July 5, 1927. 1,634,632

A. C. STRANDBERG

BRAD

Filed May 24, 1926

Fig. 1.

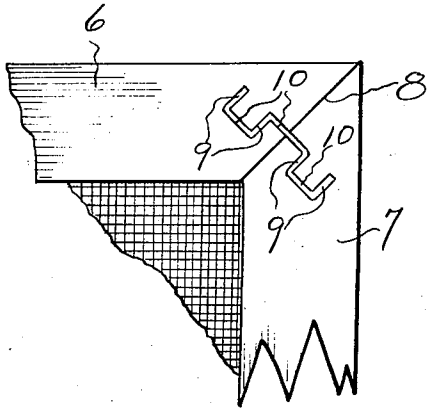


Fig. 2.

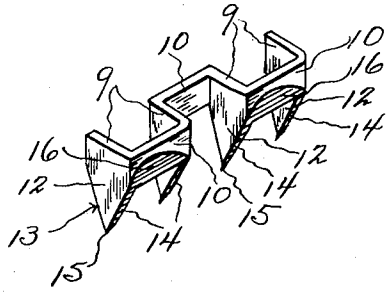


Fig. 3.

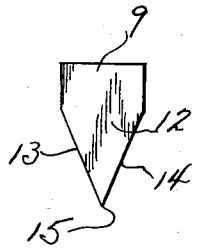


Fig. 4.

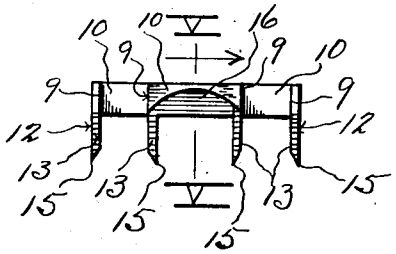
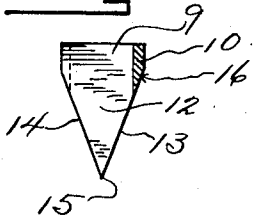


Fig. 5.



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Patented July 5, 1927. 1,634,632

UNITED STATES PATENT OFFICE.

ALVIN C. STRANDBERG, OF KANSAS CITY, MISSOURI, ASSIGNOR OF ONE-HALF TO OLIVER S. WIARD, OF KANSAS CITY, MISSOURI.

BRAD.

Application filed May 24, 1926. Serial No. 111,261.

This invention relates to a new article of manufacture, and has for its primary object, the contemplation of a brad, especially adapted for securing butt joints, that will not sever the two joined pieces across the joint or line made by the brad.

Another object of my invention is the provision of a brad having a body portion made up of a plurality of transverse walls, joined by staggered connecting walls to form a number of staggered overlapping salients of the material in which the brad is driven.

A still further object of the instant invention is to provide a novelly constructed brad which is provided with spurs extending below the lowermost edge of the walls forming the body of the brad.

Yet a further object of my invention is the provision of a brad having a plurality of transverse and staggered connecting walls, the lower portion of said transverse walls being continued to form spurs by cutting the opposite edges thereof at an angle to meet at a point, said connecting walls being cut away on an angle the same as the spur edges to form a cutting edge along the bottom thereof.

Many minor objects, advantages and details of specific construction will appear throughout the specification referring to the accompanying drawing, in which:

Figure 1 is a plan view of a butt joint formed at the corner of a screen frame, showing the brad, constructed in accordance with this invention, in place to secure the pieces together.

Fig. 2 is a perspective view of the brad alone.

Fig. 3 is an end view of the same.

Fig. 4 is a view of one side of the brad showing the sharpened lower edge of one connecting wall, and,

Fig. 5 is a vertical cross section taken on line V—V of Fig. 4.

Similar reference characters refer to like parts throughout the several views, and the numerals 6 and 7 designate abutting pieces of wood presenting a typical butt joint 8 across which the brad is placed and driven into position so that the upper zig-zagged edge of the body portion is all that is visible.

The brad proper may be made of any suitable metal and formed by any desirable method. A body portion is made up of a plurality of substantially parallel, transverse walls 9, connected and rigidly held in their spaced position by connecting walls 10 which are staggered as shown in Fig. 2, to cooperate with the transverse walls 9 in defining a plurality of staggered, overlapping salients. It is preferred to have walls 9 and 10 meet at right angles so that a square-cornered salient of wood or other material is formed when the brad is in place. This particular construction insures perfect gripping walls and does not cut away the wood along a straight line so that a piece will fall out if the wood splits slightly. Also, the walls 9 and 10 are comparatively narrow and do not pass clear through the thickness of the board to be fastened.

Each transverse wall 9 continues at its lower edge into a spur 12. This spur is formed by converging opposite edges 13 and 14 respectively, to meet at a point 15, which may be sharpened as shown in Fig. 4 to make the same easy to drive.

These spurs extend below the lower edge of walls 9 and 10, and the bottom edges of each connecting wall 10 is cut away or sharpened as at 16 to present a cutting edge. This cutting edge bites into the wood as the brad is being driven, and the angle formed by cutting away a portion of the side as above set forth extends in continuance of the angle of the adjoining spur edge 13 or 14. This construction is clearly illustrated in Fig. 5.

In practice, the brad is most efficient in presenting a gripping member. The body portion is properly formed to pass but part way through the material, and the spurs continue therebelow to engage the material and grip the same at right angles to the direction of greatest strain.

It is understood that the brad may be made in various sizes, and modifications in specific structure may be made without departing from the scope of the appended claims.

What I claim and desire to secure by Letters Patent is:

1. A brad of the class described including a plurality of transverse walls and staggered connecting walls adapted to hold said transverse walls in spaced parallel relation, said transverse walls extending below the connecting walls and each having its opposite edges converging to form a spur below the lowermost edge of said connecting walls.

2. A brad of the class described including a plurality of transverse walls, staggered connecting walls for holding said transverse walls in spaced parallel relation and spurs integral with the lowermost edge of said transverse walls, said connecting walls each having their lower edge sharpened to form a cutting edge.

3. A brad of the class described including a plurality of transverse walls and staggered connecting walls for holding said transverse walls in spaced parallel relation, each transverse wall extending below the connecting walls and having its opposite edges converging therebelow to form a spur, the outer side of each connecting wall being cut away adjacent its lower edge to form a cutting edge, the angled face formed by said cutting away being in continuance of and in the same angled plane as the joining edge of said transverse walls.

In testimony whereof I hereunto affix my signature.

ALVIN C. STRANDBERG.