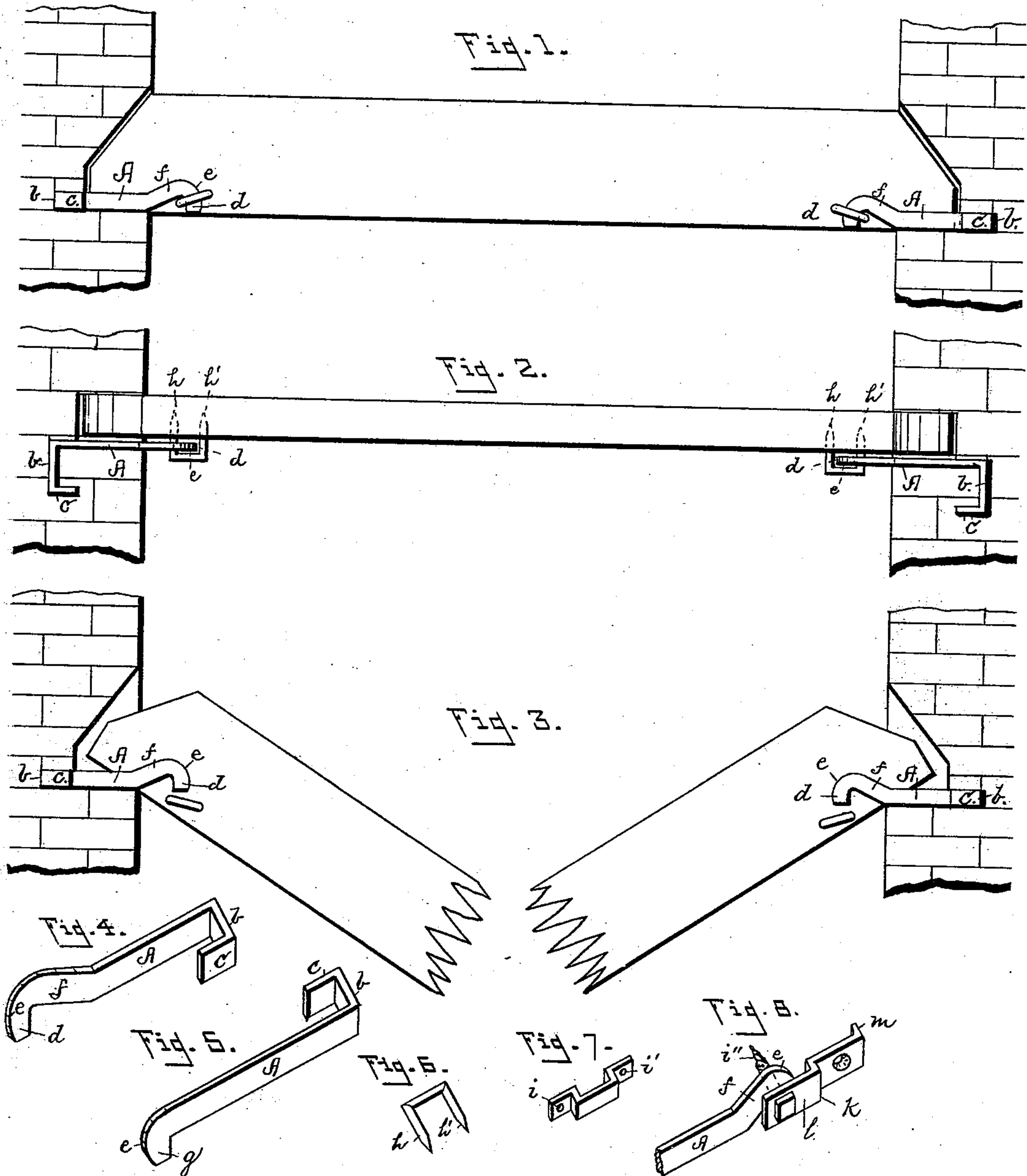


(No Model.)

W. A. JORDAN.  
MEANS FOR COUPLING AND AUTOMATICALLY RELEASING BUILDING  
JOISTS.

No. 550,075.

Patented Nov. 19, 1895.



WITNESSES  
H. J. Wetmore  
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# UNITED STATES PATENT OFFICE.

WILLIAM A. JORDAN, OF NEW ORLEANS, LOUISIANA.

MEANS FOR COUPLING AND AUTOMATICALLY RELEASING BUILDING-JOISTS.

SPECIFICATION forming part of Letters Patent No. 550,075, dated November 19, 1895.

Application filed March 7, 1894. Serial No. 502,771. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. JORDAN, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Means for Coupling and Automatically Releasing Building-Joists, of which the following is a specification.

This invention relates to improvements in the construction of buildings; and it consists in providing means for securing the joists of buildings to the walls thereof in such manner as to insure an automatic release of same whenever, by reason of fire, overweight, or other cause, they may be injured to such an extent as to be no longer self-sustaining.

The object of the invention is to preserve the walls of buildings and prevent their being broken or thrown down by the falling joists, as is nearly always the case in disasters such as above referred to.

My invention consists mainly in a wall-anchor provided at its rear or wall end with a right-angle projection and a return right-angle projection, and at its front end with a hook adapted to engage a projection at the side of a joist in such manner as to securely hold said joist until same may be severed by fire or other cause, and in such case to permit the dismembered pieces to be automatically released and thus fall clear of the walls and without injury thereto.

My invention will be readily understood by referring to the accompanying drawings, whereon—

Figure 1 is an elevation of two building-walls with joists connecting same, the said joists being secured in position by means of my improved device. Fig. 2 is a top view or plan of Fig. 1. Fig. 3 is an elevation of the walls with my locking device and a broken joist, the two sections of which are represented as in the act of falling. Fig. 4 is a perspective view of my improved wall-anchor, and Fig. 5 a modification of Fig. 4. Figs. 6, 7, and 8 are modifications of a side projection to joists for engaging the hooked end of the wall-anchor.

My improved wall-anchor, designated by the letter A, consists of a bar or plate of metal, the rear portion of which is provided

with two right-angle projections, as shown at *b c*. The angle *c* may, however, be extended in an opposite direction to that shown in the drawings, or it may be omitted altogether, without departing from the spirit of my invention; and to permit of the anchors being used in pairs, or at either side of a joist, the first angle *b* may be made to project either to the right or left, as is shown in Figs. 3 and 4.

The front portion of the wall-anchor A is provided with a downward turn, forming a hook *d*, the inner edge of which is preferably made at right angles to the base of the anchor, while its outer edge is curved, as at *e*.

The hooked portion of the anchor may be raised from the base-line thereof, as shown at *f* in Fig. 4, or the hook proper be made to project below the base-line, as at *g* in Fig. 5, either form being adapted to engage a projection at the side of the joist in such manner as to be automatically released therefrom whenever by any reason the said joist may be forced to succumb to the weight thereon, or be injured to such an extent as to be no longer self-sustaining.

The side projections of the joists should be of such form as to be adapted to be engaged by the hook portion of the wall-anchor, and to be automatically released therefrom when carried downward by a severed joist. The forms of projections best adapted for this purpose are shown in detail in Figs. 6, 7, and 8, that shown in Fig. 6 being in form of a wrought-iron staple with pointed ends *h h'* to permit of its being driven into the side of a joist. Fig. 7 represents a staple or hook receiver made of plate or bar iron, with holes *i i'* near the ends thereof for the reception of the wood-screws or nails, whereby it is designed to be secured to the side of the joist. Fig. 8 shows an ordinary wood-screw for connecting the joist and anchor *i''* with a bracket *k*, for steadying the outer end of the wood-screw.

In the application of my invention, after the joists have been placed on the walls at requisite distance apart, I arrange my anchors at necessary intervals, with the straight side of the anchor next the joist to be secured, with hooks pointed downwardly and projecting a few inches over the inner side of the



walls, thus leaving the angled ends of the anchors to be secured within the walls as same are being carried upward. This accomplished, I next secure my side projection to the joists 5 in such manner that its shank, or one of its shanks, as the case may be, shall be engaged by the hooked portion of the wall-anchor, as shown at Figs. 1 and 2, and be freely separated therefrom by the falling joist, as shown 10 at Fig. 3.

If a wood-screw or single shank is employed, I brace the outer end thereof by means of a bracket *k*, one end of which is provided with an offset *l*, having an orifice therein for the 15 reception of the shank or wood-screw, while the opposite end is provided with a right-angled projection *m*, to fit a mortise made in the side of the joist, and with perforations for nails or screws whereby it is designed to be 20 secured to the side of the joist.

Having described my invention, what I

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

1. As a new article of manufacture, a wall-anchor for securing and automatically releas- 25 ing building-joists, consisting of a bar of flat-iron, having one end bent edgewise into hook form, and the other end provided with a right-angle projection, the said projection having a return right angle projection, substantially 30 as and for the purpose set forth.

2. In combination with a wall-anchor having a hook at one end thereof, a joint provided with a projecting shank, and a bracket 35 for bracing the outer end of the shank, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM A. JORDAN.

Witnesses:

CHAS. M. HERO,  
JNO. J. WARD.