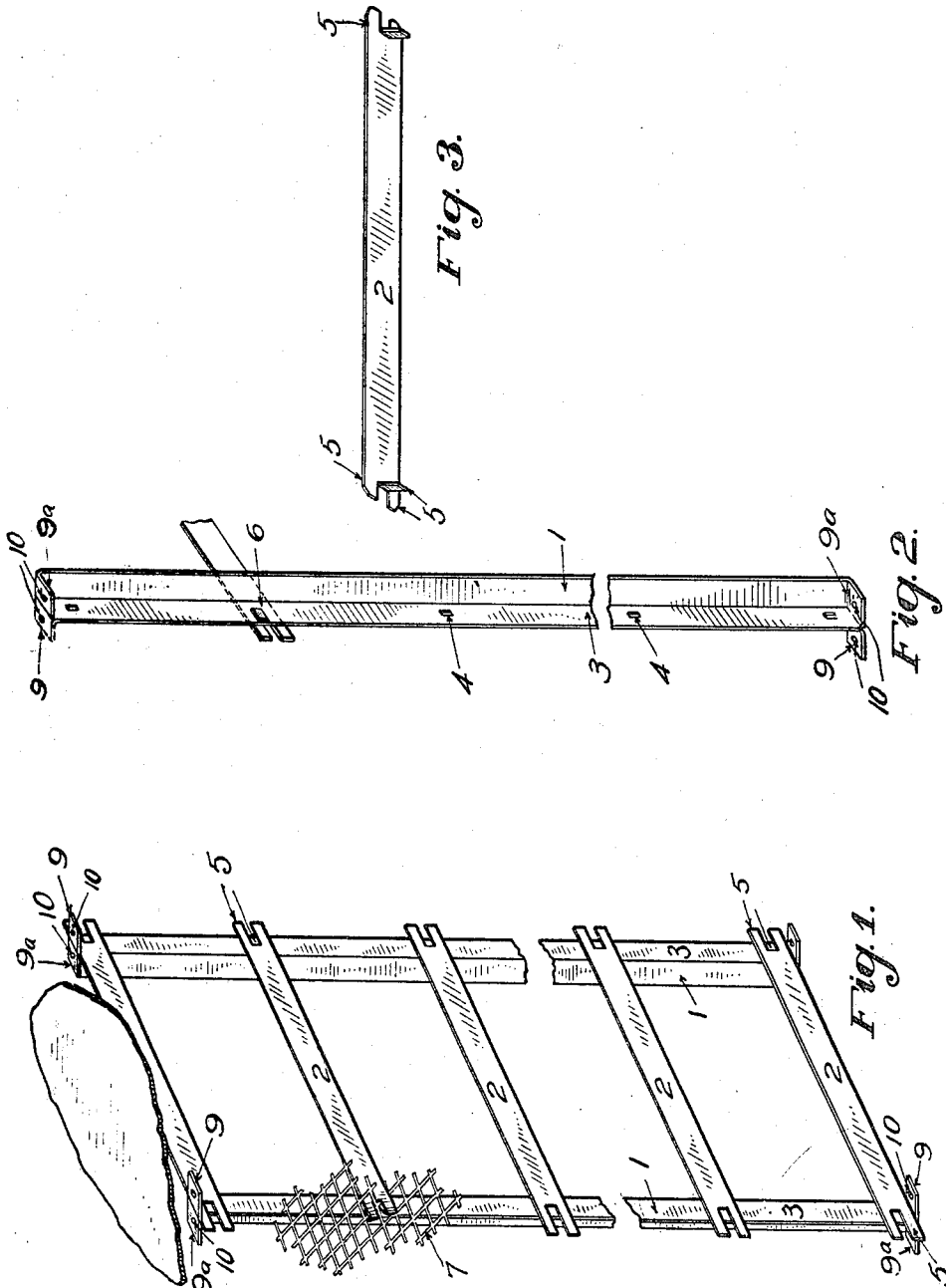


H. E. MARKS & E. C. ROBERTS.
STUD OR PARTITION CONSTRUCTION.
APPLICATION FILED JUNE 9, 1910.

1,011,218.

Patented Dec. 12, 1911.



WITNESSES
Stephen Wachs.
J. W. D. D. D.

INVENTORS
Herbert E. Marks
Edward C. Roberts
By Fred W. Winter
Attorney

UNITED STATES PATENT OFFICE.

HERBERT E. MARKS AND EDWARD C. ROBERTS, OF WHEELING, WEST VIRGINIA, AS
SIGNORS, BY MESNE ASSIGNMENTS, TO JAMES B. HAINES, JR., OF PITTSBURGH,
PENNSYLVANIA.

STUD OR PARTITION CONSTRUCTION.

1,011,218.

Specification of Letters Patent.

Patented Dec. 12, 1911.

Application filed June 9, 1910. Serial No. 566,057.

To all whom it may concern:

Be it known that we, HERBERT E. MARKS and EDWARD C. ROBERTS, both residents of Wheeling, in the county of Ohio and State of West Virginia, have invented a new and useful Improvement in Stud or Partition Construction, of which the following is a specification.

This invention relates to metallic studs for fire proof buildings and like structures.

The object of the invention is to provide a metallic stud which requires no rivets or other separate fastening means in the assembling and erection thereof, which is of lattice construction so that pipes and wires can be freely extended therethrough, which is of light weight and cheap to manufacture, which is provided with means for the attaching of the lathing thereto, and particularly one which permits the plaster to key behind the lathing at the points where the studs are located.

The invention comprises the construction and arrangement of parts hereinafter described and claimed.

In the accompanying drawing Figure 1 is a perspective view of a stud embodying the invention and showing the manner of attaching the lathing thereto; Fig. 2 is a perspective view of one of the vertical angle members of said stud; and Fig. 3 is a similar view of one of the cross connecting or lattice members.

The stud is composed of two vertical members 1, and a suitable number of cross connecting or lattice members 2. The vertical members are preferably of angle shape in cross section, as shown, although they may be of other flanged shape, and may be either small rolled angle bars or formed from strips of sheet or thin plate steel bent into angle form. The latter construction is preferred, since light gage metal can be used so as to save in stock and cost. These angle bars are so placed that the legs or flanges 3 which lie transversely of the partition extend outwardly or away from each other. The legs or flanges 3 are provided with vertical slots 4. The cross connecting or lattice members 2 preferably are formed from strips of sheet or thin plate metal, such as steel. The ends of these members are slit longitudinally to provide a plurality of tongues 5. Preferably three tongues are provided, but two will answer the purpose.

One of the tongues, preferably the middle one when three tongues are provided, is bent at right angles to the strip, and extends through a slot 4 in the vertical angle bar, being secured in place by bending the end on the reverse side of said flange or leg, as shown at 6. This provides a simple and easy manner of connecting the vertical angle bars and securing them so that they can neither spread nor move toward each other. This is accomplished without the use of rivets or fastening means which are separate from the main members of the stud. The remaining tongue or tongues of the lattice or cross connecting members are permitted to project straight outwardly, and they are of such length as to extend somewhat beyond the edges of the transversely disposed flanges or legs 3 of the vertical angle bars. They serve as a means for securing the lathing 7 to the stud, by merely causing said tongues to project through the meshes of the lathing and then bending or clenching them sidewise. A single outwardly projecting tongue will suffice, but a plurality of straight outwardly projecting tongues provide a better and more convenient securing means for the lathing, and also, one of them is certain to be in position to project through a mesh of the lathing, and if both are in such position it forms a more secure fastening for the lathing.

The stud can be secured at the floor and ceiling by any suitable means, the drawings showing one of the legs of the angle bent outwardly at a right angle as at 9, and the other leg bent inwardly at a right angle as at 9^a, and each provided with a hole 10 for receiving a spike when the stud is to be attached to wooden floor or ceiling members, or a rivet, bolt, or similar means when the stud is to be secured to metal floor or ceiling members.

By having the transverse legs or flanges of the vertical angle bars projecting outwardly there is only a thin portion of the stud in contact with the inner face of the lathing. Consequently the stud does not prevent the plaster from keying on the back face of the lathing, as would be the case if the longitudinally disposed leg of the angle were placed outwardly, which would present a comparatively broad surface against the inner face of the lathing at this point. Heretofore metallic studs have usu-

ally been so placed that a broad flange or leg was in contact with the inner face of the lathing. Obviously this weakened the plaster in a vertical line over such stud.

5 The stud described comprises only two standard parts, namely, the vertical angles 1 and the cross connecting or lattice members 2. These can be quickly and cheaply fabricated by ordinary punching and bending apparatus, and be assembled at either 10 the factory or the place of erection by unskilled labor and by the use of very simple tools. The lathing can be any form of metal lathing and this can be secured to 15 the studs without the use of any special tool. There are no separate fastening means required either for assembling the parts of the stud or for the attachment of the lathing to the stud. The stud is of open lattice 20 construction, so that wires and pipe can be readily run in all directions. While strong, it is light, so that there is a material reduction in stock or tonnage from prior constructions and hence it is less 25 costly.

What we claim is:

1. A metallic stud comprising two vertical flanged members placed with the flanges which lie transversely of the partition projecting outwardly or away from each other 30 and provided with slots, and transverse connecting or lattice members having their ends lying against the faces of said outwardly projecting flanges and provided 35 with tongues bent at right angles and projecting through said slots and with other tongues projecting outwardly beyond the edges of said flanges.

2. A metallic stud comprising two vertical angle bars placed with the flanges which 40 lie transversely of the partition projecting outwardly and away from each other and

provided with vertical slots, and flat lattice or connecting members having their ends lying against the faces of said outwardly 45 projecting flanges and slit inwardly from their ends to provide a plurality of tongues, one of said tongues extending through one of said slots and another of said tongues projecting outwardly beyond the edges of 50 said flanges and serving to secure the lathing.

3. A metallic stud comprising two flanged vertical members having flanges lying transversely of the wall and provided with vertical 55 slots, and cross connecting members comprising flat plates split inwardly from their ends to provide three tongues, one of said tongues projecting through a slot in a vertical member, and the other two tongues projecting outwardly beyond the outer edge of 60 said vertical member and serving to secure lathing.

4. A metallic stud comprising two vertical flanged members placed with the flanges 65 which lie transversely of the partition projecting outwardly or away from each other and provided with vertical slots, and flat transverse connecting or lattice members arranged flatwise in a vertical plane with 70 their ends lying against the faces of the outwardly projecting flanges of the vertical members, and being provided with end longitudinal extending tongues which are bent at right angles and project through the slots 75 in the vertical members and are bent against the opposite faces of the latter.

In testimony whereof, we have hereunto set our hands.

HERBERT E. MARKS.
EDWARD C. ROBERTS.

Witnesses:

R. B. NAYLOR,
R. E. BYRUM.