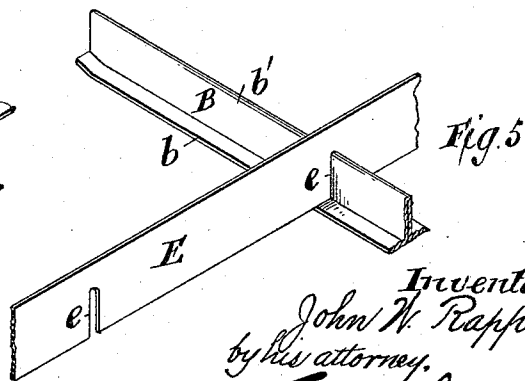
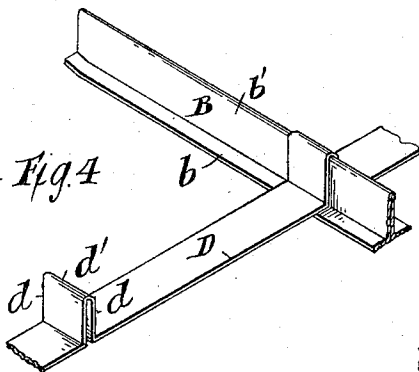
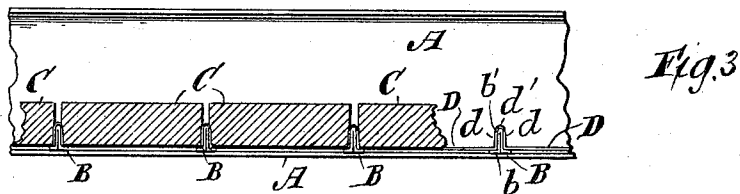
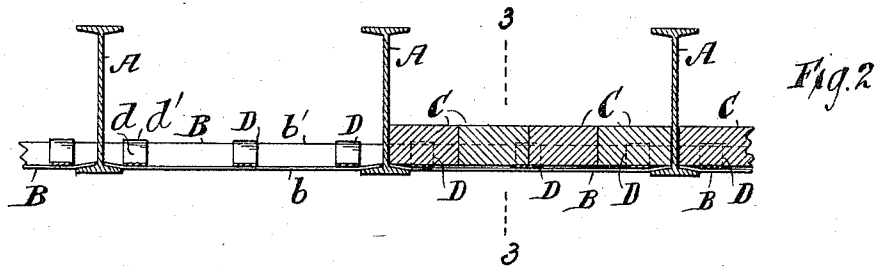
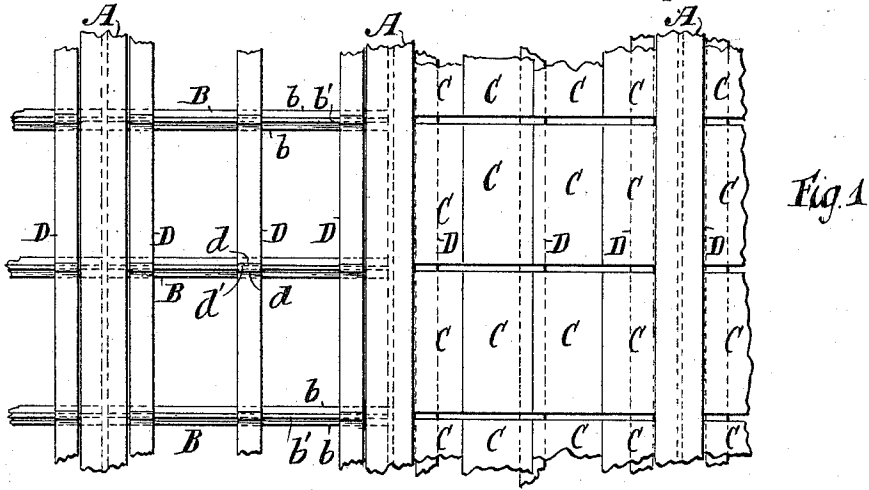


(No Model.)

J. W. RAPP.
FLOOR CONSTRUCTION.

No. 537,483.

Patented Apr. 16, 1895.



Witnesses
Geo. Wadman
Pierson L. Wells.

Inventor
John W. Rapp.
by his attorney,
Edmund H. Brown.

UNITED STATES PATENT OFFICE.

JOHN W. RAPP, OF NEW YORK, N. Y.

FLOOR CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 537,483, dated April 16, 1895.

Application filed September 20, 1894. Serial No. 523,567. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. RAPP, of New York, in the county and State of New York, have invented a certain new and useful Improvement in Floor Construction, of which the following is a specification.

My invention relates to building construction and is particularly directed toward that class of construction in which the space between the beams is filled in with material.

It is the common practice to-day in the construction of buildings wherein iron beams are employed to fill in the space between the beams, brick among other materials being commonly used for such purpose. This filling not only serves to give a better and a finished appearance to this part of the structure, but is also utilized, generally, if the beams are for the main support of the floor, with the beams in supporting the flooring and the superstructure. In this case, the better to support the filling material, it is commonly given an arched form from beam to beam, or some other form equivalent to that of the arch. The construction of these arches involves considerable expense and labor. My improvement is designed especially toward a lessening in these items.

I will describe a construction in which the features of my invention are embodied, and then point out the novel features in claims.

In the accompanying drawings, Figure 1 is a plan view of a construction embodying my invention. Fig. 2 is an end elevation of Fig. 1. Fig. 3 is a section on the line 3—3 of Fig. 2. Fig. 4 is a view in perspective of a retaining piece embodied in my improvement. Fig. 5 is a perspective view of a modification.

Similar letters of reference designate corresponding parts.

In the drawings A indicates floor beams. Three such beams are here represented and they are shown as being of the ordinary I form. They are sustained, as usual, at their ends by columns, other beams or the walls of the building, not necessary to be shown.

B indicates metal rods. They have the form of an inverted T, with lower flanges *b*, *b* and central extension or web *b'*, and extend across from one beam to another, in general, at right angles thereto with their extremities resting

upon the lower flanges of the beams. These rods B may be formed of the rolled shapes of the general form represented, the so-called T iron, or they may be formed of sheet metal bent to a T form as shown by the drawings.

These rods B will, generally, simply rest upon the lower flanges of the beams A and have no fixed connection therewith. For the purpose of keeping them in place and to facilitate their being placed in position, I combine with them retaining pieces D. These retaining pieces, as shown in Fig. 4, are formed of flat strips of metal bent at intervals along their length, forming yokes. These yokes form recesses, bounded by side pieces *d*, *d*, and connection *d'*. The retaining pieces are intended to be placed over the rods B, the upright portion *b'* of the latter entering the recesses in the former.

The rods B are placed at intervals between the beams A, at such distances apart that the ends of suitable tiling or bricks may rest upon the lower flanges *b* of adjacent rods B. In this position a suitable number of retaining pieces D keep the rods B in place.

Fig. 5 represents a modified form of retaining piece. It is shown as consisting of a flat strip of metal suitably notched at *e*, to engage with rods B.

Having described my invention, what I consider as new, and desire to secure by Letters Patent, is—

1. A retaining piece for holding a number of rods in place, consisting of a strip bent intermediate of its ends to form a series of yokes having recesses or openings extending transversely to the length of the strip substantially as specified.

2. The combination with T shaped rods of a metallic retaining strip having a number of recesses or openings intermediate of its ends for engaging with said rods substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN W. RAPP.

Witnesses:

PIERSON L. WELLS,
CAROLINE E. DAVIDSON.