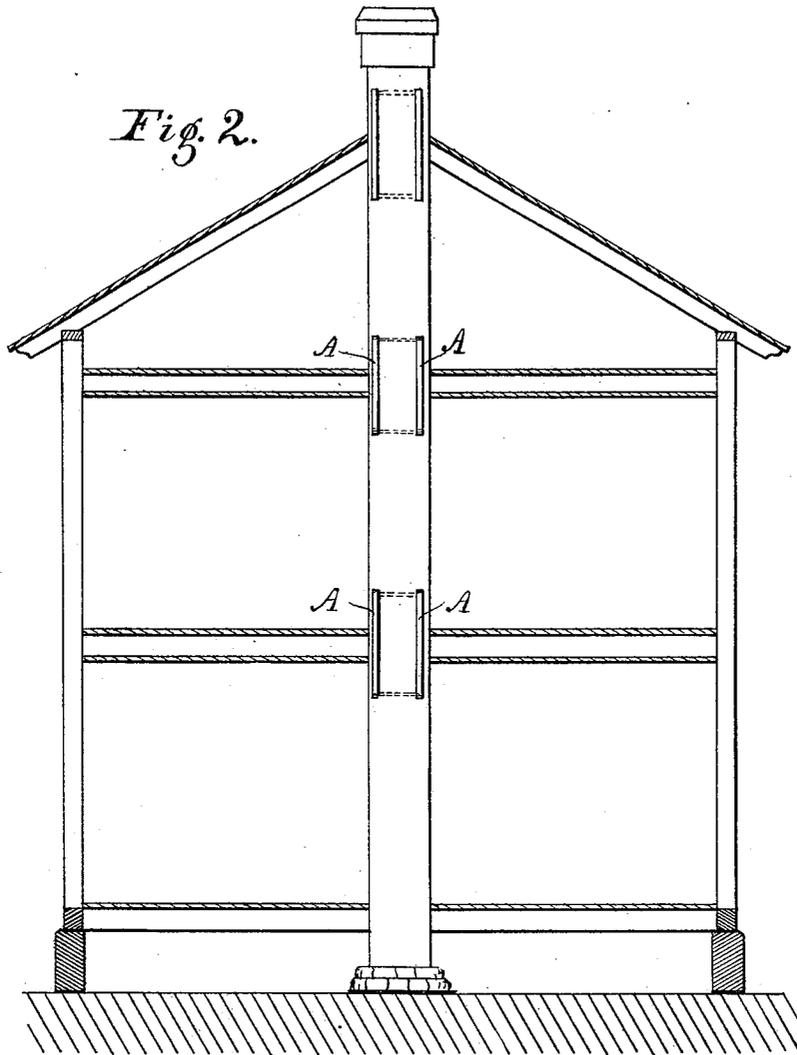


(No Model.)

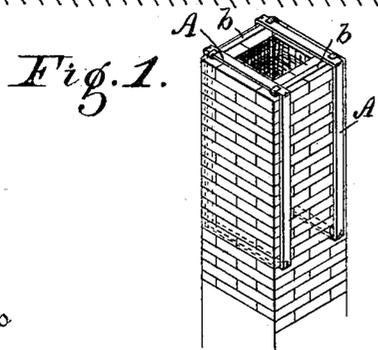
J. E. TWINAME.  
CHIMNEY.

No. 360,332.

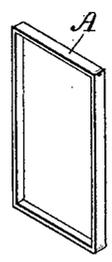
Patented Mar. 29, 1887.



*Fig. 2.*



*Fig. 1.*



*Fig. 3.*

Witnesses

*M. Coarsten*  
*E. N. Hood.*

Inventor:

*James E. Twiname.*

By *His Attorney*  
*H. P. Hood.*

# UNITED STATES PATENT OFFICE.

JAMES E. TWINAME, OF INDIANAPOLIS, INDIANA.

## CHIMNEY.

SPECIFICATION forming part of Letters Patent No. 360,332, dated March 29, 1887.

Application filed December 30, 1886. Serial No. 232,955. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES E. TWINAME, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Chimneys, of which the following is a specification.

My invention relates to an improvement in chimneys, particularly to that class of chimneys which are made of bricks and are used in wooden buildings. It often occurs that, on account of the settling of the foundation of a chimney or other disturbing causes, a brick chimney as ordinarily constructed will be cracked transversely at the points where it passes through the floors or roof, thus permitting the escape of fire and heated gases at points hidden from observation until the surrounding wood-work is set on fire.

The object of my improvement is to prevent the cracking of a chimney at these hidden points; and it consists in providing portions of the chimney with vertical metallic bands built into its walls, as hereinafter fully described.

The accompanying drawings illustrate my invention.

Figure 1 represents a perspective view of a portion of a brick chimney having my improvement. Fig. 2 represents a vertical section of a building of several stories, showing the relative relation to the floors of the protected portions of the chimney. Fig. 3 is a perspective view of one of the metallic bands.

A is a rectangular band formed of light band-iron bent to the required form and having the ends secured together. The longer sides of band A are of sufficient length to reach from a point about one foot below the

ceiling of a room to a like height above the floor of the room above, and the shorter sides are of a length on the inside equal to the width of the chimney. When the chimney has been built up to within about a foot of the ceiling, a pair of the bands A are set up, one end on opposite walls of the chimney, and are built in as the chimney progresses, being set in a little from the face of the chimney, so that the ends of the band are inclosed in the mortar in which the bricks are laid, while the sides lie closely along the outside, as shown in Fig. 1.

For convenience in holding the bands A in position, they may be connected by ties of light hoop-iron, as at *b b*, Fig. 1; but I do not consider this as essential. As each floor and the roof is reached similar bands are laid in the chimney. The sections of the chimney passing near timbers are thus bound together by the metallic bands, so that it is not possible for openings from the flue to be formed opposite the timbers, and all danger of fire from defective flues is thus avoided.

I claim as my invention—

That improvement in the art of building chimneys which consists in binding together several courses of the material of which the chimney is built by means of a rectangular metallic band having two of its sides embedded in the chimney-wall and the other two sides extending along the sides of the wall, whereby a series of courses are embraced between the embedded sides of the band, substantially as and for the purpose specified.

JAMES E. TWINAME.

Witnesses:

H. P. HOOD,  
M. CARSTEN.