

(No Model.)

2 Sheets—Sheet 1.

W. E. DODGE.
VESSEL.

No. 529,065.

Patented Nov. 13, 1894.

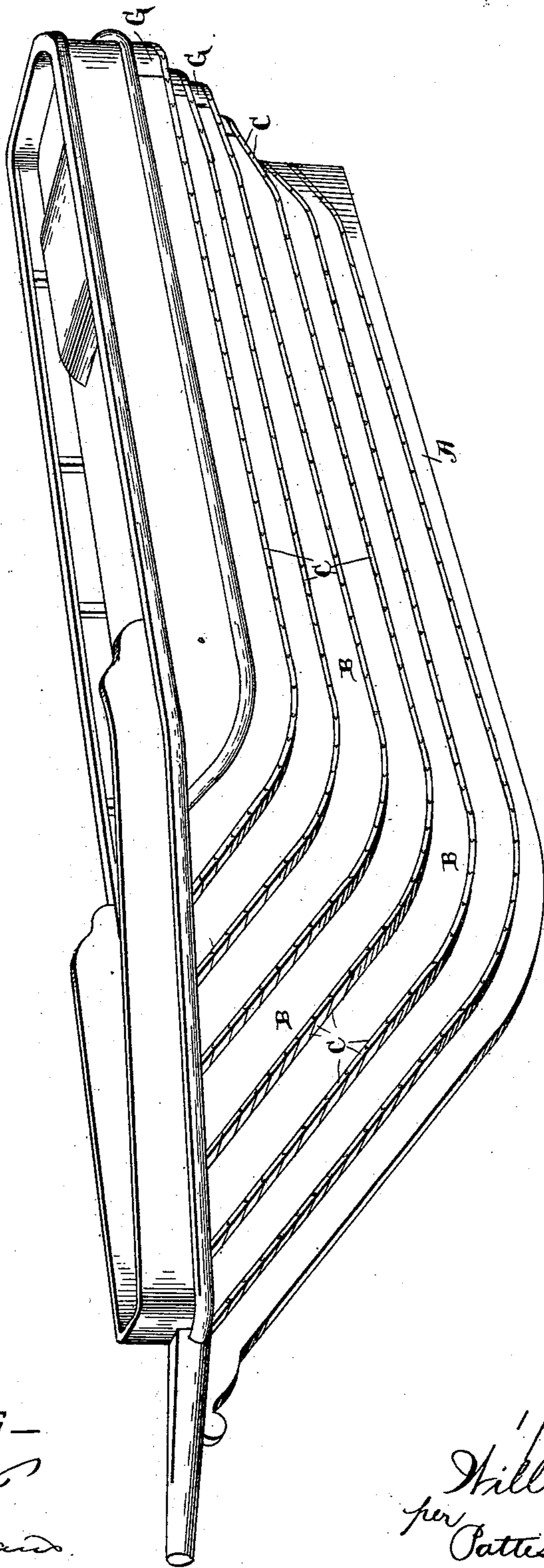


Fig. 1.

WITNESSES—
Geo. C. French,
James M. Brand.

INVENTOR—
William E. Dodge,
per Patterson & Nesbit, attys.

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Fig. 3.

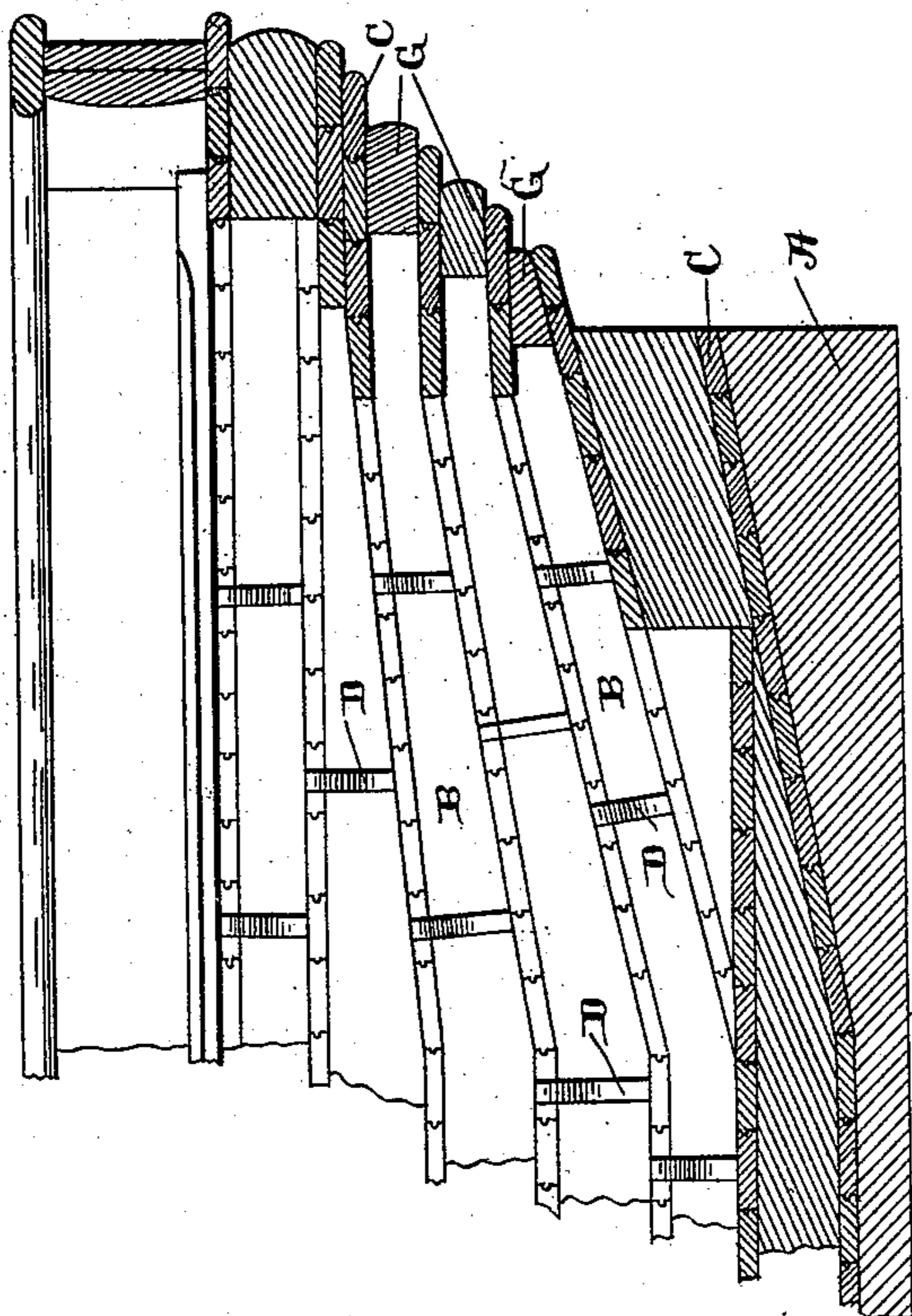


Fig. 4.

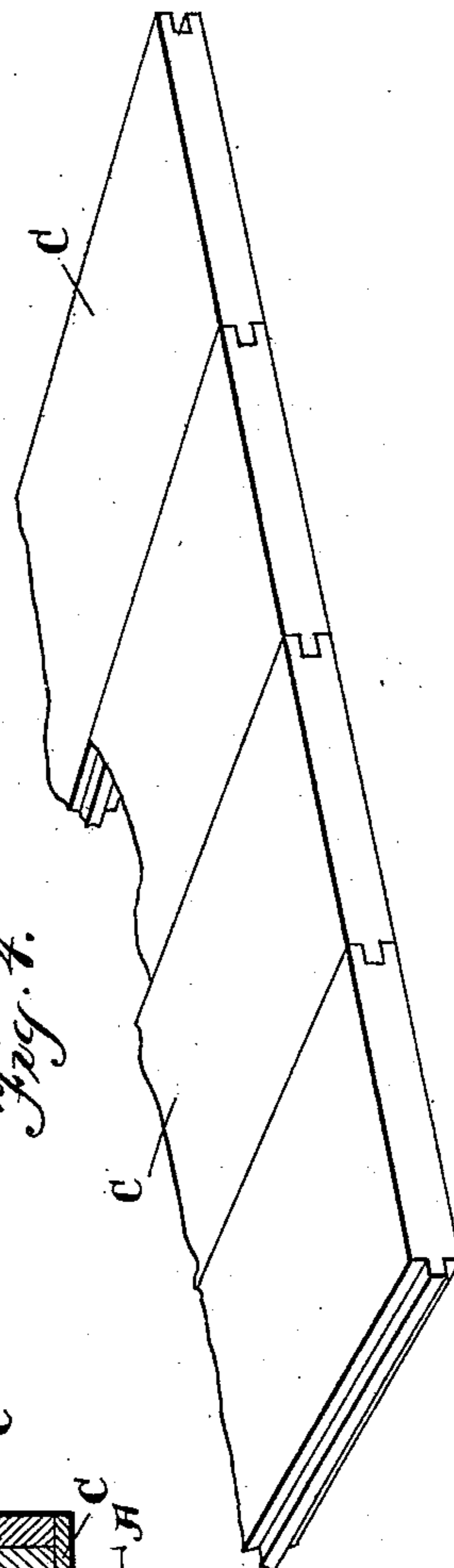
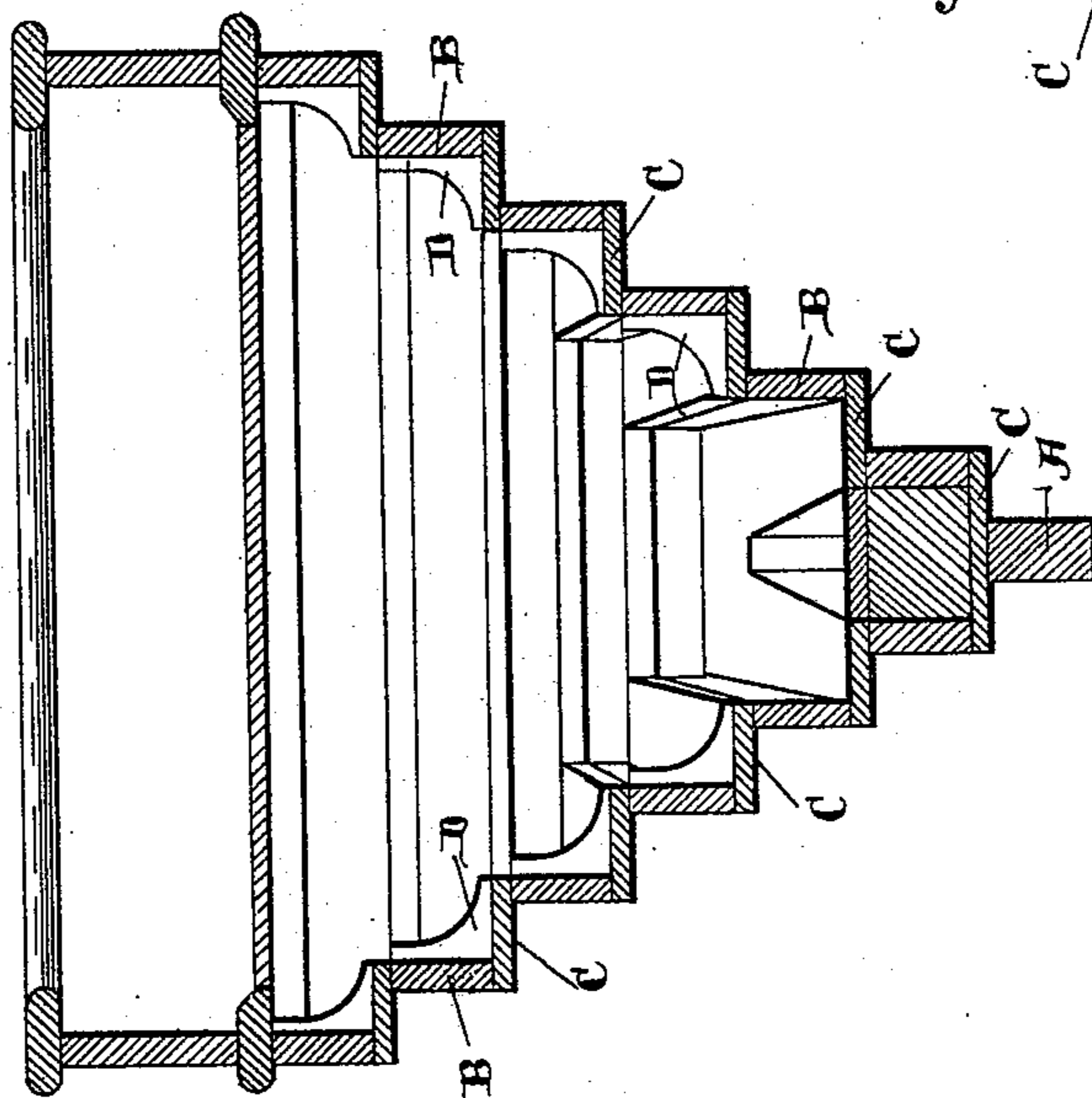


Fig. 2.



WITNESSES:

Geo. C. Freck;

James W. Berans.

INVENTOR—
William E. Dodge,
per
Pattison Nesbit, atty.

UNITED STATES PATENT OFFICE.

WILLIAM E. DODGE, OF BALTIMORE, MARYLAND.

VESSEL.

SPECIFICATION forming part of Letters Patent No. 529,065, dated November 13, 1894.

Application filed July 18, 1894. Serial No. 517,926. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. DODGE, of Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Vessels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in vessels; and it consists of the construction hereinafter shown and described and particularly pointed out in the claims.

The object of my invention is to provide a vessel so constructed that the great displacement of water at the bow is prevented, and the vessel caused to run upon the top of the water instead of burying and pushing or displacing an immense quantity of water.

In the accompanying drawings:—Figure 1 is a perspective view of the vessel which embodies my invention. Fig. 2 is a transverse central vertical sectional view looking toward the stern of the vessel. Fig. 3 is a longitudinal central vertical section of the stern of the vessel. Fig. 4 is an enlarged detached perspective view of several of the planking, showing their specific construction.

A indicates the keel of the vessel which is constructed of timber in the usual manner and extends up to form the cut-water as shown, the same being in such an inclination that as little water as possible will be displaced thereby, as will be more fully explained farther on.

The hull of the vessel consists of a series of vertical timbers B placed one above the other in step fashion and connected by the horizontal planking C as clearly shown in the drawings. The planking extends crosswise the vessel, while as just stated the timbers B run lengthwise, and have their forward ends curved upward in lines parallel with the upward curve and inclination of the keel and cut-water.

The planking C of the vessel consists of a series of short and comparative narrow planks as clearly illustrated, and these planks have their edges provided respectively with tongue and groove as clearly shown in Figs. 1, 3, and

4 of the drawings, the object of which is to prevent the necessity of calking the vessel.

The lower planking as shown in Fig. 2, extends across the keel A and outward therefrom at each side. Upon the upper face of each end of these series of planking the vertical and longitudinal timbers B are placed and securely held by spiking from and through the under side of the said planking. The planking is then continued on throughout the entire depth of the hull by placing the inner edges of the planks upon the top of each succeeding longitudinal timber B as shown, and securing them in place upon the said longitudinal timber preferably by wood screws, then placing the next succeeding longitudinal timber upon the upper outer faces of the planking and securing them in position the same as the timbers are held in place upon the lower series of planking just explained.

The cross planking or braces G forming and extending across the stern of the vessel are held in place by means of suitable spiking, and are arranged in step fashion to correspond with the step arrangement of the longitudinal timbers and cross planking.

Short knees D are placed upon the cross planking and extend upward against the inner side of the longitudinal timbers for the purpose of strengthening and holding the planking and timbers in their relative right angle position as will be readily understood.

From this description it will be seen that I have produced a vessel composed of a series of longitudinal timbers connected by cross planking, thus forming a vessel having an outer surface arranged in step fashion throughout its length, the forward end of the said vessel being cut away to a great extent for the purpose of displacing as little water as possible, and also for the purpose of having the inclined outer faces of the planking forming horizontal bearing surfaces upon the water, lift the vessel in contra-distinction to burying. Owing to the fact that the vessel rises and travels on the top of the water as compared to a vessel of the ordinary construction, it will be readily seen that there is a considerable less displacement of water at the bow. Another function and purpose of these vertical timbers and horizontal planking, are to form substantially a series of vertical keels which will

enable the vessel to hold on to the windward to a great extent and by the horizontal planking surfaces give the vessel a much greater resistance against careening.

5 The planking which is used in the construction of this vessel is previously prepared by filling its pores with linseed oil and pitch at a temperature of 120° Fahrenheit and all of the joints are subjected to a coating of this
10 substance before they are put together, thus rendering the planks and also the joints impervious to water as will be clearly understood.

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

1. An improved vessel consisting of a series of longitudinal timbers, and horizontal planking connecting the opposite edges of the said
20 timbers, substantially as specified.

2. An improved vessel consisting of a series

of vertical longitudinal timbers each arranged above and outside of the preceding one, and horizontal planking C extending in a direction transverse the vessel and having their opposite ends secured to the opposite edges of the said vertical timbers, substantially as described. 25

3. An improved vessel having the side and bow consisting of a series of vertical longitudinal timbers curved upward at their forward ends, and horizontal planking connecting the opposite edges of said timbers, and a stern consisting of horizontal and vertical planking and timbers in inverted step fashion, substantially as set forth. 30 35

In testimony whereof I affix my signature in presence of two witnesses.

WM. E. DODGE.

Witnesses:

P. JOBANNSLER,

JAS. H. CURTAIN.