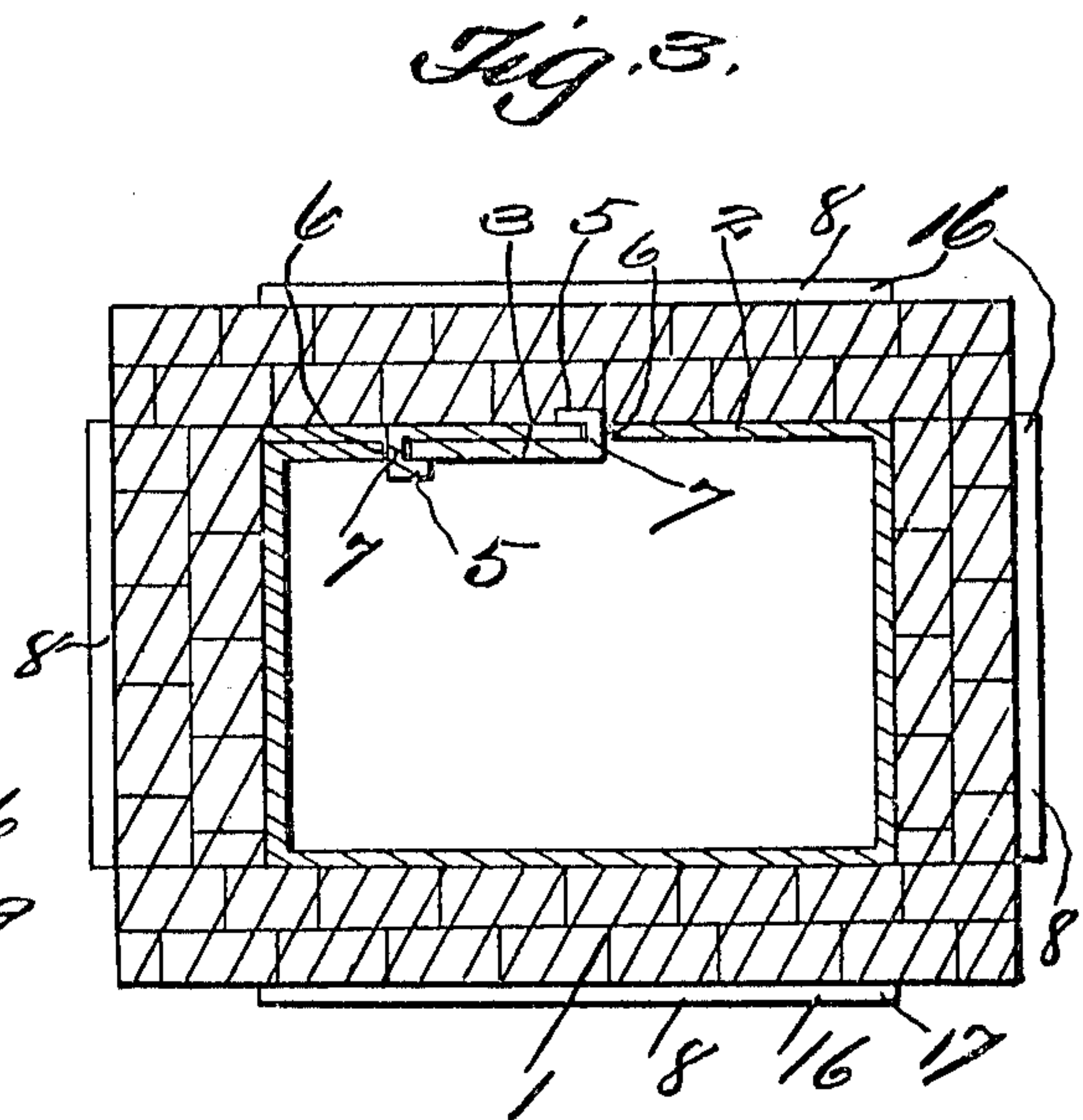
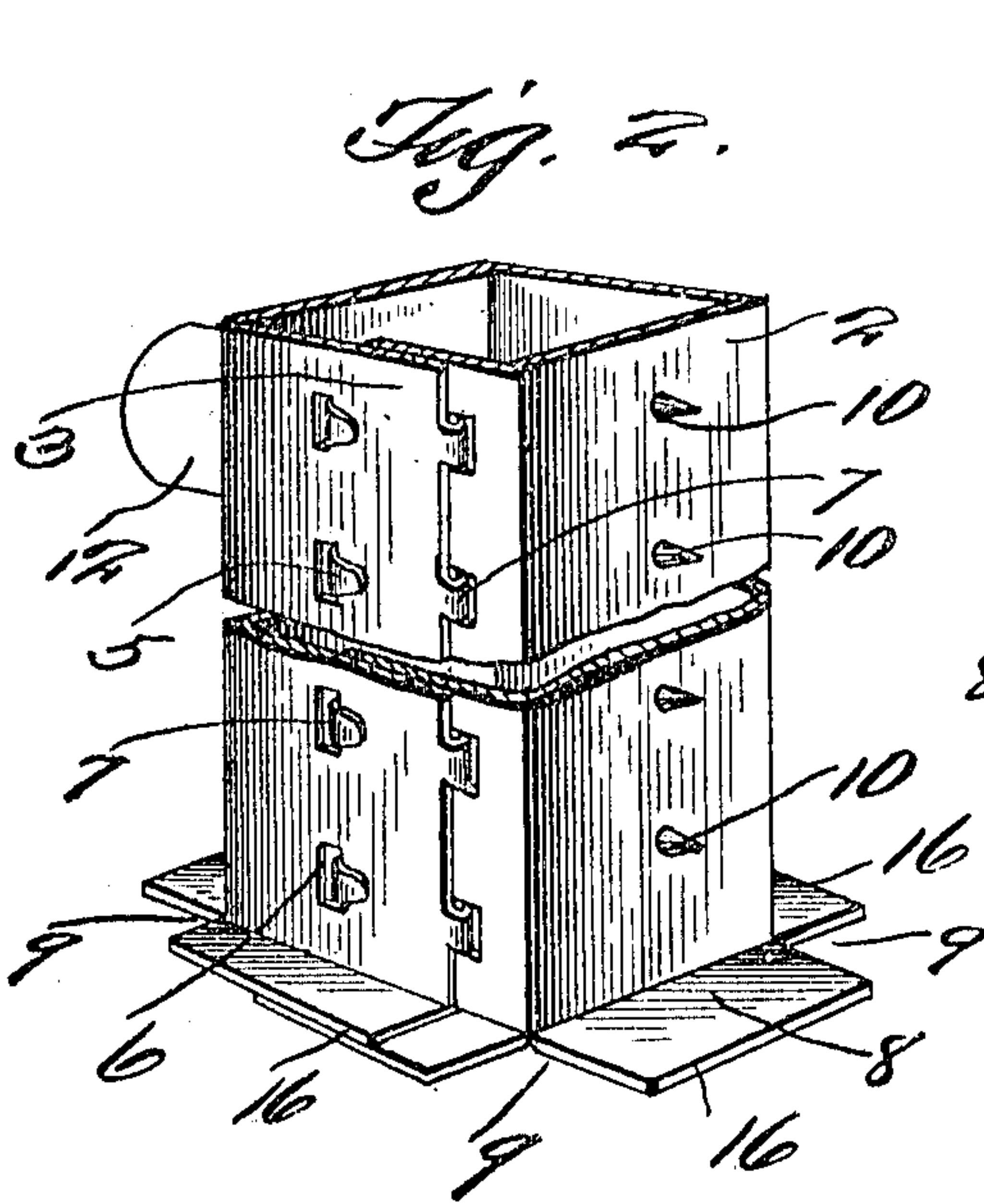
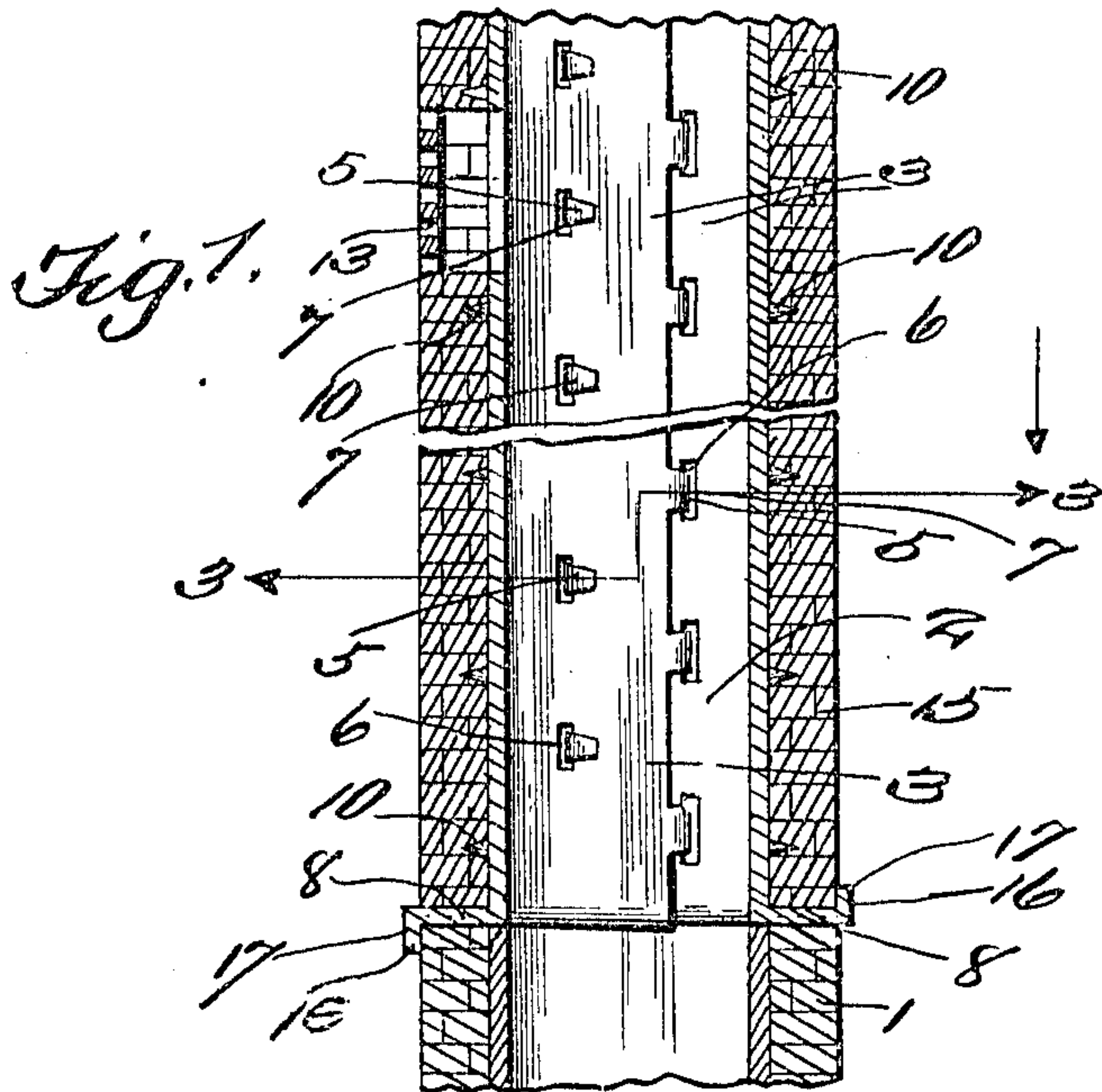


F. B. WILKINSON.  
CHIMNEY LINING.  
APPLICATION FILED JUNE 16, 1909.

954,234.

Patented Apr. 5, 1910.



Witnesses

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Attorneys.



# UNITED STATES PATENT OFFICE.

FRANK B. WILKINSON, OF HILLMAN, MICHIGAN.

CHIMNEY-LINING.

954,234.

Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed June 16, 1909. Serial No. 502,442.

*To all whom it may concern:*

Be it known that I, FRANK B. WILKINSON, a citizen of the United States, residing at Hillman, in the county of Montmorency and State of Michigan, have invented a new and useful Chimney-Lining; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention about to be set forth pertains to a new and useful chimney or flue lining.

The invention in its fundamental principle aims as its most important object to provide an improved device of this character by which chimneys or flues are prevented from becoming overheated, which very often causes fires.

The invention aims as a further object to provide a lining for chimneys or flues having elements by which the said lining is held securely to the inner surface of the chimney or flue, as will be readily manifest.

The invention directs as a further object to provide flanges upon the lower portion of the lining, which are embedded between the base of the flue or chimney and the flue proper.

A further object of the invention is to provide a lining composed of one piece of metal and provided with a lapped joint, which is disposed in the rear of the flue or chimney, as seen clearly in the drawings.

This invention comprises further objects and combinations of elements, which will be hereinafter more fully described, shown in the accompanying drawings, and the novel features thereof will be pointed out by the appended claims.

The features, elements and the arrangement thereof, which constitute the above entitled invention, may be changed and varied, that is to say, in an actual reduction to practice, with the understanding that the changes and variations accruing from said reduction to practice are limited to the scope of the appended claims.

To obtain a full and correct understanding of the details of construction, combinations of features, elements and the advantages, reference is to be had to the hereinafter set forth description and the accompanying drawings in connection therewith, wherein—

Figure 1 is a vertical section through a chimney or flue, showing the same provided with the improved lining, of any suitable metal. Fig. 2 is a perspective view of the lining removed, embodying the improved features thereof. Fig. 3 is a transverse section on line 3—3 of Fig. 1.

In regard to the drawings, wherein similar reference characters indicate corresponding parts in the several illustrations, by figures, 1 designates a chimney or flue constructed of any suitable material, that is to say, the outside portion may be constructed of brick or stone, and 2 designates a metallic lining composed of a single piece of metal, and which when formed to coincide with the contour of the chimney a lapped joint 3 is provided, that is to say, the ends of the single piece of metal are lapped and are designed to be held together by rivets or other suitable means 4, as seen in the drawings, the other suitable means, for instance, may be a tongue or lip 5 struck out of the metal which is designed to engage an aperture 6 of the opposite end of the metal; which tongue or lip being bent, as indicated at 7 in the drawings, so as to prevent displacement of the connecting ends of the lining.

The lining is provided with flanges 8, between which recesses 9 are formed, as seen clearly in Figs. 1 and 2 of the drawings. The outer circumference or surface of the lining is provided with a plurality of elements 10, which are designed to engage the inner circumference of the brick or stone flue, so as to prevent displacement of the said lining. The lining is provided with an integral cylindrical portion 12 to which the elbow (not shown) of a stove pipe may be connected, but, if desired, in place of the said cylindrical portion, a register 13 may be provided, as seen clearly in Fig. 1, while the cylindrical portion is shown clearly in Fig. 2. In utilizing a lining of this character, a suitable base of masonry, which may be the basement of a house, that is to say, a portion thereof, is constructed, and upon which the flanges of the lining are placed, after which plaster, cement or other material is placed upon the said flanges and between the recesses 9, that is to say, after a layer of plaster, cement or other material is placed upon said base. After the recesses 9 and the flanges 8 are provided with plaster, cement or other material, a construction of masonry 15 is built thereupon and around



the said metallic lining, thus allowing the elements 10 to be received by certain joints of the masonry, so as to securely hold the lining in place, as seen clearly in Fig. 1.

5 After the masonry is completed around the lining, the projecting portions 16 of said flanges are bent, as seen at 17, that is to say, in opposite directions, so as to insure the said lining and the masonry from displacement, as will be readily manifest.

10 From the foregoing, the essential features, elements and the operation of the device, together with the simplicity thereof, will be clearly apparent.

15 Having thus fully described the invention, what is claimed as new and useful, by the protection of Letters Patent, is:—

1. In a device as set forth, a chimney or flue composed of masonry, a lining therefor of a single piece of metal having its free ends connected to form a lapped joint in the rear of the chimney, said ends forming the lapped joint having a tongue or lip and a recessed connection for causing said ends to form a secure lapped joint, said lining being provided with flanges upon its lower portion designed to be embedded within the masonry and having their extreme ends bent in opposite directions, and means for securing the lining to the inner surface of the masonry.

2. In a device as set forth, a chimney or flue composed of masonry, a lining therefor of a single piece of metal having its free ends connected to form a lapped joint in the rear of the chimney, said ends forming the lapped joints having a tongue or lip

and a recessed connection for causing said ends to form a secure lapped joint, said lining being provided with flanges designed to be embedded within the masonry and having their extreme ends bent in opposite directions, said flanges having therebetween recesses in which the plaster of the masonry extends, and elements carried by the lining to be embedded in the masonry to securely hold the lining within the chimney.

3. In a device as set forth, a chimney or flue composed of masonry, a lining therefor of a single piece of metal having its free ends lapped upon one another, said single piece of metal having upon its extreme edges tongues or projections, and provided with apertures into which the said tongues or projections are extended and bent in opposite directions to securely hold the lapped portions of the metal together, said lining being provided with flanges upon its lower portion designed to be embedded within the masonry and having their extreme ends bent in opposite directions, said lining having between said flanges recesses into which the cement of the masonry extends, and conical projections embedded in the masonry for securing said lining to the inner surface of the masonry.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK B. WILKINSON.

Witnesses:

C. W. HARRIS,  
WILLIAM E. HAUSE.