

R. HINVEST.  
Cramps for Hollow Walls.

No. 162,383.

Patented April 20, 1875.

Fig. 1.

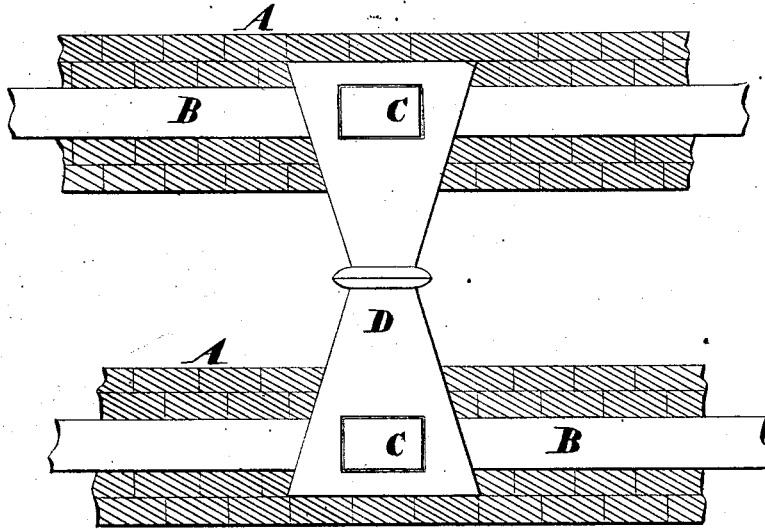


Fig. 2.

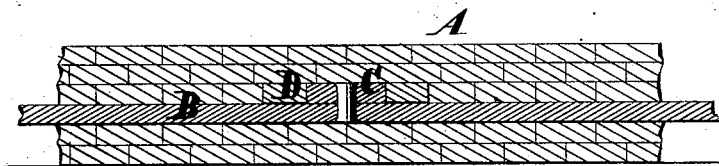
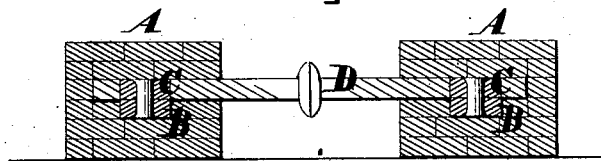


Fig. 3.



Witnesses.

*Henry Gentner &  
Chas. Hahler.*

Inventor

*Robert Hinvest  
per  
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# UNITED STATES PATENT OFFICE.

ROBERT HINVEST, OF NEW YORK, N. Y.

## IMPROVEMENT IN CRAMPS FOR HOLLOW WALLS.

Specification forming part of Letters Patent No. **162,383**, dated April 20, 1875; application filed October 7, 1874.

*To all whom it may concern:*

Be it known that I, ROBERT HINVEST, of the city, county, and State of New York, have invented a certain new and useful Improvement in Cramps for Hollow Walls, &c., of which the following is a specification:

This invention consists in combining, with a cramp which connects the two adjoining sections of a hollow wall or other object, longitudinal stay-bars, which are secured in the sections and provided with lugs, which are fitted in openings in the cramp in such a manner as to hold it in position, and hold the sections together; also, in dovetailing the ends of the cramp, whereby it is more firmly held in place.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a horizontal section, showing it applied to a hollow wall. Fig. 2 is a longitudinal vertical section. Fig. 3 is a transverse section.

Similar letters indicate corresponding parts.

The letter A designates the two adjoining parts or sections of a hollow wall, built in this example of brick-work, in which sections are embedded the longitudinal stay-bars B, as shown. The stay-bars B are provided with

lugs C, which are formed or secured thereon in any suitable manner, the lugs being fitted in holes or openings in the cramp, and serving to connect the stay-bars and cramps together. D designates the cramp, the ends of which are dovetailed, so that it is more rigidly held in position, and that the sections A are more firmly connected together. In applying my cramp to walls, I put the stay-bars B longitudinally in place, and in its proper position put the cramp D, so as to receive the lugs C in the openings, when I proceed to build the wall, and so on with successive cramps. My invention is adapted for connecting timber and other objects besides hollow walls, and I do not wish to restrict myself to walls.

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

A cramp for walls, constructed with openings or recesses to receive the lugs C of the stay-bars B, combined for operation and adaptation substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of October, 1874.

Witnesses: ROBERT HINVEST.

W. HAUFF,  
CHAS. WAHLERS.