J. W. KENSETT.

METALLIC LATHING.

No. 181,850. Patented Sept. 5, 1876.

fig. 1.

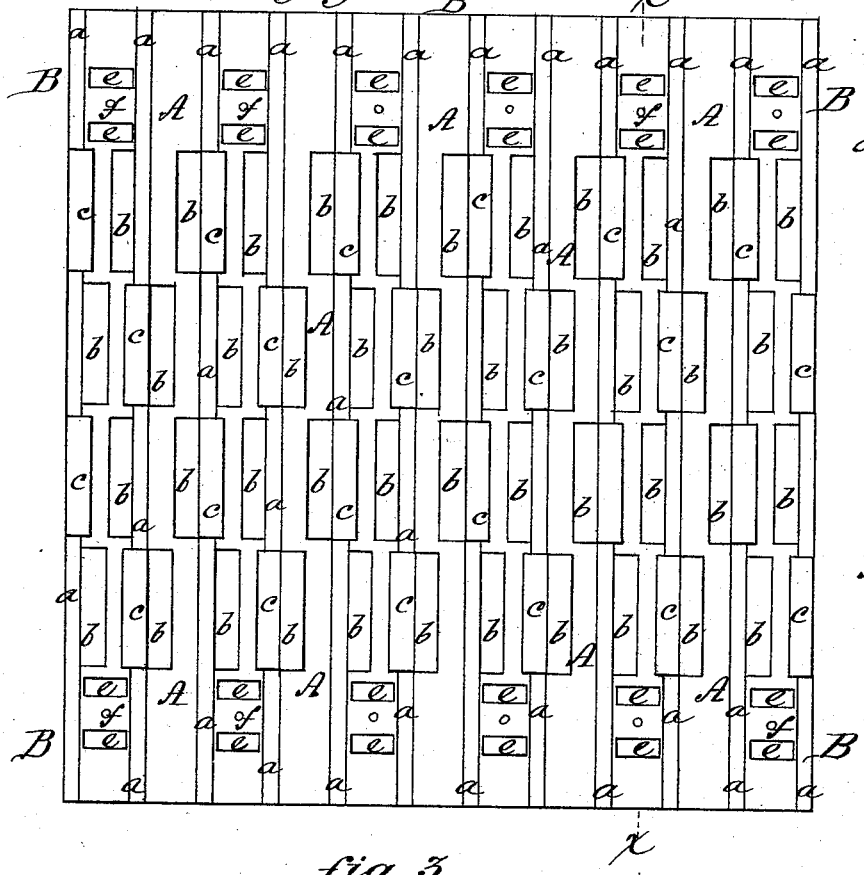



fig. 2.

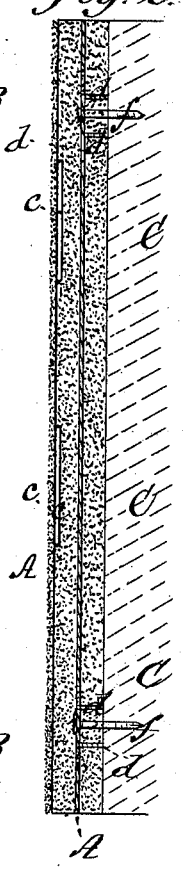



fig. 3.

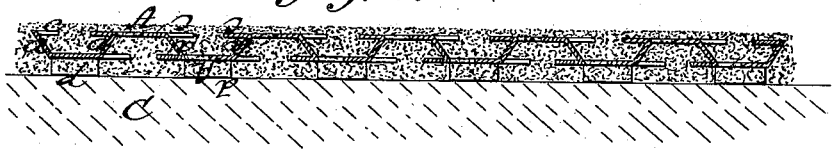
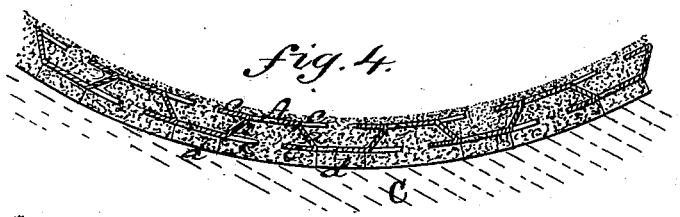



fig. 4.




Witnesses:

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# UNITED STATES PATENT OFFICE.

JAMES W. KENSETT, OF TROY, NEW YORK.

## IMPROVEMENT IN METALLIC LATHINGS.

Specification forming part of Letters Patent No. **181,850**, dated September 5, 1876; application filed March 8, 1876.

*To all whom it may concern:*

Be it known that I, JAMES W. KENSETT, of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Metallic Carriers for the Fire-Proof Plastering of Wooden Surfaces, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 represents a face view of one of the sheets of the metallic carrier; Fig. 2, a vertical section taken on line X X of Fig. 1; Fig. 3, a horizontal section, showing the application and adaptation of my carrier for its purposes; and Fig. 4, the application of my device to rounded surfaces.

The object of this metallic carrier is to obtain a fire-proof vehicle for the preferable fire-proof plastic coating of wooden surfaces.

Reference being had to the drawings for illustration, I stamp up a sheet of tin or other suitable metal into corrugations A A, which have outwardly-inclining sides *a a*, to obtain the greatest possible corrugated surface from a given-sized sheet, and thus economize material. Excepting intervals B B of the sheet thus corrugated, by which to obtain means of attachment to the studding or frame surface C, I cut or strike out in alternate columns between said intervals a series of openings, *b b*, in each of these corrugations A, the struck-out portions being turned over in the vertical line of the carrier, and forming clamping-lips *c*, the lips of each alternate column being turned in opposite directions, up and down, as shown; and in this regard, as clearly shown and readily understood, the obverse and face of the carrier present the same appearance, the one being merely the counterpart of the other—that is to say, one column of the clamp-lips *c* of the face is the same as its direct obverse, the clamp-lips of the face and obverse of the same column turning in the same direction; but as the series of columns alternate upward and downward upon both sides, the appearance and function are the same for both sides. The only difference between the face and the obverse of the carrier is in the struck-out cleats *d d* of the intervals B B, where the carrier is joined to the wooden surface. These cleats *d d* are integral with the carrier and the studding or timber surface, so as to permit of the complete isolation of the frame or timber from heat-conducting material, and the complete covering and envelopment of the whole structure, metallic carrier, frame-work, and all, by the plastic fire-proofing material. The openings *e e*, made by the striking up of the cleats *d d*, permit of the entry and immediate contact of the plaster or cement with the studding, which is previously prepared by a fire-proof paint or wash, so that the only metal which reaches the frame-work is the nail *f*, between each duplex cleat in the intervals B B and the narrow edges of the said cleats. Thus the metallic carrier, with all its parts, may be said to be completely isolated from the timber surface, to which it is attached by nails, as shown, and without the intervention of means separate from the carrier.

The metallic carrier thus constructed is attached by nails, as described, to the studding, which is washed or daubed with fire-proof paint, and from its flexible nature can accommodate itself to any shaped surface. The fire-proof cement or plaster is worked well into the depressions of the corrugations upon both of its sides, commencing at the back, the cement passing through the openings *b b*, the whole of the superficies of the metallic carrier being suitably embedded in the cement or plaster of the other. Both plaster sides are interlocked at the numerous locking-openings *b b*, as is fully understood.

The depressions of the corrugations A form tongues, which, however, in practice, would not be sufficient to hold the plaster; and to remedy this, while at the same time obtaining the advantage of economizing material afforded by the outwardly-inclining sides *a a*, I make use of the numerous clamping-lips *c c*, which are ample to uphold the inner and outer vertical walls of plaster, which are also locked by the openings *b b*, adjuvant in their function to said clamp-lips.

My preferred method of constructing a fire-proof frame building while using my metallic carrier is as follows: The wooden surface of the building or skeleton frame-work to be fire-proofed is first daubed or covered, wherever a wooden point appears, with a fire-proof wash or paint. The builder then lays one of the

sheets of carriers upon its face, and thoroughly covers the back with the fire-proof plaster or cement. The sheet is then nailed to the wooden surface, and its face covered in a similar manner. This process is continued until all the surfaces are covered, and is applied to both sides of the frame-work, commencing from the bottom. and the interval, if any, between the two walls of fire-proofing carriers is filled up with concrete or agglomerate of any suitable quality, if deemed necessary. At the foundation this should be done.

My method is applicable to any possible conformation of surface, and is intended to cover all wooden parts of buildings, including walls, floors, ceilings, roofs, window-frames, doors, and door-frames. It is capable of any species of ornamental molding. It is especially applicable to railway-cars, grain-elevators, stairways, &c., of houses, theaters, and public halls.

Pieces of wood may be let in between the corrugations at proper intervals upon the walls for picture-frame nails, and for other purposes. Pieces of marble may also be let in and held, so that my carrier would form a very desirable support for encaustic tile and mosaics.

I claim—

1. A metallic lathing consisting of a corrugated surface having outward inclines *a a*, for the purpose described, and a series of clamps, *c*, openings *b b*, and cleats *d d*, as and for the purpose described.

2. In a metallic lathing, the combination of corrugations A with the cleats *d d*, for the purpose described.

In testimony whereof I have affixed my signature in the presence of two witnesses.

JAMES W. KENSETT.

Witnesses:

A. E. H. JOHNSON,

J. W. HAMILTON JOHNSON.