No. 879,595. PATENTED FEB. 18, 1908.

N. SMITH.

BUILDING CONSTRUCTION.

APPLICATION FILED MAY 26, 1906.

2 SHEETS—SHEET 1.

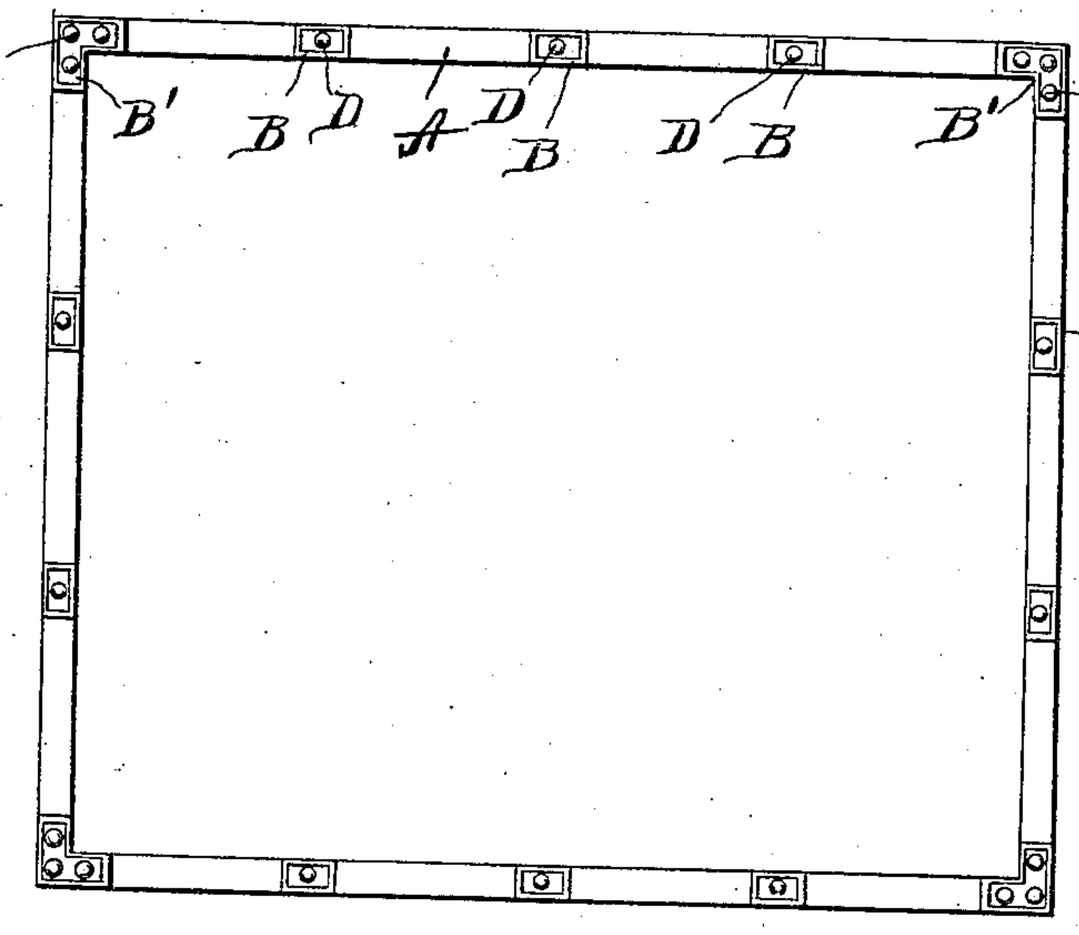
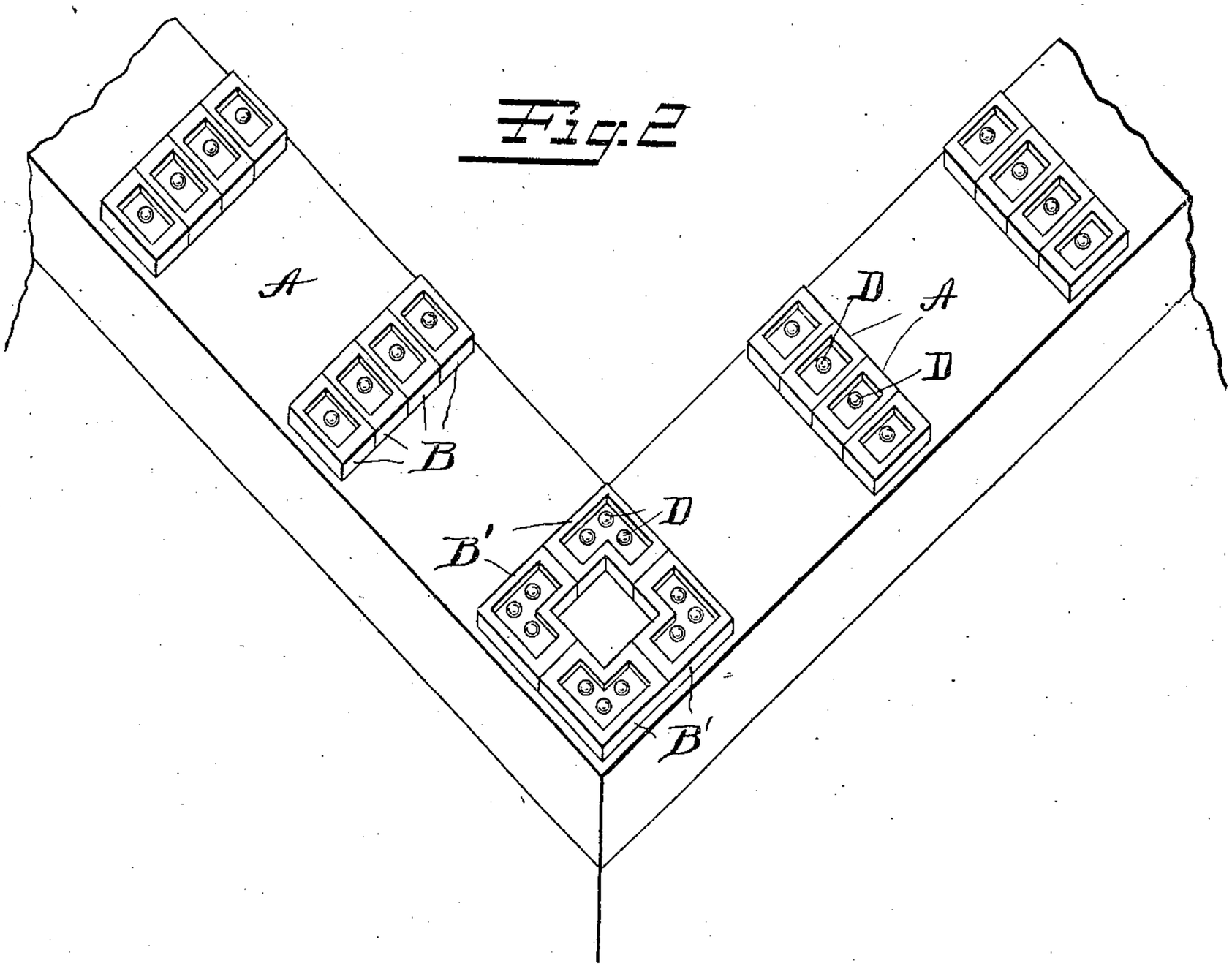


Fig. 1.

Fig. 2



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

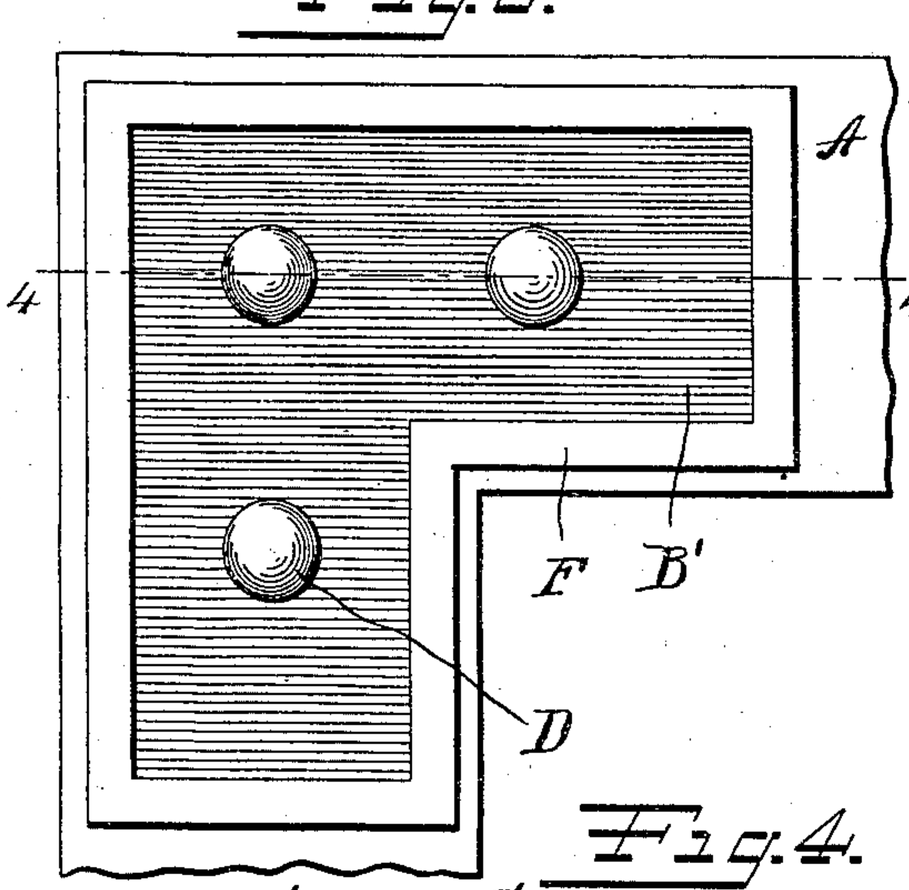


Fig. 5.

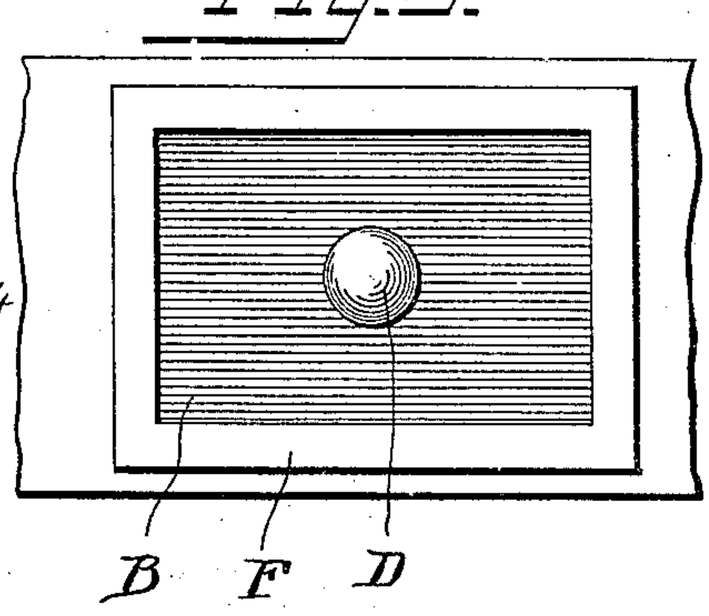


Fig. 4.

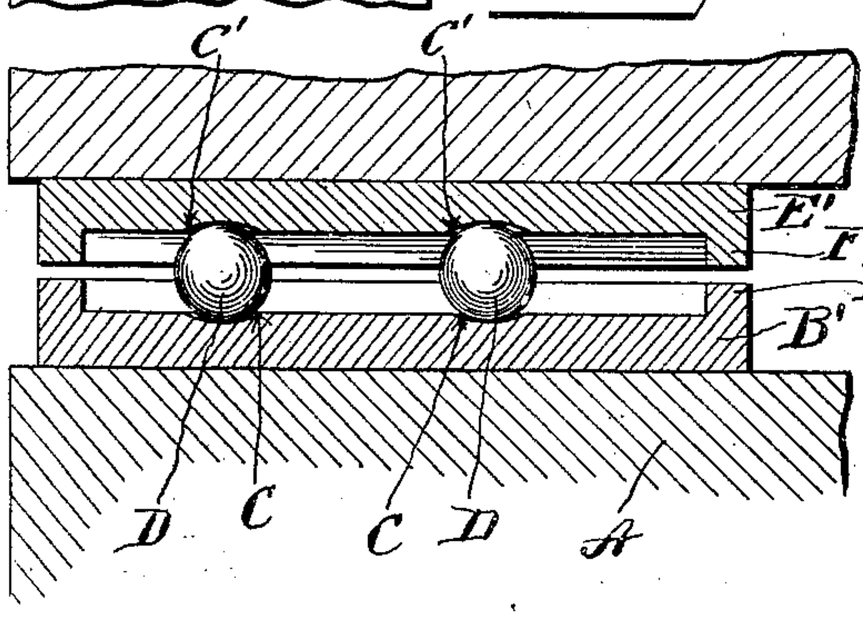


Fig. 6.

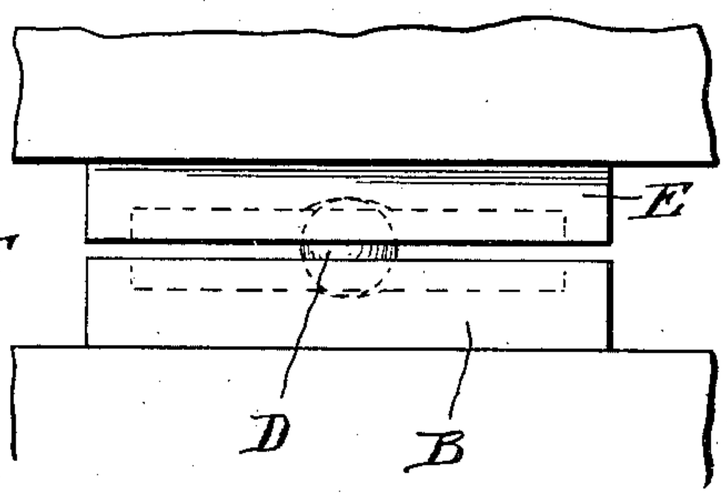
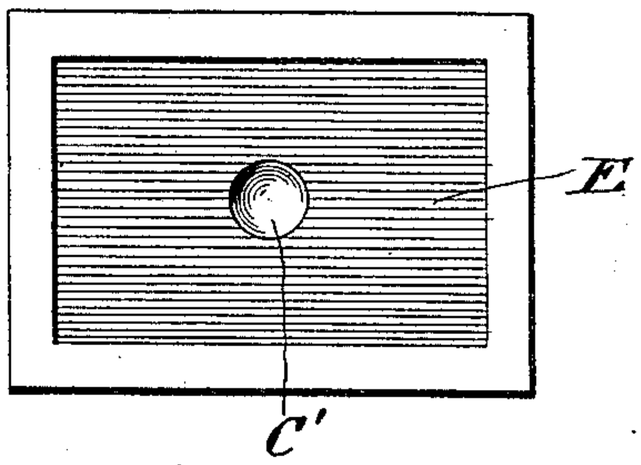


Fig. 7.



Witnesses

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NEWTON SMITH, OF NEW BRITAIN, CONNECTICUT.

BUILDING CONSTRUCTION.

No. 879,595. Specification of Letters Patent. Patented Feb. 18, 1908.

Application filed May 26, 1906. Serial No. 318,813.

To all whom it may concern:

Be it known that I, NEWTON SMITH, a citizen of the United States, residing at New Britain, State of Connecticut, (post-office address the same,) have invented certain new and useful Improvements in Building Construction, of which the following is a full, clear, and exact description.

My invention relates to improvements in building construction, the object being to provide means to prevent the shaking down of buildings by reason of earthquakes and like disturbances.

Figure 1 is a plan view of a building foundation constructed to embody my invention. Fig. 2 is a perspective view relatively enlarged of one corner of a foundation illustrating a modification. Fig. 3 is a relatively enlarged detail plan view. Fig. 4 is a section on the line 4—4. Fig. 5 is another detail view in plan. Fig. 6 is a side elevation thereof. Fig. 7 is a plan view of a detached cap plate.

A—A represents foundation of any suitable construction, such as stone or cement. This foundation of course would be adapted to the particular building which it is intended to support as to outline, weight, etc. Placed upon the foundation at suitable intervals, and firmly secured in place, are saddle plates B—B′, the plates B′ being adapted to the corners and the others to the side walls. These saddle plates are recessed so as to provide upturned border flanges F at the edges. At one or more points within the field of this flanged edge suitable supplemental recesses C C may be formed, concaved or dished so as to receive balls D D. Resting upon these balls are cap plates E E′ adapted to the saddle plates B B′ respectively. These cap plates are also provided with supplemental recesses C′ C′ to receive the balls normally standing in the supplemental recesses C C in the saddle plates. The superstructure is built upon the cap plates E E′. A sufficient number of balls may be provided between each pair of cap and saddle plates to sustain the weight and distribute the strains properly.

From the foregoing it will be seen that, should any earthquake or similar disturbance occur, the foundation of the building may be vibrated laterally to a very considerable extent and sufficient to relieve the strain upon the superstructure. The area of the main recessed portion of the several plates is sufficient to permit the balls to leave their normal bearings and have a wide range of movement. The flanges around each set of plates face toward each other and thus prevent the ball from leaving the recessed portion within the field of the border.

In Fig. 2 I have shown a slight modification in which instead of having merely one series of plates extending around the foundation, several of said sets of plates may be provided side by side. This is merely to provide for foundations of unusual width such as are required to sustain an extra heavy superstructure.

What I claim and desire to secure by Letters Patent is:

1. In a building construction, a foundation, recessed ball supporting plates carried thereby, balls thereon, and cap plates resting upon said balls to receive the superstructure, the recessed portion of both of said plates having opposite supplementally depressed ball centering recesses spaced apart from the borders of said plates.

2. In combination, in a device of the class described, lower and upper bearing plates, having concavities, one or both of said plates having a small central cavity or hollow, and a ball fitting closely in said cavity, preventing movement of the ball except by special force.

3. In combination, in a device of the class described, lower and upper bearing plates, one or both of said plates having a shallow cavity or hollow and a ball fitting closely in said cavity, whereby movement of the ball is prevented except by special or abnormal force.

NEWTON SMITH.

Witnesses:
GEORGE W. PENFIELD,
NELLIE L. MCNARY.