

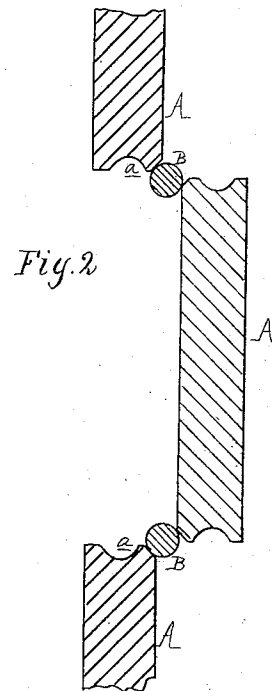
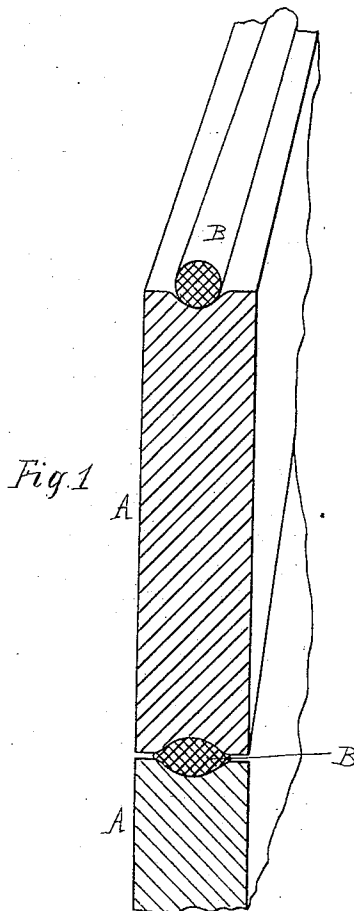
(No Model.)

C. E. MARK.

ELASTIC JOINT FOR THE PLANKING OF VESSELS.

No. 311,593.

Patented Feb. 3, 1885.



Attest:
John Schumann
Notary

Inventor:
Charlie E. Mark.
by his Atty
Thos. L. Sprague

UNITED STATES PATENT OFFICE.

CHARLIE EDGAR MARK, OF FLINT, MICHIGAN.

ELASTIC JOINT FOR THE PLANKING OF VESSELS.

SPECIFICATION forming part of Letters Patent No. 311,593, dated February 3, 1885.

Application filed September 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLIE EDGAR MARK, of Flint, in the county of Genesee and State of Michigan, have invented new and useful Improvements in Marine Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in the construction of marine vessels, whereby the difficulties and dangers arising from the ordinary calking usually employed to make water-tight joints are avoided.

The invention consists in the employment of an elastic packing between the joints held in place by compression between two adjacent planks, as more fully hereinafter described.

Figure 1 is a perspective view of a section of the outer planking of a vessel with my improved packing in the seams. Fig. 2 is a detail end elevation of the same, showing the manner of inserting a plank in place of a broken or damaged one.

In the accompanying drawings, which form a part of this specification, A A represent the planks which form the outer sheathing of the vessel. The edges of these planks have formed in them a groove, *a*, preferably in the form of the half of an ellipse, as shown, so that when two edges of adjacent planks are put into a coincident position the opening between them will be an elliptical one. An elastic and solid roll, B, preferably made of rubber, and with a diameter larger than that of the ellipse on its shorter axis, is inserted in such elliptical opening when the planks are made to advance toward each other, whereby the roll is compressed and compelled to assume the form of the opening, thereby making a water-tight joint, which will allow of a greater working of the planks in a heavy sea without disturbing the packing than can be had where the ordinary method of calking is employed. Should it become necessary to take out a plank from any cause and replace it, this replacing may be done as shown in

Fig. 2, where the adjacent corners of the plank to be inserted and those of the planks in place are beveled off, and the two elastic rolls forming the packing between such planks are placed as shown in Fig. 2, when a strong side pressure will force the plank and the packing-rolls to place.

I am aware that it is not new to form a water-tight joint between the edges of planks by providing the same with corresponding grooves, said grooves being nearer one surface of the planks than the other, thus leaving a crack leading from said nearer surface to the groove, through which, when the boards are in place, fibrous material is forced into the groove with a calking-tool in the ordinary manner.

I am also aware that it is not new to provide the adjacent edges of planks with corresponding grooves, into and between which a rubber packing is held in a compressed condition when the boards are in place, as shown in English Patent No. 1,278 of 1873.

I lay no claim to the above constructions as forming a part of my invention, as in both cases the edges of the planks abut tightly together, and designedly so, whereas in my construction a space is left between the edges of the planks. The advantage of this construction over the former is that provision is made for the expansion and contraction of the planks when alternately exposed to water and air, as is the case with ships, &c., whereas in the former construction, where the edges of the planks abut, an exposure to moisture causes them to expand, and a bulging or warping of the same is a necessary and dangerous consequence.

Another advantage of my construction is that a plank may be removed and a new one substituted without destroying the rubber packing. Such is not the case where the edges of the planks abut, as the packing between the edges is destroyed on the removal of a plank, and no provision is made for the substitution of the other packing upon replacing a new board. In fact, new packing cannot be put in when a board has been replaced between two others, when the parts

are made as in the English patent above referred to.

What I claim as my invention is—

5 The combination of two boards having co-incident beveled edges and arranged at a span or distance apart with a board of less width than said span and beveled on its inverse

edges, and an elastic roll inserted between the junction of said boards, substantially as shown, and for the purposes described.

CHARLIE EDGAR MARK.

Witnesses:

H. S. SPRAGUE,

CHARLES J. HUNT.