No. 713,141. Patented Nov. 11, 1902.

W. PASCHALL.

STRAIGHT EDGE.

(Application filed Nov. 29, 1901.)

(No Model.)

Fig. 1.

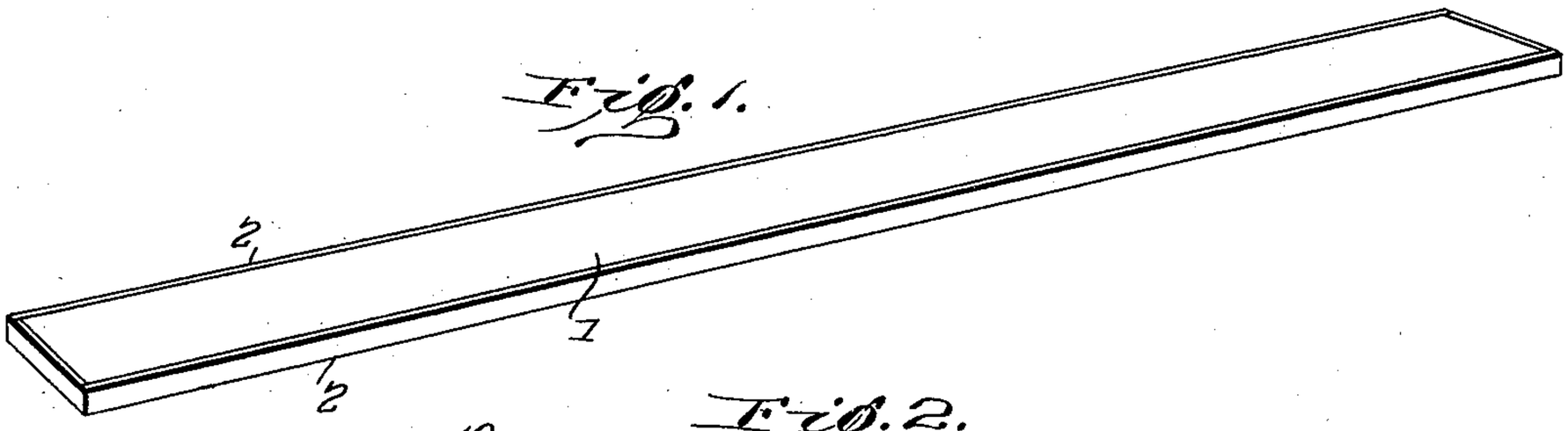


Fig. 2.

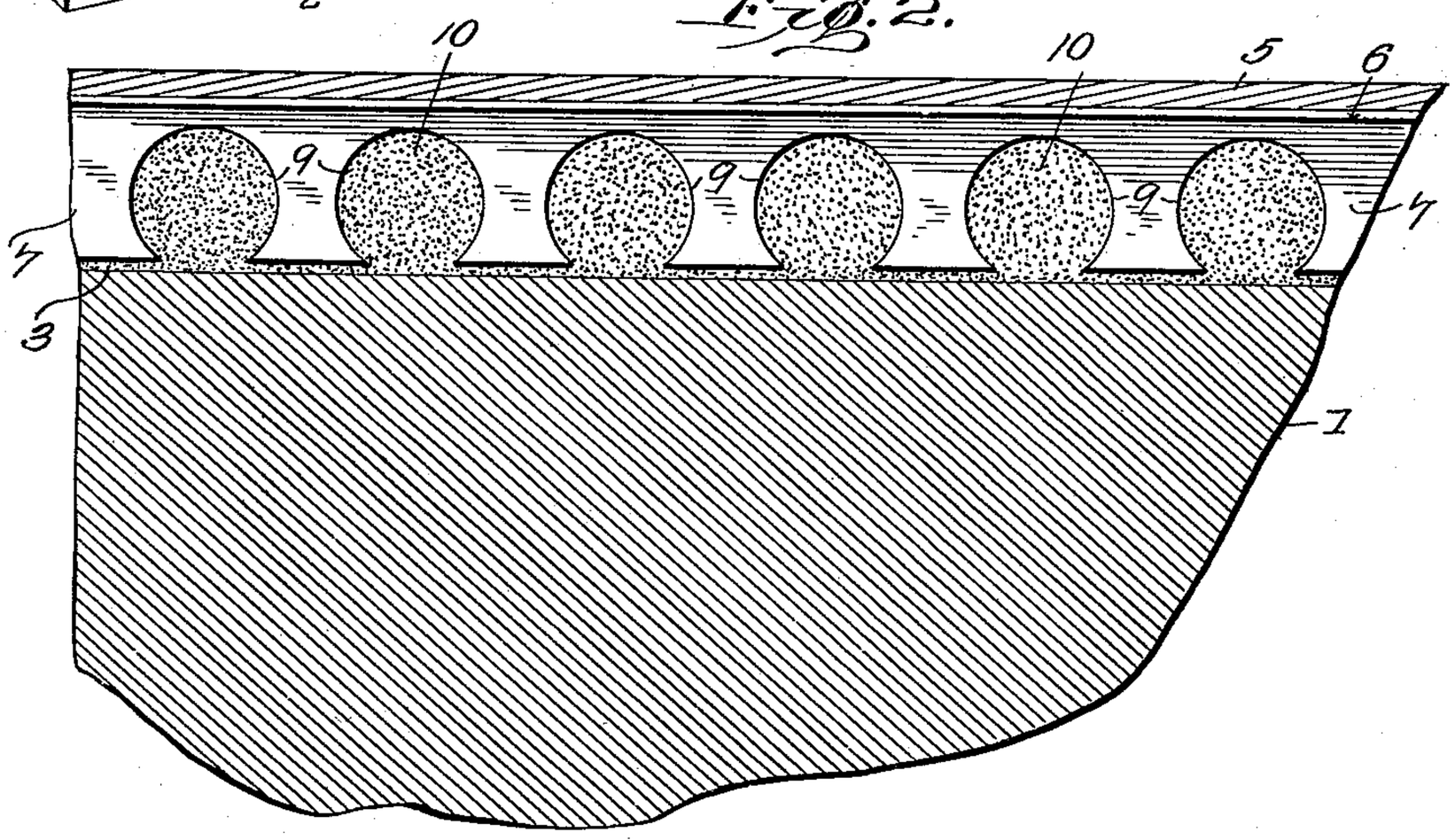


Fig. 3.

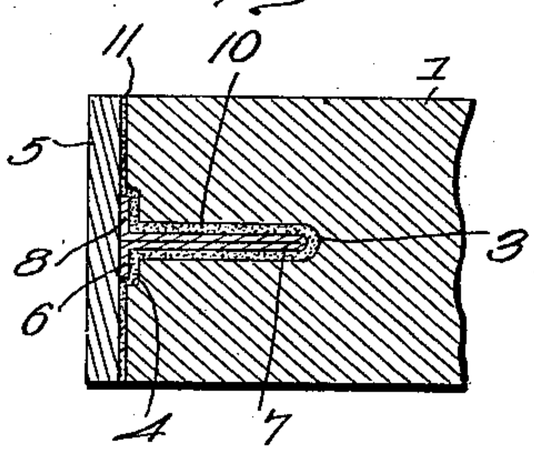


Fig. 4.

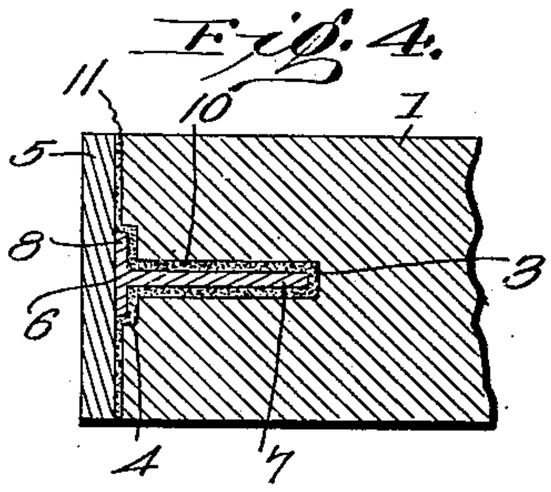
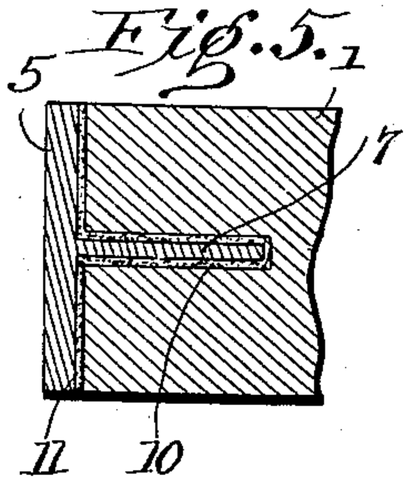


Fig. 5.



Witnesses
E. C. Stewart
R. M. Elliott.

William Paschall, Inventor.
by Cachow & Co
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM PASCHALL, OF BIRMINGHAM, ALABAMA.

STRAIGHT-EDGE.

SPECIFICATION forming part of Letters Patent No. 713,141, dated November 11, 1902.

Application filed November 29, 1901. Serial No. 84,089. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM PASCHALL, a citizen of the United States, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented a new and useful Straight-Edge, of which the following is a specification.

This invention relates to straight-edges, and particularly to a device adapted for use by paper-hangers, shade-makers, and other artisans requiring such a tool in accomplishing their work.

The object of the invention is in a ready, thoroughly practical, inexpensive, and feasible manner to associate a metallic binder or guiding edge with the body or straight-edge proper, the manner of assembling the parts being such that all danger of kinking or buckling the metallic binder will be obviated and positive assemblage of the parts against accidental separation in use will be effected.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a straight-edge, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated two forms of embodiment of the invention, each capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the scope of the invention, and in the drawings—

Figure 1 is a view in perspective of the straight-edge characterized by this invention. Fig. 2 is a sectional detail view, on an enlarged scale, showing the manner in which the binder is held associated with the body of the tool. Fig. 3 is a transverse section through the straight-edge shown in Figs. 1 and 2. Fig. 4 is a similar view of a slightly-modified form of the invention. Fig. 5 is a sectional detail view of a slightly-modified form of the device.

Referring to the drawings, 1 designates the body of the straight-edge, which is to be constructed, by preference, of wood, and 2 the binder. Each side and end of the body is provided with a groove or channel 3, disposed midway of the thickness of the body and of any suitable depth, the four grooves thus formed being in register to present a continuous channel and the mouth portion of each channel being rabbeted at 4, for a purpose that will presently appear.

Seated in the channels are the binders 2, which, as shown in Fig. 1, present a continuous structure when assembled with the body and may be secured together at their corners, as by being soldered. The form of binder shown in Figs. 1, 2, and 3 consists of an edge plate 5 and an anchoring plate or flange 6, which latter is shown in Fig. 3 as constructed of a piece of metal bent upon itself to present a channel-engaging member 7 and having its terminal edges outturned at right angles to the width of the said member to present two flanges 8, secured to the edge plate 5 in any suitable manner, as by being soldered or brazed thereto. As it is desirable that the edge plate should be of some substance that will not rust in being handled, it is preferred to make use of brass or any other metal having like properties, and to cheapen the cost of production of the same it is preferred to make the member 7 of a cheaper material than brass, and for this purpose it may be made of sheet-iron, tin, or galvanized iron and be secured to the edge plate in the manner above described. Instead of making the member 7 of sheet metal bent upon itself in the manner described it may be made of a single piece of T metal, as shown in Fig. 4, and be secured to the edge plate in any preferred manner, or, if preferred, the member 7 may be formed integral with the edge plate, as shown in Fig. 5, thereby dispensing with the two flanges 8 and the rabbet 4; but in each of the constructions shown the binder as a whole is T-shaped in cross-section. Where the binder 2 is constructed as shown in Figs. 2, 3, and 4, the flanges 8 project outward from the edge plate, and it is to accommodate these flanges that the rabbets 4 are provided.

The anchoring member 7 is provided with a plurality of open-sided openings 9, herein shown as approximately circular; but it is to be understood that they may be otherwise shaped, if preferred, the point being to have

them extend through the edge of the anchoring member to permit passage within them of the cement or other adhesive substance, (indicated by 10,) which serves to hold the edge plates associated with the body, and thereby to present anchors which by intimate cohesion with the wood of the walls of the channels will positively prevent separation of the edge plates therefrom.

In assembling the edge plates with the body a coating of a suitable cement is applied to the walls of the channels and of the rabbets and also to the edges of the body, and the edge plates are then forced into the channels, whereupon the cement will enter the openings and will also cover the sides and all the exposed surfaces of the binder, thereby firmly securing it to the body. The line of cement indicated by 11 in Figs. 3 and 4 as surrounding the anchoring member, the flanges 8, and as interposed between the inner face of the edge plate and the edge of the body is exaggerated in the drawings merely for the purpose of clearness of illustration, it being understood that, in effect, the line of cement will be a mere film, it being intended that the anchoring members 7 and the edge plates shall contact closely with the surfaces of the body with which they coact. By this novel manner of assembling the edge plates with the body of the straight-edge all danger of buckling or bending the same will be obviated, so that the guiding edges of the straight-edge will at all times be true and exact. It is to be understood that this manner of securing a metallic edge to a wooden body, while of peculiar value for straight-edges, may be employed for other mechanical implements, as for facing the edges of spirit-levels and the like or for securing metallic molding in position, and as this will be obvious detailed illustration thereof is deemed unnecessary.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A wooden straight-edge provided in its edge with a channel, in combination with a metallic binder, T-shaped in cross-section, and constituting an edge plate to bear against the straight-edge and a flange to project within the channel, the flange being provided with open-sided openings, and a filler of cement engaging the walls of the channel and the said openings.

2. A wooden straight-edge provided with a marginal channel, in combination with a metallic binder T-shaped in cross-section and comprising an edge plate to bear against the straight-edge, and a flange secured to the edge plate and projecting within the channel, said flange being provided with open-sided openings, and a filler of cement engaging the walls of the said channel and the said openings.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM PASCHALL.

Witnesses:
W. B. CALDWELL,
ARCHIE A. FELTUS.