are thus broken on the lines of the cuts or scores 10 and separated into pieces or squares of the desired size. These pieces drop from the upper side of the drum into a hopper 11, which leads them from the apparatus to a suitable box or receptacle.

From the foregoing description the advantages of my invention will be understood by those skilled in the art. The manual labor incident to breaking the squares or pieces one by one from the strips is obviated, and the pieces are broken with great rapidity as the strips pass from the receptacle 7 to the drum 2 with the speed at which the belt is driven.

In the operation of this apparatus the strips should be placed in the receptacle with the scored or cut side which is intended to constitute the exposed face of the mosaic downward, which will bring the unscored surface against the face of the drum and cause the strips to be broken evenly along the lines of cutting on the scored side. The rear or uncut surfaces of the strips, however, break unevenly, which affords rough and binding edges for the cement with which the mosaic is built, thereby retaining the pieces of tile firmly in position. This even breaking of one surface and irregular breaking of the other portion of the strip is one of the advantages of my invention, although I do not desire to limit my invention to any particular position in which the strip is to be placed or to any particular form of fracture of the same.

Although I have shown and described a certain form of apparatus, I do not wish to be understood as limiting myself thereto, as many forms and shapes may be employed in lieu thereof.

The principal feature of my device consists



in a support or carrier and a breaker the surface of which is out of line with the surface of the strip to be broken.

I claim—

- 5 1. In apparatus for breaking tile strips, the combination of a breaker, and a flexible carrier adapted to bring the tile strip to and hold it in contact with the breaker.
- 10 2. In apparatus for breaking tile strips, the combination of a breaker having a curved face and a flexible carrier adapted to bring the tile strip to and hold it in contact with the breaker; substantially as described.
- 15 3. In apparatus for breaking tile strips, the combination of a breaker, and a carrier, the carrier being arranged to carry the tile strip around the surface of the breaker; substantially as described.
- 20 4. In apparatus for breaking tile strips, the combination of a flexible carrier, a breaker,

and a hopper adjacent to the breaker and adapted to receive the broken tile, said carrier being arranged to bend the strip over the face of the breaker and break the same at designated intervals; substantially as described. 25

5. In apparatus for breaking tile strips, a breaker, a feeding-receptacle having an exit at the bottom thereof of a size sufficient to permit the passage of a single strip, an endless belt for carrying the strips from the feeding-receptacle to the breaker, and a receiving hopper or receptacle adapted to catch the broken pieces; substantially as described. 30

In testimony whereof I have hereunto set my hand. 35

PHILLIP SEMMER.

Witnesses:

A. M. STEEN,  
JAMES K. BAKEWELL.