(No Model.)

L. McCALLUM.

METAL SURFACE DECORATION.

No. 598,270. Patented Feb. 1, 1898.

Fig. 1,

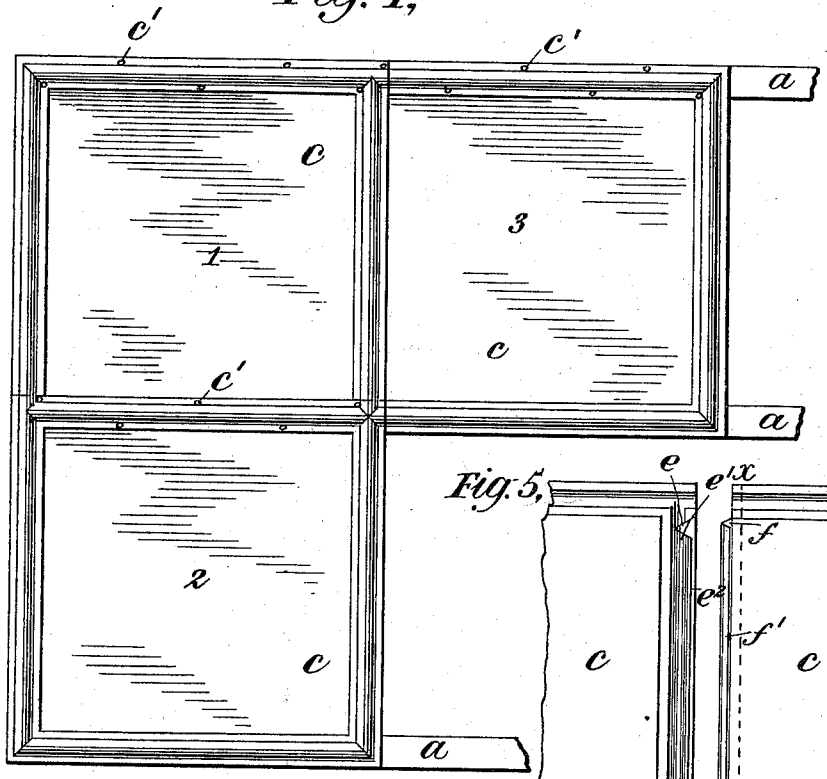


Fig. 5,

Fig. 2,

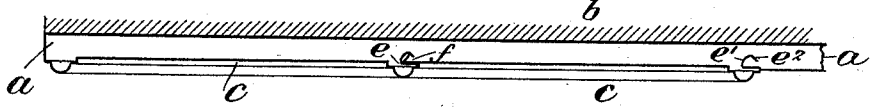


Fig. 3,

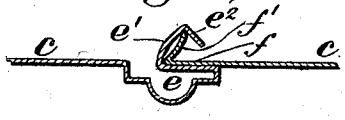
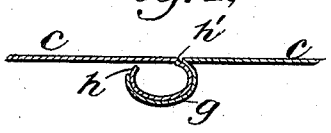


Fig. 4,



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UNITED STATES PATENT OFFICE.

LEE MCCALLUM, OF BROOKLYN, NEW YORK.

METAL-SURFACE DECORATION.

SPECIFICATION forming part of Letters Patent No. 598,270, dated February 1, 1898.

Application filed March 30, 1897. Serial No. 629,947. (No model.)

To all whom it may concern:

Be it known that I, LEE MCCALLUM, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Metal-Surface Decorations, of which the following is a specification.

This invention relates to metal-surface decorations, such as metal ceilings and walls, and has for its object to provide simple and effective means for applying and holding the metal plates used for such decorations.

An important feature of my invention is the forming of a transverse joint for the edges of the plates, whereby the edges are interlocked against separation by movement toward or from the backing or parallel to the backing; also, interlocking these parts by a spring-joint, whereby the parts may be sprung together when put in place without the use of bending-tools and will be firmly held together by the spring-joint.

Other features of my invention will appear from the following particular description of embodiments thereof, reference being had to the accompanying drawings, forming part hereof.

Figure 1 is an underneath plan view of a portion of a ceiling made of plates according to my invention. Fig. 2 is a vertical section of the same. Fig. 3 is an enlarged vertical section of the joint shown in Figs. 1 and 2. Fig. 4 is an enlarged vertical section of a modified form of joint. Fig. 5 is a rear or top plan diagrammatic view showing portions of two of the plates of Figs. 1 and 2.

The backing for the plates may be made up in the usual manner by nailing or otherwise securing furring-strips *a a* to a surface, such as a ceiling *b*, longitudinal furring-strips alone being necessary. In some instances it may be desirable to secure the plates directly to the backing without intervening furring-strips, and for such cases the modified joint shown in Fig. 4 is well adapted, but most frequently the furring-strips are employed, whereby the plates are offset from the wall or ceiling, as shown in Figs. 1 and 2.

The metal plates may be ornamented as desired and of any suitable shape. Rectangular plates *c c* are shown ornamented by beading and paneling. Upon two opposite sides the margins of the plates are adapted to be secured to the furring-strips *a* by suitable nails, as shown at *c'*, or by other fastening devices. The remaining two sides or edges of each plate bridge across from furring-strip to furring-strip and are adapted to be interlocked with the edges of adjacent plates by my improved interlocking joint. To form this interlocking joint, one of these edges is provided with a socket which, in the construction shown in Figs. 1, 2, 3, and 5, is formed by an inward fold *e*, parallel to the face of the plate, an outward oblique fold *e'*, preferably slightly curved, and a backward oblique fold e^2. The other edge is provided with a projection formed by an extension *f*, parallel to the face of the plate, and which with particular plate shown is in line with the panel part of the plate, and by an oblique fold *f'*, preferably slightly curved, formed up at the end of the extension *f*. As the extreme ends of these interlocking edges of the plates coincide with the furring-strips *a* the sockets and projections are not continued to these ends, but terminate at such a distance therefrom as to be clear of the furring-strips, as shown in Fig. 5.

In the work of putting up the ceiling with the plates, as shown, the first plate to be secured in place would be the corner-plate 1 and after this the plate 2, which, as shown, overlaps the plate 1 on the middle one of the three furring-strips shown. These plates would be secured to the furring-strips by nailing or otherwise, and after they or the plate 1 only had been secured or partially secured in place the plate 3 would be put in place by starting the projection *f f'* into the socket *e e'* e^2 and pushing the plate 3 with sufficient force to cause the parts to spring sufficiently for the projection to enter the full distance into the socket. Upon reaching this position the fold *f'* will spring under the fold e^2 to the position clearly shown in Fig. 3 and the parts will be firmly locked to-

gether. In this position it is preferable that the plate having the projection, as the plate 3, should underlap or enter slightly above or behind the edge of the plate having the socket, as the plate 1, so as to be concealed thereby, as the socket containing the edge presents a finished appearance, and an overlapped joint at the furring-strips is desirable, and the dotted line x x in Fig. 5 indicates the amount of overlap. The plate 3 may now be secured to the furring-strips.

It will be observed that when the plates are interlocked the fold f' by contact with the fold e^3 prevents longitudinal separation of the plates or separation by a movement parallel to the backing or faces of the plates, so that, for example, pressure upon both plates at a joint and between the furring-strips or a blow struck upon the plates at these points and tending to force the plates in and spread them would be resisted by the abutting edges of the joint along the entire length of the joint. The plates are held against separation toward or from the backing by the contact of the extension f and fold e' and of the end of fold f' and the corner formed by e' and e^2. The proper registering of the plates is secured by the contact of the corner formed by the extension f and fold f' with the corner formed by the folds e and e'.

In the modified construction shown in Fig. 4 there is a flush finish above or at the back of the plates, the projection and socket both extending to the front. The socket is formed by the curved extension or fold g, presenting the appearance of a bead, while the projection which engages the socket is formed by the curved extension or fold h, fitting within the socket and shaped so as to leave a shoulder h' for registering the plates. In this construction it is preferred to so attach the plates to the backing that the edge having the projection is presented from an attached plate, and in attaching the next plate a socket edge is sprung over the projection edge.

It will be observed that the sockets above described and shown are inwardly flaring with restricted openings and that the backward folds of the projections bear backwardly against the socket to hold the plates against longitudinal separation. The length and continuity of the contact of the projection and socket makes the joint an exceedingly strong one, while the spring action permits the parts to be put together without employing bending-tools and without fear of marring the outer surfaces of the plates.

It is evident that various modifications may be made in the constructions above particularly described within the purview of my invention.

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

1. A decorated metal surface composed of plates, each plate being secured by fastening devices to a suitable backing along two opposite sides thereof, and the edges of the plates between the fastened sides being joined by interlocking projections and sockets upon the plates, substantially as described, such that the edges of the plates are locked against separation toward or from the backing or parallel to the backing.

2. A decorated metal surface composed of plates, each plate being secured by fastening devices to a suitable backing along two opposite sides thereof and the edges of the plates between the fastened sides being joined by spring interlocking parts comprising a projection on one plate and a socket on the adjacent plate, whereby the edges of the plates are locked against separation by movement toward and from the backing or parallel to the backing, substantially as set forth.

3. A metal facing provided on one edge with an internally-flaring socket, and provided on an opposite edge with a projection having a backwardly-extending fold, the socket being adapted to receive the projection of an adjacent plate and the projection being adapted to enter the socket of an adjacent plate, substantially as set forth.

4. A decorated metal surface composed of plates, each plate being secured by fastening devices to a suitable backing along two opposite sides thereof and the edges of the plates between the fastened sides being joined by interlocking projections and sockets, each of such sockets having a restricted opening and being internally flared, and each of such projections having a backwardly-extending fold adapted to enter and bear backwardly against the socket, substantially as set forth.

5. A metal facing-plate provided with a socket formed by an inward fold, an outward oblique fold, and a backward oblique fold, in combination with another metal facing-plate provided with a projection including an outward oblique fold and adapted to enter and bear backwardly against the socket, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 25th day of March, A. D. 1897.

LEE McCALLUM.

Witnesses:
HENRY D. WILLIAMS,
HERBERT H. GIBBS.