No. 729,535. PATENTED JUNE 2, 1903.

P. BRANDNER.

BUILDING BLOCK.

APPLICATION FILED SEPT. 5, 1902.

NO MODEL.

FIG. 2.

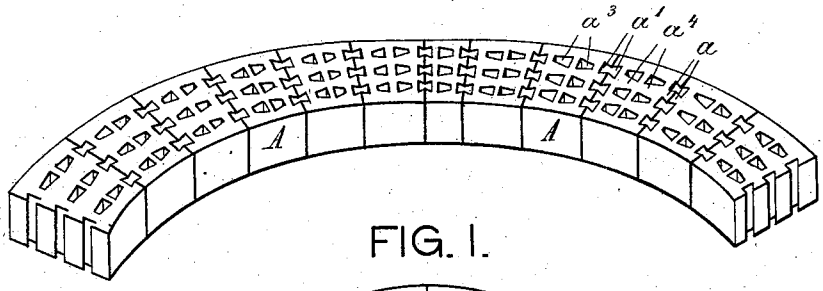


FIG. 1.

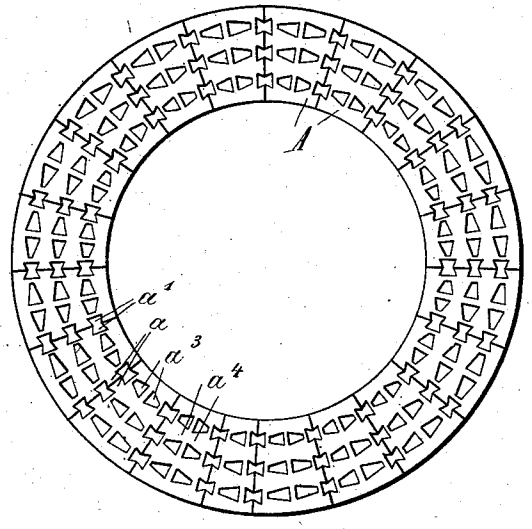


FIG. 3.

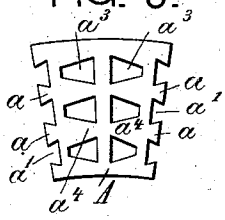


FIG. 4.

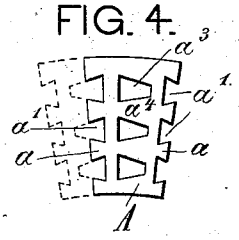


FIG. 5.

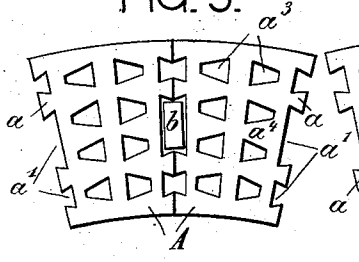
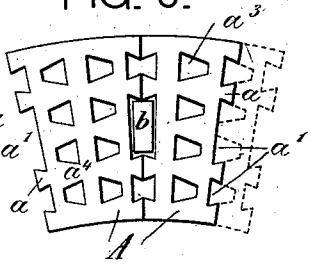


FIG. 6.



Witnesses:

Arthur Zimmermann

Edward Bay

Inventor:

Paul Brandner

by his attorneys

Roeder & Briesen

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 729,535. Patented June 2, 1903.

UNITED STATES PATENT OFFICE.

PAUL BRANDNER, OF BROOKLYN, NEW YORK.

BUILDING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 729,535, dated June 2, 1903.

Application filed September 5, 1902. Serial No. 122,156. (No model.)

To all whom it may concern:

Be it known that I, PAUL BRANDNER, a citizen of the United States, and a resident of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Building-Blocks, of which the following is a specification.

In constructing chimneys and other round or curved structures it frequently happens that the last or key block of a course must be chipped off more or less in order to fit the gap between the first and last block. In chimneys especially that receive a certain batter the width of this gap must necessarily change, so that even if the blocks are made to accurately fit any one course they cannot possibly fit accurately all the succeeding courses; but by cutting away the end of the blocks, as heretofore constructed, any locking-flange formed on such end was also necessarily removed, and consequently the lock-joint of the entire course was destroyed, so that the strength of the structure was greatly impaired. By my invention this objection is obviated, the block being so constructed that by cutting off its lock-joint end there is exposed a new lock-joint end corresponding in configuration to the original joint.

In the accompanying drawings, Figure 1 is a plan of a circular course of building-blocks embodying my invention. Fig. 2 is a perspective view of a portion of a course. Fig. 3 is a top view of one of the building-blocks; Fig. 4, a similar view showing a portion thereof removed. Figs. 5 and 6 are corresponding views of a modification of the block.

The letters A A represent fireproof building-blocks adapted to form curved structures and having arched front and rear sides and tapering ends. These tapering ends are provided with suitable lock-joints adapted to interlock with corresponding joints of the adjoining blocks. Thus in Figs. 3 and 4 each end has formed upon it dovetail tongues a and intervening undercut grooves a', the tongues on both ends of the block being arranged in alinement. When two of these blocks are placed end to end, the adjoining tongues will abut, while the adjoining grooves will together form a common opening, Figs. 1 and 2, adapted for the reception of a brick or mortar key, by means of which the blocks are locked together.

Now my invention consists in forming within the body of the block perforations and intervening partitions so placed and shaped that when the end of a block is cut off the joint on the raw end exposed will constitute a substantial duplicate of the joint destroyed, or that, in other words, the locking device is latent within the body of the block. To effect this desirable result, the perforations a^3 within the body of the block are arranged in alinement with the grooves a', while the intervening partitions a^4 are arranged in alinement with the tongues a. Thus if an arch is struck concentric to the front or rear of the block to pass through the centers of tongues a it will likewise pass through the centers of partitions a^4, while a similar arch struck through centers of grooves a' will pass through the centers of perforations a^3. Each partition and perforation corresponds, further, in shape and proportions to the shape and proportions of the tongue and groove, the edge of the partition being inclined into parallelism with that of the tongue, so that consequently the eye of the perforation is inclined into parallelism with the groove.

The result of the above construction is that if by a radial cut one end of the block is removed (dotted lines, Fig. 4) there will be at once exposed a new edge, which corresponds substantially in configuration to the configuration of the edge destroyed. In this way the block retains its lock-joint edge and may be coupled to the adjoining block as though it were not mutilated. Consequently the blocks of each course may be securely interlocked, while the point of weakness heretofore frequently found at the terminal joint is entirely eliminated.

It is obvious that the form of the lock-joint and of the body perforations may be readily altered without departing from the spirit of the invention. Thus in Figs. 5 and 6 the two central grooves a' are consolidated by chipping off the intervening section of partition a^4 and adapting the enlarged groove thus formed for the reception of a key b.

What I claim is—

1. A building-block provided with dovetail

tongues and undercut grooves, and with correspondingly shaped and proportioned body partitions and perforations, arranged in alinement with the tongues and grooves respectively, substantially as specified.

2. A building-block provided with dovetail tongues and undercut grooves, tapering body partitions in alinement with the tongues, and tapering body perforations in alinement with the grooves, substantially as specified.

Signed by me at New York city, New York, this 4th day of September, 1902.

PAUL BRANDNER.

Witnesses:
F. v. BRIESEN,
WILLIAM SCHULZ.