No. 682,316. Patented Sept. 10, 1901.

W. L. CALDWELL.

STUD FOR BUILDING CONSTRUCTION.

(Application filed Sept. 15, 1900.)

(No Model.)

Fig. 1.

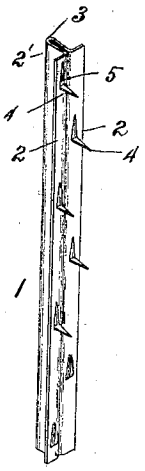


Fig. 2.

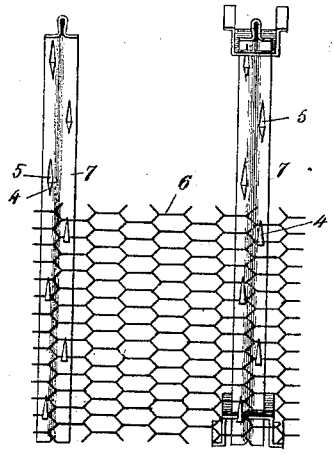


Fig. 3.

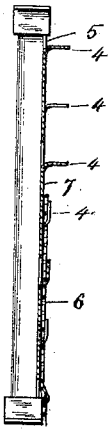


Fig. 4.

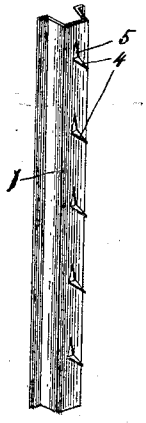


Fig. 5.

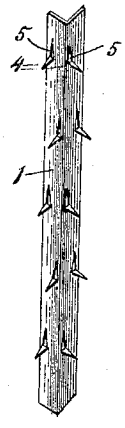
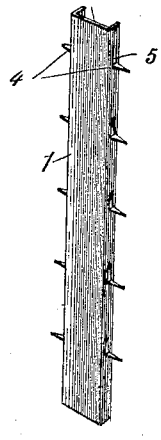


Fig. 6.



WITNESSES:

W. A. Scherer

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INVENTOR

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BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM L. CALDWELL, OF NEW YORK, N. Y., ASSIGNOR OF TWO-THIRDS TO JOHN W. RAPP AND HENRY LOY EASTON, OF SAME PLACE.

STUD FOR BUILDING CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 682,316, dated September 10, 1901.

Application filed September 15, 1900. Serial No. 30,120. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. CALDWELL, a citizen of the United States, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Studs for Building Construction, of which the following is a specification.

This invention relates to improvements in studs for building construction adapted for use with perforate sheets or open-work metal lathing, particularly the expanded metal or similar lathing now in use for fireproof construction.

The invention consists in a stud or strip of rolled metal or other suitable malleable material with projections formed thereon and therefrom by punching through the metal of the stud, leaving the punched portion attached along one edge or end and with metal on both sides thereof and bending it out to form a projection, tongue, or prong capable of passing through a perforation in the metal lathing and engaging with the lathing to support same and adapted to be bent back or over the lathing, so as to hook or clench same firmly in place.

In the accompanying drawings, Figure 1 is a perspective view of a stud provided with my invention. Fig. 2 shows the studs with a portion of metal lathing in place thereon, the view being taken in front, but looking down at an angle on the structure. Fig. 3 is a vertical section of the stud and lathing from front to back. Figs. 4 to 6 show the application of the invention to various forms of stud or strip.

Referring to Fig. 1, a stud of rolled malleable metal is represented at 1, with flat face portions 2, connected by a doubled or folded central portion 2′, this latter portion being preferably not bent into close contact, but kept somewhat open at the bend 3, so as not to crack the metal by too sharp bending. The flat face portion of metal stud 1 is punched or slit at a number of places, forming a plurality of prongs or tongues 4, which are allowed to adhere to the stock at one edge or end. These prongs are bent out either at the time of punching or afterward to form projections and leaving holes 5 in the stud with metal on both sides of the hole or of the prong, so that the stud is not materially weakened. The prongs may be punched up from any portion of the stud—that is, sufficiently removed from the edge and sufficiently thin—but they are preferably punched from a flat portion of the stud.

The studs having been set up in position, the metallic perforate lathing is attached thereto, as shown in Figs. 2 and 3, the said lathing (represented at 6) being placed against the studs 7 and the prongs 4 passing through the perforations in the lathing and engaging with the ribs thereof to support the same. The tongues or prongs 4 being malleable may then be upset or bent over or backward, so as to clench the lathing to the post.

Fig. 4 shows a furring-strip for side walls or ceilings, Fig. 5 an angle-stud, and Fig. 6 a box-stud, all provided with prongs 4 for engaging and supporting the metallic lathing. In the form of my invention shown in Fig. 4 the groove portion or longitudinal loop portion of the furring-strip is the part that is provided with projecting tongues or tangs 4 and the sides of the loop, which are separated, as shown, terminate in lateral flanges.

Studs may be shipped with the prongs unbent, so as to prevent injury; but by properly stacking the studs in shipment they may be safely shipped with the prongs bent out, and for convenience it is preferable to furnish them in this condition.

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

1. A building construction comprising perforate metallic lathing and a stud of malleable metal with flat prongs formed thereon and therefrom by making perforations in the flat portion of the metal strip so that the prongs are supported at one end and have metal on each side of them projecting through perforations in the lathing and bent over the latter so as to clench same.

2. A stud for partitions comprising a longitudinal loop portion, the edges of which are separate, lateral flanges at said edges and tangs formed from the metal comprised in the loop portion.

3. A stud for partitions comprising a longitudinal loop portion, the edges of which are separate one from the other, lateral flanges provided at said edges, and means in the said loop portion by which wire or other lath may be secured to said loop portion.

4. A stud for partitions comprising a longitudinal loop portion and means provided therein by which wire or other lath may be secured thereto.

WILLIAM L. CALDWELL.

Witnesses:
A. P. KNIGHT,
J. GREEN.

Correction in Letters Patent No. 682,316.

It is hereby certified that in Letters Patent No. 682,316, granted September 10, 1901, upon the application of William L. Caldwell, of New York, N. Y., for an improvement in "Studs for Building Construction," an error appears in the printed specification requiring correction as follows: Page 1, line 93, claim 1, before the word "projecting" insert a comma; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 25th day of January, A. D., 1916.

[SEAL.]

R. F. WHITEHEAD,

Acting Commissioner of Patents.

Cl. 189–9