J. KAHN.

EXPANDED METAL.

APPLICATION FILED MAY 16, 1908.

1,050,837. Patented Jan. 21, 1913.

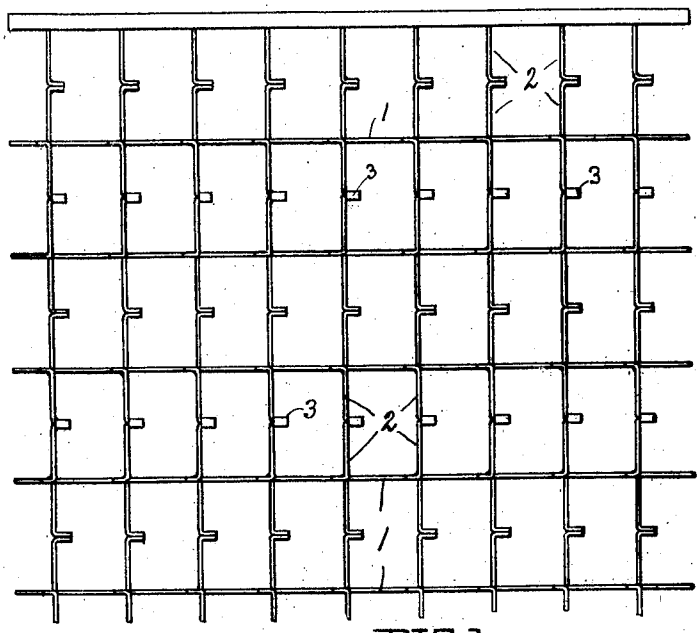

FIG. 1.

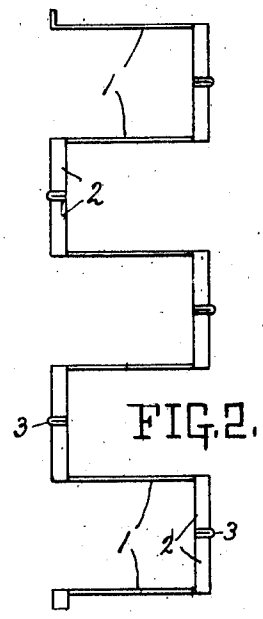

FIG. 2.

Witnesses.

J. A. Brennan.

E. M. Brown

Inventor

Julius Kahn

by Edward N. Pagelsen, Atty.

UNITED STATES PATENT OFFICE.

JULIUS KAHN, OF DETROIT, MICHIGAN, ASSIGNOR TO TRUSSED CONCRETE STEEL COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

EXPANDED METAL.

1,050,837. Specification of Letters Patent. Patented Jan. 21, 1913.

Application filed May 16, 1908. Serial No. 433,247.

To all whom it may concern:

Be it known that I, JULIUS KAHN, a citizen of the United States, and a resident of Detroit, in the county of Wayne and State of Michigan, have invented a new and Improved Expanded Metal, of which the following is a specification.

This invention relates to light sheet metal construction adapted for the support of surfaces of plastic material such as plaster, cement and stucco, and its object is to provide a construction which shall have maximum strength for weight.

My invention consists in sheet metal, preferably steel, which has been slitted, bent and expanded in such a manner as to form sufficiently continuous surfaces of flat reticulated metal adapted to receive and retain plastic material, which surfaces are reinforced by light parallel beams.

In the accompanying drawing Figure 1 is a plan and Fig. 2 is an end view of this improved construction.

Similar reference characters refer to like parts in both views.

The process of forming this expanded metal is the same as that described in the patent to Forsyth, No. 862,897, dated August 13th, 1907.

In Figs. 1 and 2 a series of flat beams 1 are shown connected at each edge to adjacent beams by means of the integral tongues 2 which are connected at the ends at 3. The longitudinal spaces between the tongues 2 connecting adjacent beams 1 will depend upon the character of the plastic material. The width of the beams 1 will depend upon the load to be carried and upon the span. The distance between adjacent beams 1 will depend upon the plastic material and also upon the loading. This form of construction is peculiarly adapted for light partitions, as it is only necessary to secure the metal frame work at the top and bottom, and then to plaster over the same, the tongues 2 permitting the plaster faces on both sides of the partition to join, forming a continuous mass. For light floors this material is laid across with the beams 1 vertical and concrete is placed over the same. If desired, the lower side of a floor of this character may be left open or it may be plastered. Each pair of plates 1 and the webbing between them form U shaped beams extending along the rear face of a sheet of expanded metal, which may be plastered. The depth of such beams will depend upon the strength desired.

This construction is well adapted for light partitions as it is portable in the fullest sense. It requires no more plaster than any other form and it requires no studding to hold it in place. Where there is an opportunity to secure the upper end of the sheet, the forms shown in Figs. 1 and 2 may be made with the beams 1 quite narrow, not more than one inch of depth being necessary.

Having now explained my improvements, what I claim as my invention and desire to secure by Letters Patent is:

1. An expanded metal structure comprising a series of narrow parallel strips of sheet metal, and a band of expanded metal connecting an edge of each strip to an edge of the adjacent strip, each alternate band of expanded metal lying in one of two parallel surfaces at substantially right angles to the strips.

2. An expanded metal structure comprising a series of narrow bands of expanded metal spaced apart with edges parallel to each other, and a series of substantially U shaped beams connecting adjacent edges of the bands, said beams comprising strips of entire metal connected by a narrow band of expanded metal.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

JULIUS KAHN.

Witnesses:
EDWARD N. PAGELSEN,
ELIZABETH M. BROWN.