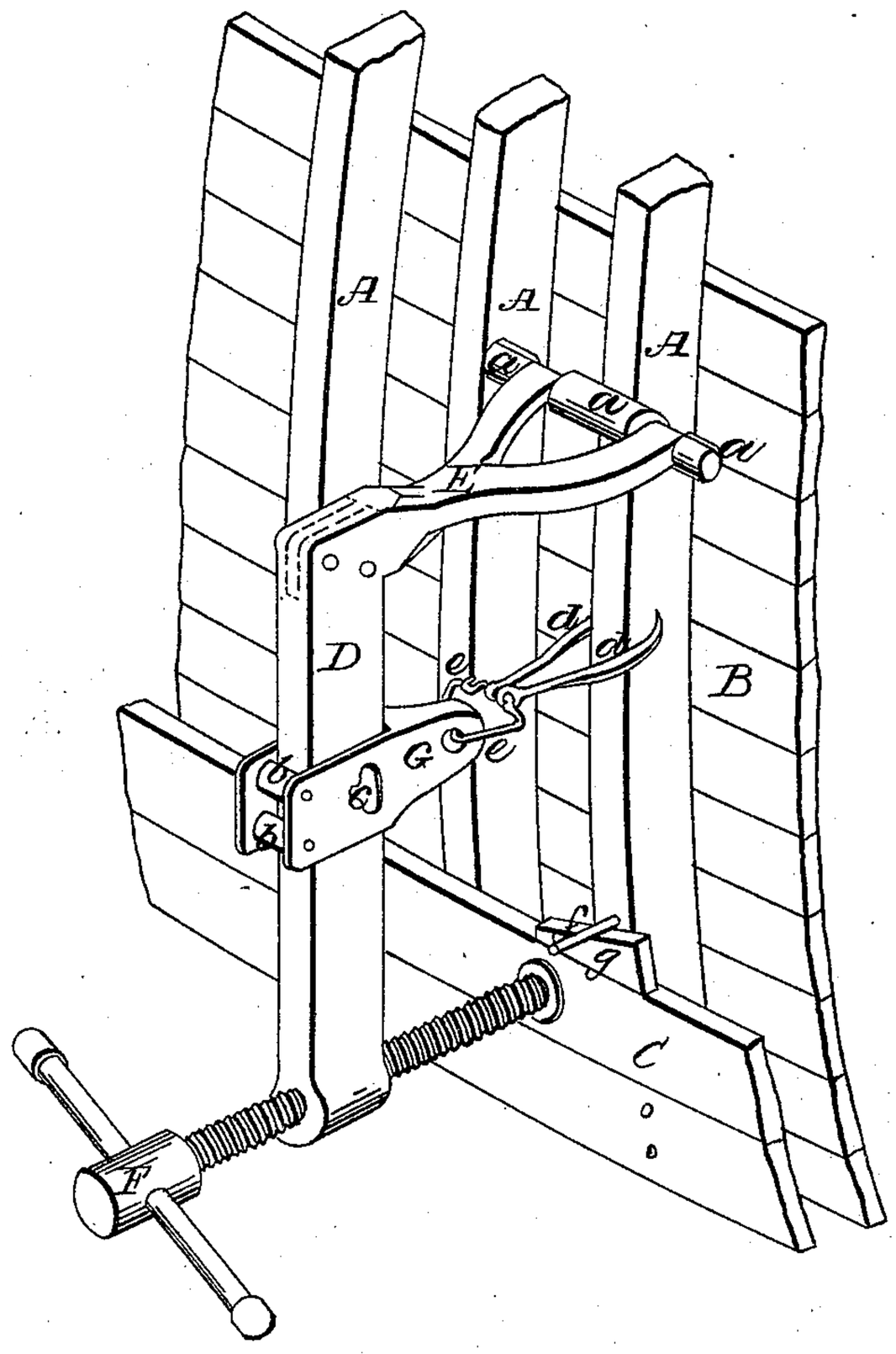
G. Savage, Jr.,

Planking Clamp.

No. 62,894. Patented Mar. 12, 1867.



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GEORGE SAVAGE, JR., OF BANGOR, MAINE.

Letters Patent No. 62,894, *dated March* 12, 1867.

IMPROVED PLANKING SCREW.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE SAVAGE, Jr., of Bangor, in the county of Penobscot, and State of Maine, have invented a new and useful improvement on Planking Screws; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawing, making a part of this specification, which drawing is a perspective view of my invention, applied to the outboard planking of a vessel.

The nature of my invention consists in a planking screw, which is attached to the vessel by adjustable arms or dogs, and is provided with rollers which allow the screw to follow the direction in which the plank, upon which it is operating, may be moved, thereby obviating much of the strain to which such work subjects screws of ordinary construction.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

After the frame of a vessel is set up, the inboard planking is usually first done, after which the outboard planking is put on. But whichever may be last done, the application of the common clamp-screw, to force the planks against the timbers, is rendered difficult by the planking upon the opposite side of the timber, for the reason that planking screws, as heretofore constructed, were designed to exert their force upon the opposite sides of the timber and plank which they were employed to bring together; hence the difficulty of attaching the clamp to the timbers when the opposite side was "planked in." Another difficulty attending the use of the common screw in planking vessels is the fact that owing to the "lines" of the vessel, many planks have not only to be bent sideways towards the timbers by the direct action of the screw, but they have also to be bent at the same time edgewise by the application of wedges or other means, and as the clamp rigidly adheres to the timber wherever applied, the lateral strain upon the screw is then more severe than the direct strain, often resulting in a broken or damaged screw or clamp.

In the drawings, A A A represent sections of frame timbers of a vessel. B is a section of the inboard planking. C is a section of the outboard planking, which is being last done. D represents a short stout lever, having a female screw formed near one end, in which works the male screw F, while at the other end it is formed with a right-angled prop or fulcrum, E. At the extremity of this prop are attached the rollers *a a a*, which bear upon the timbers A A A. G is a clevis, sliding upon lever D; this clevis is secured in any desired position by the set-screw *c*, while two small rollers, *b b*, which revolve upon the pins that secure the clevis to lever D, also bear upon the edge of the lever, and insure its easy motion in passing through the clevis, when screw *c* is released. *e e* is a triangular link which plays loosely in a hole in clevis G. Attached to this link are two dogs, *d d*, formed so as to be readily and securely attached to the timbers of the vessel. The link *e e* is so formed that the dogs, when attached both to the same timber, draw upon the centre of the link, but when extended, they draw from the angles of the link.

The operation of this screw, when in use, is plainly shown in the drawings. The rollers *a a a* bear against timbers A A A, while dogs *d d* are fastened to one of the timbers A, and screw F operates against plank C, thereby forcing it against timbers A A. Should it be necessary to give the plank C an edgewise bend, it is done by means of the wedge *g* driven between the plank and the bolt *f*, which thereby forces the plank downwards edgewise. And it will be apparent that as the plank C moves downwards, the screw F will follow the movement by reason of the rollers *a a a*, in bearing E, and rollers *b b* in the clevis G, allowing lever D to move in accordance with the plank which is being bent into place, thereby causing screw F to act directly upon the plank, however much it may be bent edgewise after the screw is applied. This screw is adapted to many uses upon vessels besides planking, and from its peculiar operation and feasibility of being attached, can be used where other screws cannot.

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

1. The planking screw, consisting of lever D, with the prop or fulcrum E, screw F, and dogs *d d*, attached to lever D, by the clevis G, or its equivalent, all arranged to operate in manner substantially as described and shown.

2. The rollers *a a a*, in fulcrum E, in combination with sliding clevis G, whereby to allow the adjustment of screw F, substantially in manner as and for the purpose specified.

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