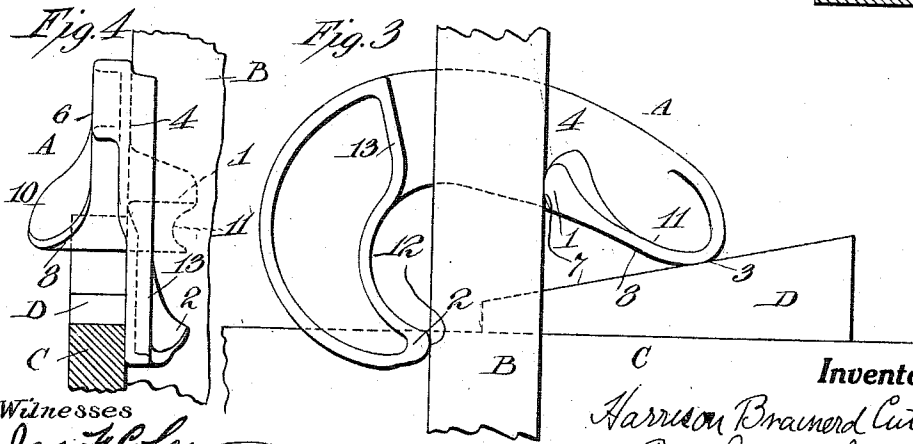
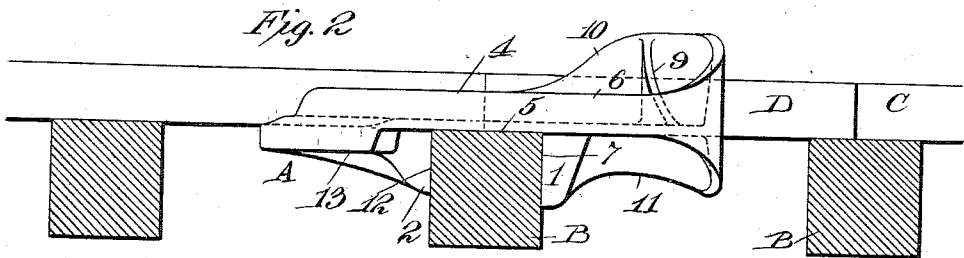
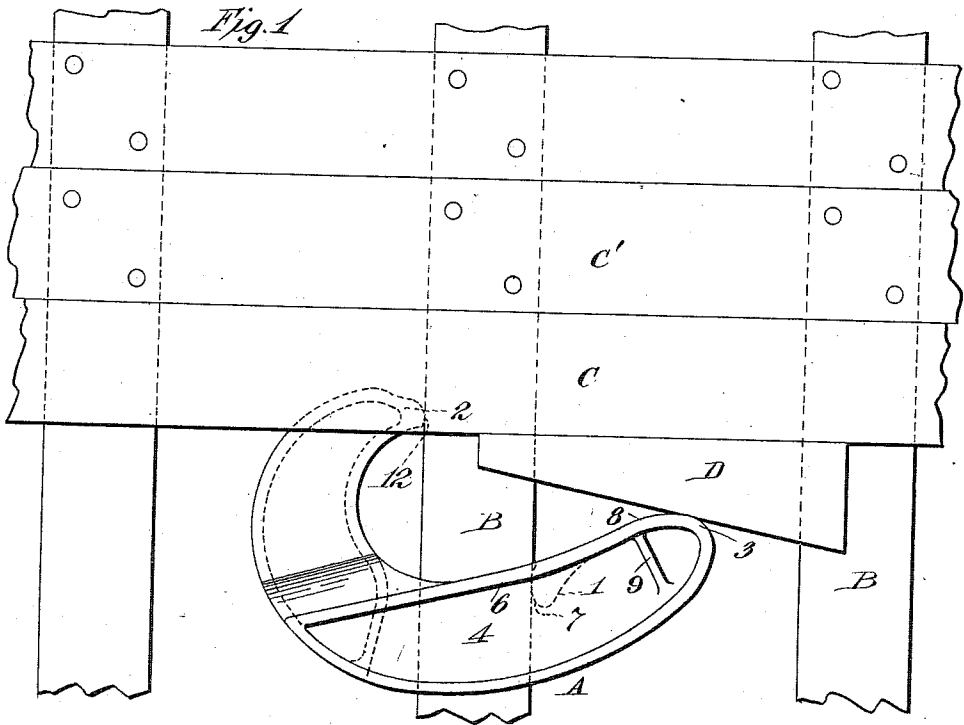


H. B. CUTLER.
 PLANKING AND DECKING CLAMP.
 APPLICATION FILED JUNE 4, 1909.

994,722.

Patented June 13, 1911.



Witnesses
Jas. F. Coleman
John H. Cook

Inventor
Harrison Brainerd Cutler
By Ayers & Ayer
 Attorneys.

UNITED STATES PATENT OFFICE.

HARRISON BRAINERD CUTLER, OF NEW YORK, N. Y.

PLANKING AND DECKING CLAMP.

994,722.

Specification of Letters Patent. Patented June 13, 1911.

Application filed June 4, 1909. Serial No. 500,085.

To all whom it may concern:

Be it known that I, HARRISON BRAINERD CUTLER, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented a certain new and useful Planking and Decking Clamp, of which the following is a specification.

The object I have in view is the production of a device for holding planking and decking in position in connection with boat, yacht and ship building operations, and for forcing one course of planking or decking against the courses already nailed in position.

Further objects are to produce a device which may be used, without adjustment, on frames or beams of different widths and thicknesses, which may be used for planking downward from the gunwale or upward from the keel, which may be used, without adjustment, for ceiling, decking or planking, and which also may be used in connection with planking on frames which curve inward, as well as those which curve outward.

These and further objects will appear more fully from the following specification and accompanying drawings, considered together or separately.

In the drawings: Figure 1 is a figure showing a clamp embodying my invention in position on a frame or beam, holding a plank in position preparatory to fastening. Fig. 2 is a bottom view of the same, showing the beams or frames in section. Fig. 3 is a side view of the clamp shown in Fig. 1, looking at it from the other side. Fig. 4 is an end view of the same, the planking being shown in section.

In all views like parts are designated by the same reference characters.

In carrying out my invention, I provide a clamp A, which lies against a frame or beam B and has members which engage upon both sides of the frame or beam, and another member which is acted upon by means of a wedge D, which bears against the edge of the plank C. The two members are in the form of ears 1 and 2, which engage with opposite sides of the frame or beam, locking the clamp in position and forming an abutment against which the wedge may be driven. The clamp preferably is of the lunule shape illustrated, having an ear 1 adjacent to its center portion, and an ear

2 adjacent to one end. The opposite end 3 forms an abutment for the wedge. The wedge D may be made of oak or other hard wood, and is adapted to be driven between the end 3 of the clamp and the last plank C. This will twist the clamp, engaging the two ears 1 and 2 on opposite sides of the frame or beam B. By this means the clamp will be locked upon the frame and against movement. The end 3 serving as a fixed abutment against which the wedge D will act, the plank C will be forced against the plank C' with any desired degree of force and it will be held in position.

The shape of the clamp A is such that it may be used upon frames or beams of different widths. It may also be used, without change, upon frames which curve inward or outward. The body of the clamp A, indicated at 4, is flat on one side, indicated at 5 (as shown in Fig. 2) so as to lie closely against and rest in contact with the beam or frame on the side on which the planking or decking is being fastened. The opposite side of the body is provided with a web flange 6, for the purpose of strengthening it. On the side 5 is formed an ear 1, already described. This ear 1 is sufficiently long to accommodate the clamp to frames or beams of the maximum molding. The inner face 7 of the ear 1 is straight (as shown in Fig. 2) and preferably lies at right angles to the side 5. Looking at the ear 1 at right angles, in the position shown in Fig. 2, the face 7 appears to be curved (as shown in Figs. 1 and 3). This curve is sufficient to prevent the formation of a sharp edge which would injure the frame or beam. The end 3 of the clamp is broadened and is much wider than the web flange 6 (see Fig. 2). This forms a broad table 8 (see Figs. 1 and 4) against which the wedge D will engage. This table is arranged substantially at right angles to the side 5 and is straight, viewed from the end (as shown in Fig. 4); but is curved when viewed from the side (as shown in Figs. 1 and 3). The curve is of a sufficiently large radius to provide a curved surface for engagement with the wedge D, so that the latter may be driven in. The purpose of curving the table is to present a smooth surface to the action of the wedge, irrespective of the angle at which the clamp will lie upon the frame or beam, such angle varying with the siding of the latter. This table is strengthened by a web 9, such web con-

necting the table and the body 4. The table merges upon one side into the web flange 6 at 10; and on the other side it merges into the ear 1 at 11 (see Fig. 2). This strengthens the ear and also strengthens the entire clamp.

The ear 2 has a face 12 (see Fig. 2), which is straight when viewed from the top, and is parallel to the face 7 on the ear 1, and is at right angles to the side 5 on the body 4. This face is curved when viewed at right angles (see Figs. 1 and 3) so as to produce a member which will engage with the frame or beam without cutting into the latter. The ear 2 is offset from the body 4 (as shown in Fig. 2), so that it will engage upon the side of the beam or frame opposite from the ear 1, as has already been described,—the body 4 of the clamp lying to one side of and in engagement with the frame or beam. This end of the body 4 is surrounded by a web flange 13 (as shown in Fig. 3), by means of which it is strengthened.

The distance between the ears 1 and 2 determines the maximum siding of frame or beam upon which the clamp may be used. The clamp may be used upon a frame of any siding less than this, as will be apparent. One size of clamp, therefore, may be used upon all work, which is an important practical advantage. Another advantage of the clamp is that it is in one piece and has no moving members. It may be quickly applied,—the operator placing the clamp against the frame or beam with the side 5 in contact therewith, and the ears 1 and 2 on opposite sides. He then inserts the wedge D between the end 3 and the plank C and drives the former in place. The wedge D may be placed to be driven either toward or away from the clamp,—which ever is most convenient. It is apparent also that the clamp will not slip while nailing off, and will not injure the planking or decking or ceiling or the frames or beams. It is also apparent that it does not interfere with boring or plugging as is the case with clamps which employ chains, such chains running across the course of planking and interfering with boring and plugging.

I prefer to make my clamps of malleable iron and paint them red,—making them conspicuous among the shavings. The clamp may be used either inside or outside of the frames for planking, or ceiling, and may be used for planking upward from the keel or downward from the gunwale, as well as ceiling or decking. Owing to the breadth of the table 8, the wedge D will engage fairly with the clamp and plank, irrespec-

tive of the curve of the frame or beam. The same clamp, therefore, may be used without change for frames which curve inward as well as those which curve outward.

It is apparent that the clamp can be used in other structures than ships, boats or yachts.

In accordance with the provisions of the patent statutes, I have described the principle of my invention, together with the apparatus which I now consider to represent the best embodiment thereof; but I desire to have it understood that the apparatus shown is merely illustrative and that the invention can be carried out in other ways.

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

1. A clamp of crescent shape, having a body, an offset portion at one extremity of the body, said offset portion being on a different plane from the body, and carrying a depending ear, the other extremity of the clamp being in the form of a table, and a depending ear intermediate the table and the first ear.

2. A clamp of crescent shape, comprising a body, an offset extremity at a lower plane than the body and carrying a depending ear, a widened table at the other extremity and a depending ear intermediate the table and the first ear.

3. A clamp having a body, a web flange on the body, a broad table at one end, said table merging into the flange, the other end of the body being in the form of a hook, said hook lying in a plane lower than the body, and a depending ear at the end of the hook.

4. A clamp having a body, a web flange on the body, a broad, curved table at one end, said table merging into the flange, an offset hook on the other end, an ear on the hook, a second ear on the body between the first ear and the table.

5. A clamp having a flat body, an offset hooked end, a dependent ear at the hooked end, a web flange adjacent to the ear, a web flange on the other side of the body extending to the other end, a rib joining the web flange and the body, a flange opposite the last mentioned flange, the two flanges constituting a broad table, and a dependent ear intermediate the table and hook.

This specification signed and witnessed this first day of June, 1909.

HARRISON BRAINERD CUTLER.

Witnesses:

LLOYD A. CUTLER,
CHAS. M. JEROLOMAN.