

Johnson & Kreisler,

Hollow Tile Floor,

No. 112,926,

Patented Mar. 21, 1871.

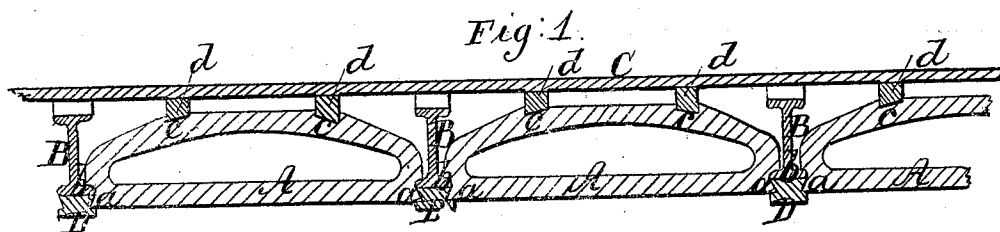
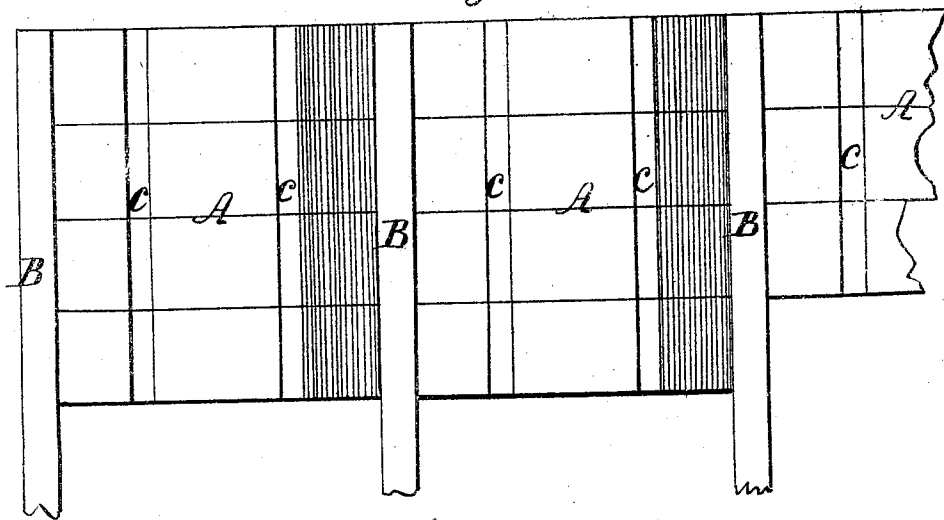


Fig: 2.



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UNITED STATES PATENT OFFICE.

GEORGE H. JOHNSON AND BALTHASAR KREISCHER, OF NEW YORK, N. Y.

IMPROVEMENT IN HOLLOW-TILE FLOORS.

Specification forming part of Letters Patent No. **112,926**, dated March 21, 1871.

To all whom it may concern:

Be it known that we, GEORGE H. JOHNSON and BALTHASAR KREISCHER, both of the city, county, and State of New York, have invented a new and Improved Hollow-Tile Floor; and we do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a longitudinal vertical section of this invention. Fig. 2 is a plan or top view of the same, the floor-boards having been removed to expose the parts below.

Similar letters indicate corresponding parts.

This invention relates to a floor which is composed of hollow arched tiles, provided with dovetailed grooves near their bottom edges to catch over the lower flanges of the iron girders of a fire-proof building, and consists in the employment of recesses in the upper convex surface of said tiles to receive strips of wood, to which the floor-boards are nailed. Said arched bottom-tiles are made of a length corresponding to the distances between the girders, in such a manner that a hollow floor is obtained which is strong, durable, and very simple in its construction, and which, on account of the circulation of air through it, prevents dampness and an injurious influence of atmospheric changes. With the hollow arched tiles are combined filling-strips of clay, which are secured in the dovetailed recesses of the tiles below the girders, so as to fill up the interstices between the adjoining tiles, and to produce a good finish of the ceiling.

In the drawing, the letter A designates a hollow arched tile, the cross-section of which is shaped as shown in Fig. 1, and which is made of such a length that it fits between the iron girders B of a fire-proof building. Said tile is provided near its base with dovetailed

grooves *a*, which catch over the bottom flanges *b* of the girders, and in the convex surface of the tile are two or more recesses, *c*, to receive strips *d* of wood on which the floor-boards C are nailed. The dovetailed grooves *a* project somewhat below the girders, so as to make room for the filling-strips D, which are made of clay in any desirable form or shape, and the upper parts of which are so formed that they can be inserted in the dovetailed grooves *a*, as shown in Fig. 1. By these means the spaces intervening between the adjoining tiles are filled up and a good finish is given to the ceiling. The hollow arched tiles A are formed about one foot wide, more or less, and they are placed on the girders side by side, as shown in Fig. 2. Their arched tops impart sufficient strength to the floor, and the resisting power of the tiles is still further increased by the strips *d* of wood, which extend across them, being fitted into the recesses *c*.

By these means a floor is obtained which is comparatively light, which can be readily put up, and which forms a good protection for the floor against moisture or any changes in the temperature or in the atmosphere.

If desired, currents of hot or cold air can be passed through the hollow floor for the purpose of heating or cooling, as may be required.

What we claim as new, and desire to secure by Letters Patent, is—

1. A hollow arched tile, provided with recesses *c* in its convex upper surface for the reception of floor-supporting strips *d*, substantially as shown and described.

2. The removable clay filling-strips D, in combination with the hollow arched tiles A and double-flanged girders B, as herein set forth, for the purpose specified.

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Witnesses:

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