F. A. WISWELL.

TILE CLAMP.

APPLICATION FILED SEPT. 7, 1916.

1,257,276.

Patented Feb. 19, 1918.

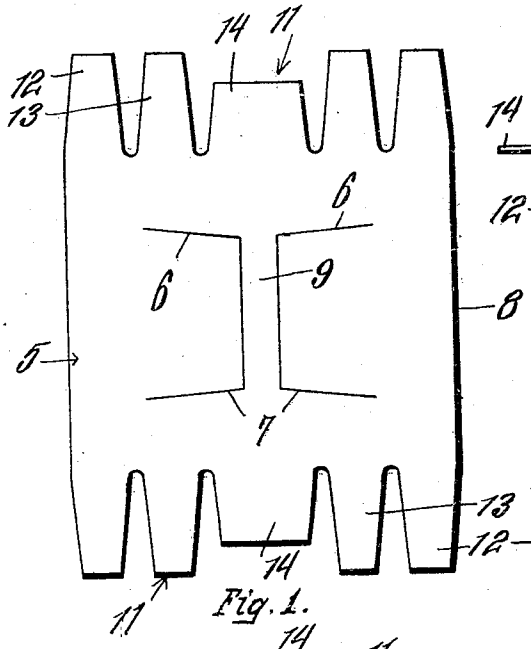


Fig. 1.

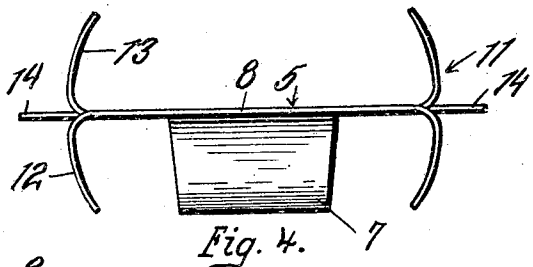


Fig. 4.

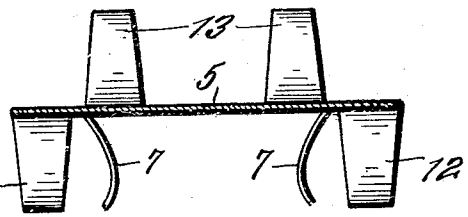


Fig. 3.

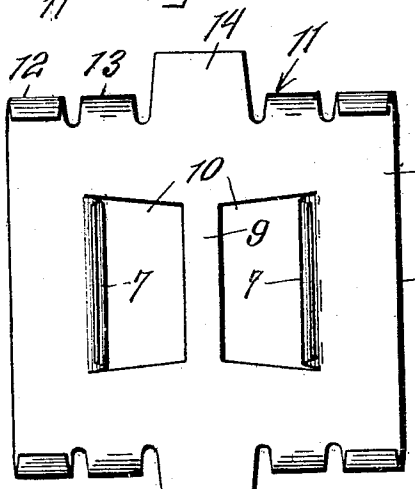


Fig. 2.

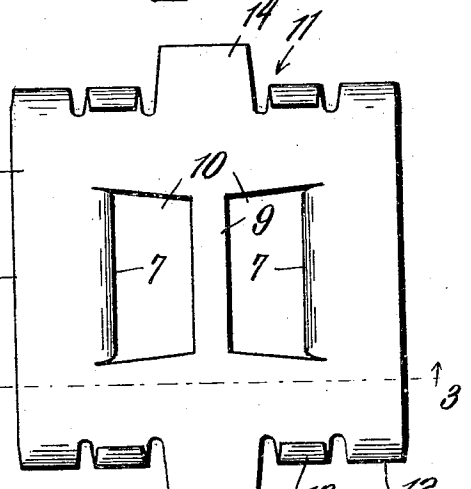


Fig. 5.

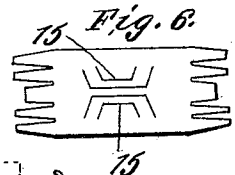


Fig. 6.



Fig. 7.



Fig. 8.

Witnesses:

Wynne Johnson

R. H. Webber

Inventor:

Frederick A. Wiswell.

By

C. L. Parker.

Attorney.

UNITED STATES PATENT OFFICE.

FREDERICK A. WISWELL, OF OAKLAND, CALIFORNIA, ASSIGNOR OF TWO-FIFTHS TO ELIZABETH E. PHELAN, OF OAKLAND, CALIFORNIA.

TILE-CLAMP.

1,257,276. Specification of Letters Patent. **Patented Feb. 19, 1918.**

Application filed September 7, 1916. Serial No. 118,893.

To all whom it may concern:

Be it known that I, FREDERICK A. WISWELL, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Tile-Clamps, of which the following is a specification.

My invention relates to improvements in clamps for hollow tiles, partitions, or wall blocks, for securely binding them together and allowing of their union by means of cementitious material.

An important object of the invention is to provide a clamp of the above mentioned character, which is simple in construction, inexpensive to manufacture, convenient in use and may be cut or stamped from a section of sheet metal in a single operation.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawing forming a part of this specification and in which like numerals are employed to designate like parts throughout the same.

Figure 1 is a plan view of a cut or stamped blank from which the clamp is made, before bending,

Fig. 2 is a bottom plan view of the clamp,

Fig. 3 is a transverse sectional view taken on line 3—3 of Fig. 5,

Fig. 4 is an end elevation of the clamp, and,

Fig. 5 is a plan view of the same.

Fig. 6 is a plan view of a blank embodying a different form of the invention, and

Fig. 7 is a side elevation of the clamp formed from such blank, and

Fig. 8 is a transverse sectional view taken on line 8—8 of Fig. 7.

In the drawings, wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numeral 5 designates a flat blank of sheet metal, which is cut or stamped along approximately U-shaped lines 6, providing tongues 7, which are bent downwardly and are preferably longitudinally curved, as more clearly shown in Fig. 3. These tongues are integral with the body portion 5 at points near and spaced from its sides 8. As more clearly shown in Fig. 2, the stamping of these tongues 7 provides a longitudinal bridge-strip 9, and large openings 10, upon opposite sides thereof. This construction is advantageous inasmuch as it enables the tongues 7 to be conveniently stamped in one operation and the bridge strip 9 serves to strengthen and reinforce the device. The openings 10 permit of the passage of cementitious material or mortar, for securing the blocks or tiles together.

The transverse ends 11 of the clamp are provided with pairs of tongues 12 and 13, upon opposite sides of flat supporting tongues 14, projecting outwardly beyond them, as shown. The tongues 12 and 13 are curved longitudinally to render them resilient and the tongues 12 extend downwardly while the tongues 13 project upwardly, as more clearly illustrated in Fig. 4.

In the use of the clamp, it is placed upon the contacting ends of a pair of hollow tiles or the like. The tongues 7 extend downwardly and engage the inner sides of the ends of the tiles, thus holding them against separation by a longitudinal movement. The tongues 13 extend downwardly within the tiles to contact with the inner surfaces of their sides while the tongues 12 extend upwardly to enter the hollow tiles arranged above it and to contact with the inner surfaces of their sides, thus holding the upper and lower sets of tiles against lateral movement with relation to each other. The tongues 14 serve to support the clamp, the same contacting with the top of the lower tiles.

As clearly shown in Fig. 6, I may stamp each of the tongues 7 upon an approximately U-shaped line 15, for providing end engaging tongues 15′ which extend upwardly in an opposite direction from the depending tongues 7. This construction renders the tongue 7 an open frame but will not materially weaken it. The upwardly extending tongues project into the upper tiles and contact with their ends, preventing displacement by longitudinal movement thereof.

It is to be understood that the forms of my invention herewith shown and described are to be taken as preferred examples of the same and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claim.

Having thus described my invention, what I claim is:

A substantially concealed clamp adapted

for use in connection with hollow tiles; comprising a substantially flat body portion adapted to span the adjacent ends of a pair of tiles and having substantially horizontal flat supporting tongues stamped from the ends thereof and adapted to be arranged between the upper and lower tiles; upwardly and downwardly extending tongues carried by the ends of the body portion to engage within the upper and lower portions; end engaging tongues stamped from the central portion of the body portion and extending longitudinally of the body portion in spaced relation with a bridge strip arranged between the openings formed by the end engaging tongues, said end engaging tongues having their sides adapted for engagement within the ends of the hollow tiles; and a second set of end engaging tongues stamped from the materials of the first named end engaging tongues, and adapted for engagement with the ends of the hollow tiles.

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

FREDERICK A. WISWELL.

Witnesses:
PEARL B. MILLER,
H. C. DAVIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."