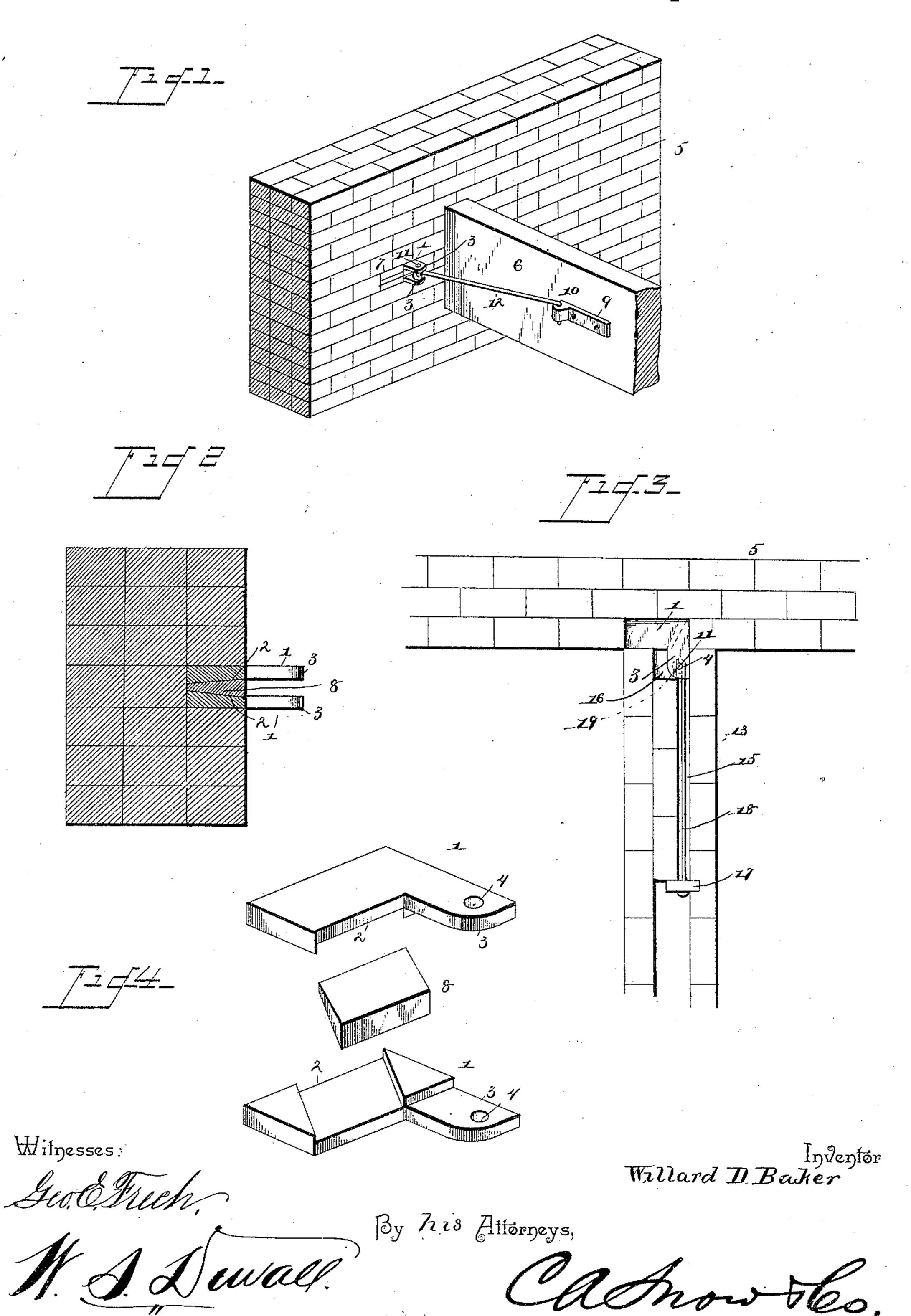
(No Model.)

## W. D. BAKER. ANCHOR FOR BUILDINGS.

No. 436,767.

Patented Sept. 23, 1890.



## United States Patent Office.

WILLARD D. BAKER, OF ROGERS, ARKANSAS.

## ANCHOR FOR BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 436,767, dated September 23, 1890.

Application filed June 28, 1890. Serial No. 357,126. (No model.)

To all whom it may concern:

Be it known that I, WILLARD D. BAKER, a citizen of the United States, residing at Rogers, in the county of Benton and State of Arkansas, have invented a new and useful Anchor for Buildings, of which the following is a specification.

This invention has relation to improvements in anchors for buildings and various io kinds of masonry adapted for connecting to the same of various kinds of beams, joists, &c.

A further object of the invention is to provide an anchor adapted for insertion in the most rigid manner into old walls at the side of which new buildings are being erected, and for connecting to the same joists of said building, whereby the new walls may be permitted to settle, subsequent to their erection, without injury or strain either to themselves or to the old wall.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed

out in the claims.

Referring to the drawings, Figure 1 is a perspective of an old wall in which has been set a joist and an anchor. Fig. 2 is a transverse vertical section through the anchor and wall. Fig. 3 is a horizontal section of an old wall having an anchor constructed in accordance with my invention and connected thereby to a new partition-wall. Fig. 4 is a perspective in detail of the two anchor-sections and the wedge.

Like numerals indicate like parts in all the

figures of the drawings.

The improved anchor is formed of opposite halves or sections 1 of exactly similar construction, the two sections being designed to be mounted one upon the other, and the inner faces of the two sections are correspondingly recessed in diagonal directions, as at 2, for the purpose of receiving a locking-key, hereinafter described. The upper and lower outer corners of the sections are provided with outwardly-projecting perforated anchoring ears or lugs 3, the perforation 4 of the upper lug aligning with the corresponding perforation of the lower lug.

It is well known among builders and others | row recess 15, and in the same is formed a conversant with the construction of masonry | perforation through which is inserted a con-

that wedges driven between bricks or stones will burst the same long previous to the time that the actual crushing-power of the bricks or stone has been reached, and that, therefore, such means for anchoring beams, &c., are impracticable. By my invention, however, I overcome this difficulty, and yet secure the full advantage of the wedge.

5 represents an old wall in which rests one 6c end of a joist 6, the opposite end of the joist presumably resting in a new wall of a structure being erected at one side of said old wall. At one side of the joist a brick and two layers of mortar are removed, forming a recess 7.65 In the recess 7 is located the anchor, heretofore described, which may be formed of cast metal or in any desired manner. Between the two anchor-sections is driven a wedgeshaped key 8, of hard wood, and which is, as 70 before stated, slightly tapered or wedgeshaped, and its opposite longitudinal sides are parallel and formed upon diagonal lines, as shown, so that said key conforms in shape to the intermediate recess or socket formed 75 by the combined anchor-sections. To one side of the joist there is securely bolted a strap 9, which strap terminates at its free end in an eye 10. A bolt 11 is passed through the vertical opposite eyes of the lugs of the 80 anchor-sections, and to said bolt is connected one end of a connecting-rod 12, the opposite end of said rod loosely connecting with the eye 10 of the strap. In this manner it is apparent that joists, girders, &c., may be con-85 nected to walls of masonry, whether formed of brick or stone, and a settling of the opposite end of the same will not strain or affect the old wall to which the joists are anchored.

In Fig. 3 I have illustrated how a new par- 90 tition-wall may be anchored to an old wall. In the present instance the anchor is set into the old wall in the same manner as previously described. 13 represents the partition-wall, the central course of brick for a short dis- 95 tance adjacent to the old wall being cut away to form a narrow recess 15, and said central course terminates slightly in rear of the end of the partition-wall, forming a recess 16. A plate 17 is located at the rear end of the narrow recess 15, and in the same is formed a perforation through which is inserted a con-

necting-rod 18, the rear end of which is headed to prevent the rod being drawn through the hole in the plate. The inner end of the rod is provided with a hook 19, which engages the bolt of the anchor, the lugs of said anchor taking into the recess 16, as clearly shown.

By the above construction it will be apparent that I have provided a very simple, cheap, and efficient anchorage, one capable of use for supporting joists, beams, stairways, and in all styles of masonry, which anchorage is capable of being keyed into position so as to receive the full benefit of the wedge-shaped key without imparting the injurious effect of the force of the same upon the masonry, as heretofore done.

Having described my invention, what I claim is—

1. The combination, with a wall having a recess, and a joist or its equivalent projecting from the wall, of an anchor formed of opposite sections or plates terminating at their front ends in perforated lugs, a connecting-bolt mounted in the perforations and loosely connected with the said joist, and a wedge-shaped key driven between said plates,

substantially as specified.

2. The combination, with a wall having a recess, a joist, beam, or its equivalent projecting from the wall, of an anchor formed of opposite halves or sections terminating at

their front ends in perforated lugs and hav-1

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ing their inner faces diagonally and correspondingly recessed, a wedge-shaped and diagonally-disposed key driven in said recess 35 and between the sections, a bolt mounted in the perforated lugs, a strap bolted to the joist, and a connecting-bar terminating in hooks and engaging an eye at the free end of the strap and the bolt of the anchor, substantially 40 as specified.

3. The combination, with a wall having a recess, of an anchor formed of opposite plates or sections having their inner faces recessed, a wedge-shaped key inserted in said recess 45 between the plates, a wall-joist or its described equivalent abutting against the first-mentioned wall, and devices for connecting said wall-joist or its described equivalent with the anchor, substantially as specified.

4. The herein-described anchor, comprising the opposite plates or sections fitted in the wall, the wedge-shaped key inserted between the plates, and the connecting-rod attached to the plates and to the side wall, substantially 55 as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

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WILLARD D. BAKER.

Witnesses:

S. M. Morris, W. P. Price.