(No Model.)

F. SCHMIDT & M. HOLZBECHER.

CLAY TILE.

No. 245,227.

Patented Aug. 2, 1881.

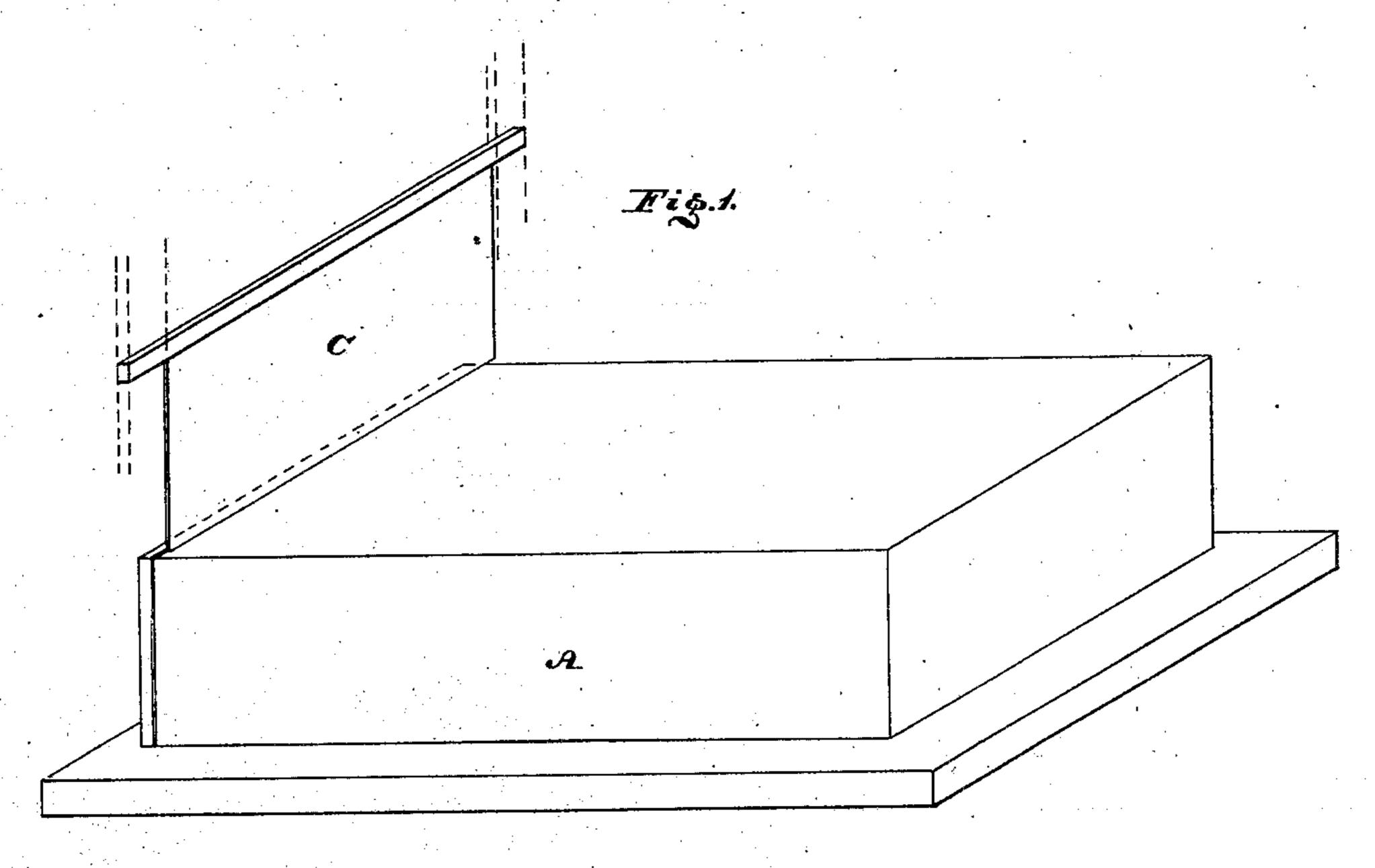
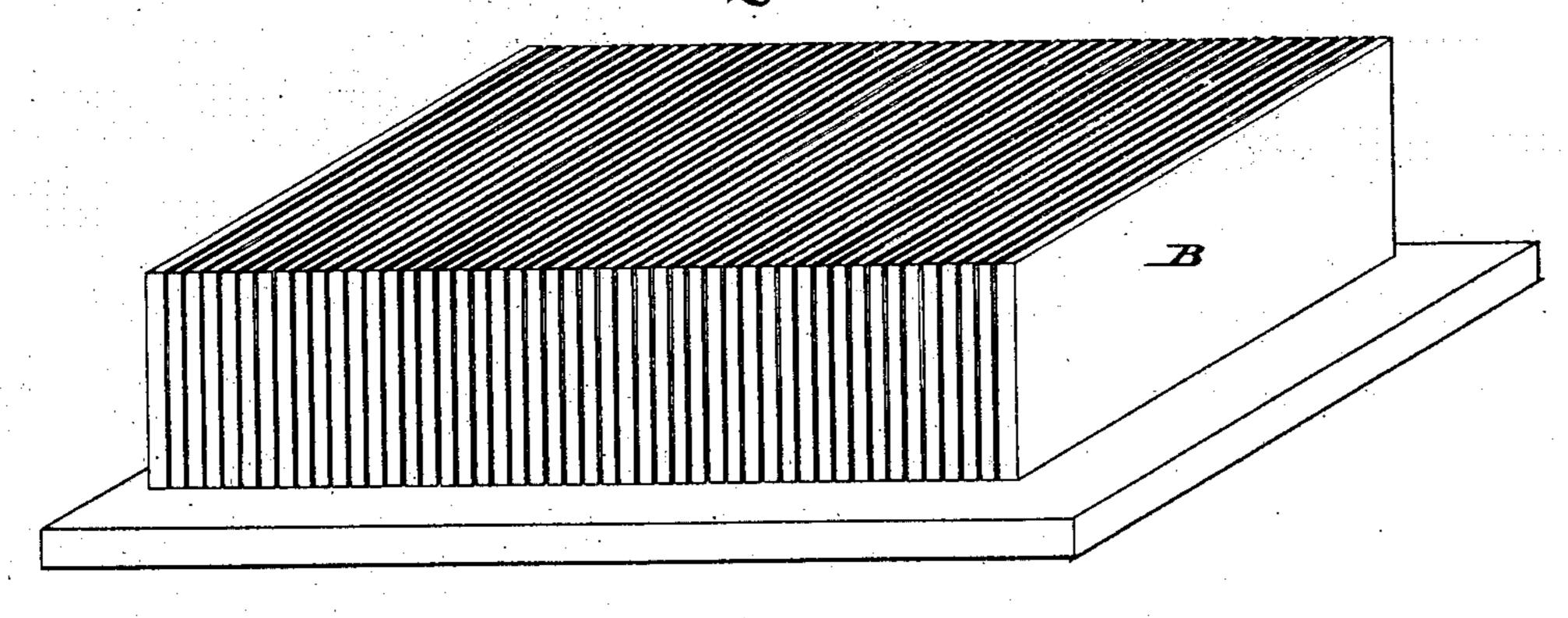
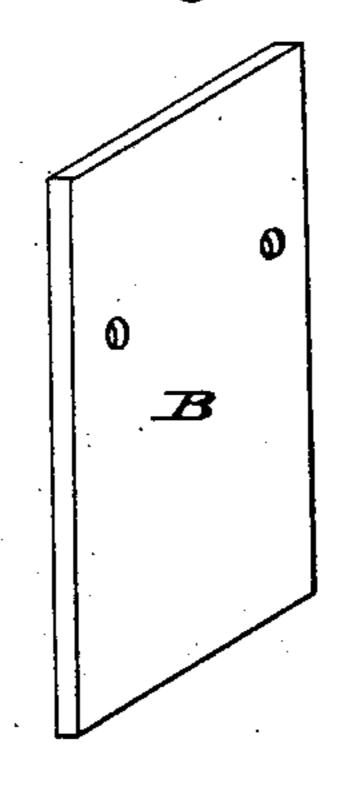


Fig.2



Fi &.3.



Mitnesses:

R. F. Grant, M. St. Kircher Inventorsz

Mutty Schmidt, Martin Holybechet, by Swilledershew

ATTORNEY.

United States Patent Office.

FRITZ SCHMIDT AND MARTIN HOLZBECHER, OF OPPELN, PRUSSIA, GERMANY.

CLAY TILE.

SPECIFICATION forming part of Letters Patent No. 245,227, dated August 2, 1881.

Application filed January 31, 1881. (No model.)

To all whom it may concern:

Be it known that we, FRITZ SCHMIDT and MARTIN HOLZBECHER, both subjects of the German Empire, and residents of Oppeln, in the Province of Silesia and Kingdom of Prussia, Germany, have invented a new and useful Improvement in Clay Tiles, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a block of clay and a blade or cutter which may be employed to slice the block. Fig. 2 is a perspective view of the block of clay sliced or cut into tile shapes or plates in condition to be dried and baked or burned. Fig. 3 is a perspective view of one of the tiles.

Similar letters of reference indicate corre-

sponding parts in the several figures.

Referring to the drawings, A represents a

block of clay, B the sliced shapes or plates, and C a blade, which may be employed to cut or slice the block A.

In carrying out our invention we take prop-25 erly-worked clay of the best quality and produce therefrom, by means of a press or machine, blocks of given size, and divide them, by means of a cutting apparatus, into a number of thin plates, which, without being removed 30 one from another, are then carefully dried and afterward burned in kilns. By this method of forming, drying, and burning exactly plain and even plates are produced, because during the drying period, and with the laying aside, 35 all warping and casting are made impossible, and because warping and casting, while drying, are avoided in consequence of the total weight no premature drying of the edges, and of course no unequal shrinkage, is occasioned, 40 and also, within the burning period, in conse-

quence of the attraction of the surfaces, the same conditions take place with the block consisting of single plates as if the block consisted of one piece only. Furthermore, the highest temperature for burning is allowed, and the 45 separation of the plates one from another after burning is easily accomplished. The burned plates are now entirely impregnated with tar or other similar substances, whereby they are made water-tight and have imparted to them 50 an elasticity of the highest degree, thus avoiding brittleness.

The plates are fixed to the roof by means of nails, the holes whereof are punched through the plates either in their soft state, before dry-55 ing, by means of a punching apparatus, or after the finishing, by means of a proper drill.

We are aware that it is not new to mold tiles in such manner that the tiles, though well separated, are connected by small fins, whereby, 60 when the tiles are baked, they may be broken one from another at the fins, and we therefore disclaim such features.

Having thus described our invention, what we claim as new, and desire to secure by Let- 65 ters Patent of the United States, is—

The method of producing clay tiles, consisting in forming a mass of worked clay into a block, slicing or cutting the same into a number of thin plates, and then drying and burn-70 ing the sliced block without separating the plates or slices, the plates or slices thus sustaining each other during the drying and burning, substantially as and for the purpose set forth.

FRITZ SCHMIDT.
MARTIN HOLZBECHER.

Witnesses:

HEINRICH BRASATOR, JOSEPH KRUBY.