

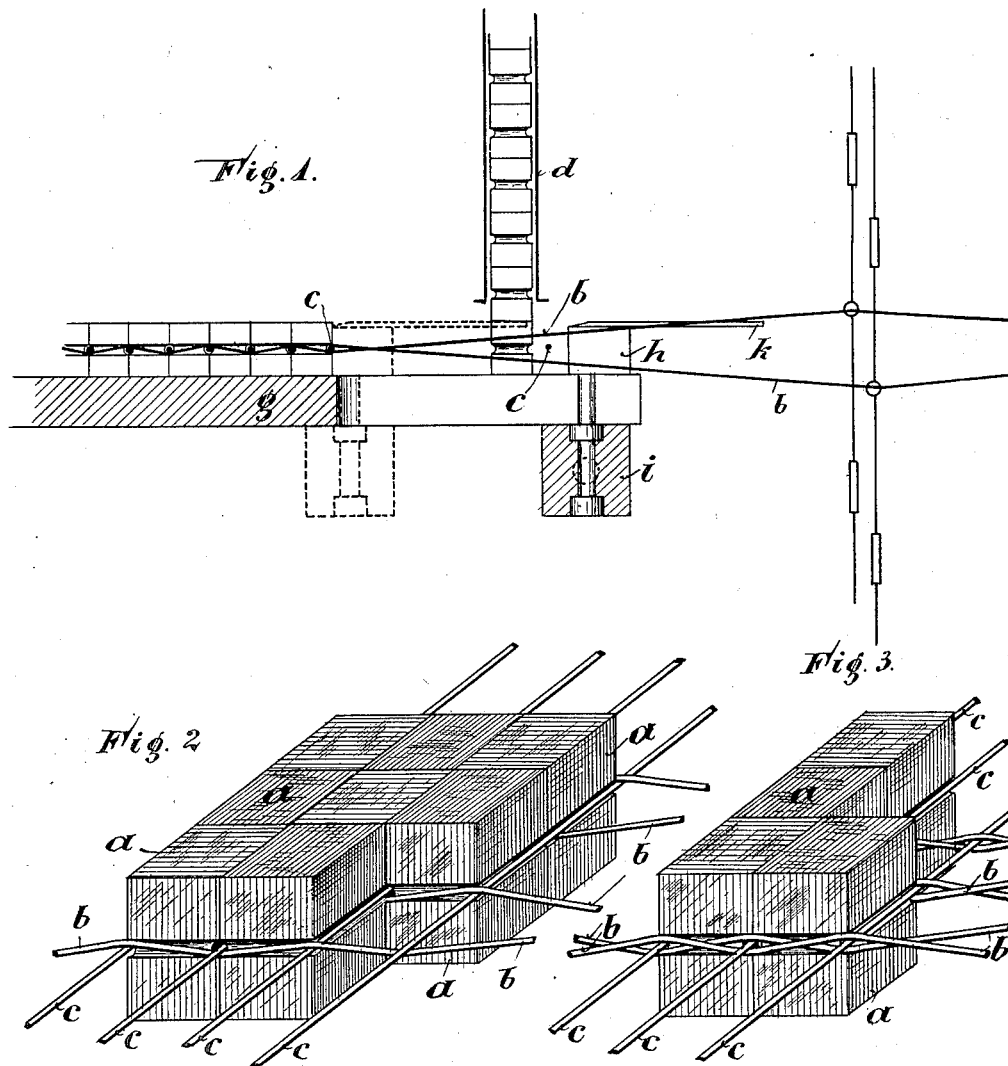
No. 649,323.

Patented May 8, 1900.

H. A. LITZ.  
WOOD MOSAIC.

(Application filed Feb. 28, 1899.)

(No Model.)



WITNESSES:

Edw. L. Gier  
O'Connor

INVENTOR

H. A. Litz  
By Richard D.

ATTORNEYS

# UNITED STATES PATENT OFFICE.

HEINRICH A. LITZ, OF ZURICH, SWITZERLAND, ASSIGNOR TO JOHANN WEHINGER, OF SAME PLACE.

## WOOD MOSAIC.

SPECIFICATION forming part of Letters Patent No. 649,323, dated May 8, 1900.

Application filed February 28, 1899. Serial No. 707,214. (No model.)

*To all whom it may concern:*

Be it known that I, HEINRICH AUGUST LITZ, a citizen of the Republic of Switzerland, and a resident of Zurich, Switzerland, have invented certain new and useful Improvements in Wood Mosaic, of which the following is a full, clear, and exact specification.

The present invention is wood mosaic for inlaid floors in particular and for various other purposes.

Figure 1 of annexed drawings is a scheme of the mechanism required for the manufacture. Figs. 2 and 3 represent the manufacture of mosaic plates or tables in operation.

The mosaic consists, as seen from Figs. 2 and 3, of single prismatic blocks of wood, preferably with square or rectangular faces. At half-height the vertical planes or surfaces of the blocks have a groove each to take up the wires *b b* and *c c*, which keep the blocks jointed. These wires are combined together in the same way as the threads of a simple tissue.

The mode of manufacturing the mosaic is as follows, Fig. 1: A number of channels *d*, placed vertical side by side in a row on a machine which resembles a loom, contain the blocks, which drop in between the wires of the warp *b b*, whereupon the woof or shoot wire *c* is introduced between or among the warp-wires. The batten of the loom then presses the blocks inserted between the wires and the wire woof against the precedingly-made portion of mosaic. That pushes the latter back for the space of one block's breadth, and the interchange of the position of the warp-wires caused by the up-and-down motion of the thread-gear binds the new row of blocks tight with the preceding portion. In order to facilitate the insertion of the blocks between the warp-wires, the latter must be at a greater distance from each other, for so much as the thickness of wire imports, at the place of insertion than they are near the accomplished portion of work. They are pressed into a compact solid with the blocks by means of guides applied to the accomplished portion. With a view to facilitating the movement of the batten between the divergent warp-wires the batten is formed of several separate parts *h*, guided by slots in the plate *g*, the directions of which are in correspondence with

those of the warp-wires. A rail *i*, that moves along underneath the plate *g*, has a slot in which the parts *h* are rested for transverse or slanting motion. The parts *h*, forming the batten, have each at the top a little rod *k*, which during the forward motion of the batten reaches back under the column of blocks and keeps the latter from dropping before the return of the batten. When the plate woven has attained the length desired, the weaving may be continued without the insertion of blocks, with the warp and woof wires only, to give room for cutting the tissue into parts when desired, and a new plate may at once be started without stopping or discontinuing the operation.

It is easy to imagine the great variety of combinations in the color of the blocks that may be employed to produce endless variations of imagery. The plates can be made of any desirable length. They may be made so as to serve as stripes in floors along the whole length or breadth of a room, or they may be composed in plates of rectangular or quadratic shape.

The blocks may be coated before the weaving with some agglutinant, or the texture may be impregnated to still more secure its solidity and to render the taking out of plates easier.

In Fig. 2 the wires forming the shed of the warp are on opposite sides of the blocks, while in Fig. 3 the wires forming the shed are on one and the same side of the block.

I claim—

1. A mosaic composed of blocks having grooves in their sides and warp and woof wires interwoven and lying in the said grooves, substantially as described.

2. In combination, the blocks having the grooved sides, the woof-wires and the warp-wires the latter being arranged alternately over and under the woof-threads at opposite sides of the blocks, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

H. A. LITZ.

Witnesses:

J. FRÄULIN HOFER,  
R. BERNER.