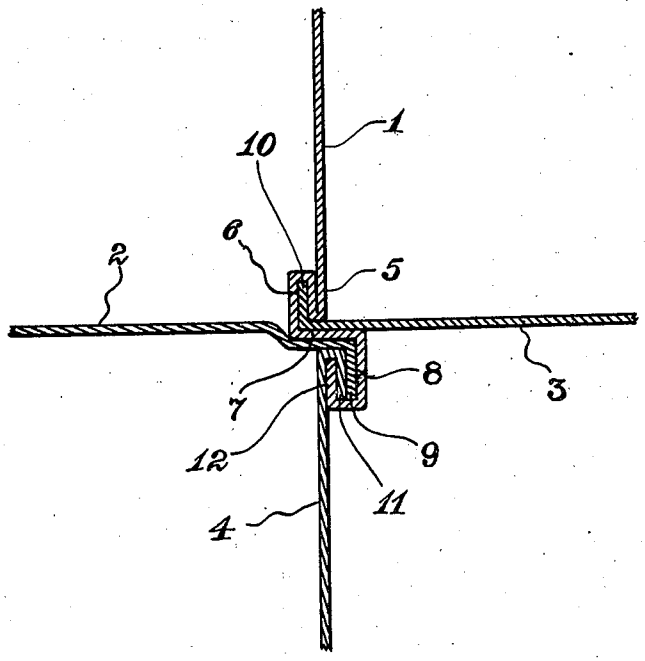
Feb. 23, 1943. A. N. PLANTE 2,311,867

SHEET MATERIAL STRUCTURE

Filed Nov. 4, 1940



Inventor:
Arthur N. Plante
By F. E. Anderson
His Attorney

Patented Feb. 23, 1943 2,311,867

UNITED STATES PATENT OFFICE

2,311,867

SHEET MATERIAL STRUCTURE

Arthur N. Plante, Torrington, Conn.

Application November 4, 1940, Serial No. 364,211

1 Claim. (Cl. 189—36)

This invention relates to structures comprising compartments or cells formed of sheet material joined together at partition terminals. The object of the invention is provision of a simple, inexpensive and easily assembled and disassembled form of joint which is useful and efficient in uniting sheet material to form structures with angularly disposed walls. The joint indicated together with others similarly formed is of especial advantage in forming sheet material into what are commonly known as knock-down structures.

While the invention may be embodied in any sheet material formed as hereinafter set forth it is particularly appropriate in the use of bendable material such as metal, in relatively thin sheets, of which respective margins or zones are folded to form channels and tongues so arranged that these zones or margins are adapted to be engaged in telescoped relation to produce an interlocked union of the several sheets, the joint so formed presenting an assembly in which an intermarginal portion of each sheet terminates in substantially perpendicular abutment with a surface of another sheet.

The drawing is a transverse sectional view of four wall sheets joined together in accordance with my invention.

The four-corner joint illustrated is formed of wall sheets 1, 2, 3 and 4. A marginal zone of sheet 1 is folded upon itself to form the two-ply tongue 5, then reversely folded to form an L-shaped channel 6 of one-ply thickness, with the web 7, which is spaced from the two-ply tongue to form the branch of the L-shaped channel, again reversely folded to form an L-shaped channel 8 of two-ply thickness. A margin of sheet 2 is folded to form a laterally extended tongue 9. A margin of sheet 3 is folded to form a laterally extended tongue 10. A margin of sheet 4 is folded to form a tongue 11 and channel 12 extended in parallelism with the flatwise extent of the sheet. The folded margin of sheet 3 is adapted to be telescopically engaged with the one-ply channel 6 of sheet 1 and the folded margins respectively of sheets 2 and 4 are adapted to be telescopically engaged with the two-ply channel 8 of sheet 1.

Having thus described my invention, what I claim is:

A four-corner structural joint for sheet material, including in combination four wall sheets, one of said sheets having a marginal zone which is folded upon itself to form a two-ply tongue, then reversely folded to form an L-shaped channel of one-ply thickness, the web spaced from the two-ply tongue to form the branch of the L-shaped channel being again reversely folded to form an L-shaped channel of two-ply thickness, the second and third sheets each having a margin thereof folded to form a laterally extended tongue, and the fourth sheet having a margin thereof folded to form a tongue and channel extended in parallelism with the flatwise extent of the sheet, said margin of the second sheet being engaged with the one-ply channel of the first sheet, and said margins of the third and fourth sheets being engaged with the two-ply channel of the first sheet.

ARTHUR N. PLANTE.