[3.] Faundation for Plastering.
Patented Oct. 3, 1871. James John. No. 119,615. Mityesses

## UNITED STATES PATENT OFFICE.

JAMES JOHN, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN FOUNDATIONS FOR PLASTERING.

Specification forming part of Letters Patent No. 119,615, dated October 3, 1871.

To all whom it may concern:

Be it known that I, James John, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improved Wire Foundation for Plastering; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, in which—

Figure 1 is an isometric view of a portion of a ceiling fitted with my wire foundation. Fig. 2 is an isometric view of a portion of a joist with my improvement attached. Fig. 3 is an elevation of a portion of my invention. Figs. 4 and 5 represent modifications of my method of forming wire foundations for plastering.

My invention relates to the use of iron or other wire as a substitute for wood lathing for a foundation for plastering upon walls and ceilings; and it consists in the peculiar manner of applying and securing said wire to the joists or furrings.

I am aware that wire in the form of netting or wire-cloth has heretofore been used as a substitute for lathing, but the cost of the wire-cloth and the impracticability of properly stretching and securing the same to the joists or furrings with a sufficient projection to form a secure and level foundation for the plastering has prevented the use of wire-cloth from becoming general or advantageous to the public.

My invention obviates all of the difficulties incident to the use of wire-cloth for said purpose, and renders it easy to construct a level and tense fire-proof foundation for plastering.

That others may fully understand my invention, I will particularly describe it and various modes of construction.

A strip of sheet metal, A, is prepared in the form shown in Fig. 2—that is, the strip is bent lengthwise in the form of angle-iron, and one of its edges is notched, as shown in Fig. 3, the said notches being spaced equal to the required distances between the wires. The strips A are secured along the edges of the joists or furrings by nails when said joists are of wood, or by rivets or screws if of iron, and the notches in the projecting edges will then have an elevation of, say, half an inch, or sufficient to give the mortar a good hold back of the wires resting in said notches. The wires B are next stretched from side to side of the room, so as to rest in the

notches of the various strips A in line, and may be secured at each end by simply bending around the head of a projecting pin or nail, or in some other convenient way. When the whole required number of wires has been put in position in this way transverse wires C are run along the side of each strip, and the points a intermediate between the notches are then bent over said transverse wires, as shown in Figs. 2 and 3, and the line-wires B are thereby firmly bound in place at the bottom of the notches. The stretching of the line-wires B to any required degree may be accomplished by any of the well-known appliances for that and similar purposes.

It will appear from the foregoing description that the principal points of this invention are included in the use of single wires and means for supporting them at a short distance from the surface of the joist or furrings, so that the plaster will have a secure hold around the wires uninterrupted by the surfaces of said joists or furrings, and that to secure the desired object it is only necessary to interpose between the joist or furring and the line-wires a very thin support of proper height, while the spacing and securing of said wires may be attained in a variety of ways, some of which I will now describe. Instead of the notched strip A, I prepare a similar strip, E, without notches, but a smooth edge instead, and secure said strip to the joist in the same manner that strip A was secured. The wires B are then stretched over these strips E and a notched strip, F, similar to A, except that the bend is located along the bottoms of the notches, is placed over the wires and along the strips E, as shown in Fig. 4, and secured by nails, as shown in said figure. The points of strip F between the notches then project downward between the wires and secure them at proper distances apart, while they are also firmly held in contact with the edge of strip E. This method has the advantage of facility of execution.

In point of economy I prefer to employ a narnow furring-strip, G, which is to be nailed along the edge of the joist. The wires B are stretched over said strip, as shown and described, and a strip of metal, H, bent as shown in Fig. 5, is then nailed along said strip G, confining the wires in position thereon, while the curved edges of the strip H afford a good and sufficient hold for the plastering. A saw-tooth gauge may be employed to hold the wires B properly spaced while the strip H is being nailed on.

Having described my invention, what I claim.

as new is—

1. The combination of the line-wires B with the supporting-strips A and clamps, substantially as described, to form a foundation for plastering.

2. Iron wire, applied substantially in the manner specified, as a substitute for wood laths or other material as a foundation for plastering upon ceilings and walls, for the purposes set forth.

JAMES JOHN.

Witnesses:

WILLIAM E. COWPER, D. M. HALE.