

(No Model.)

2 Sheets—Sheet 1.

A. H. WILLIAMS.

PONTON.

No. 280,272.

Patented June 26, 1883.

Fig. 1.

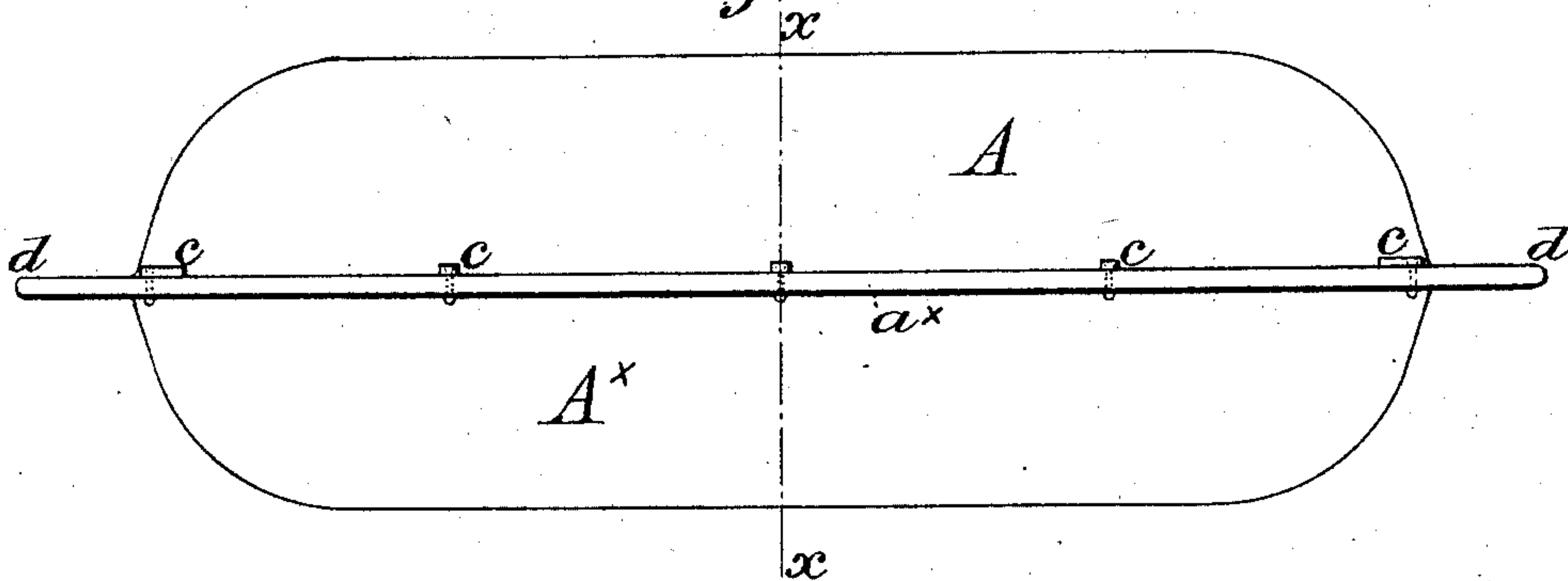


Fig. 2.

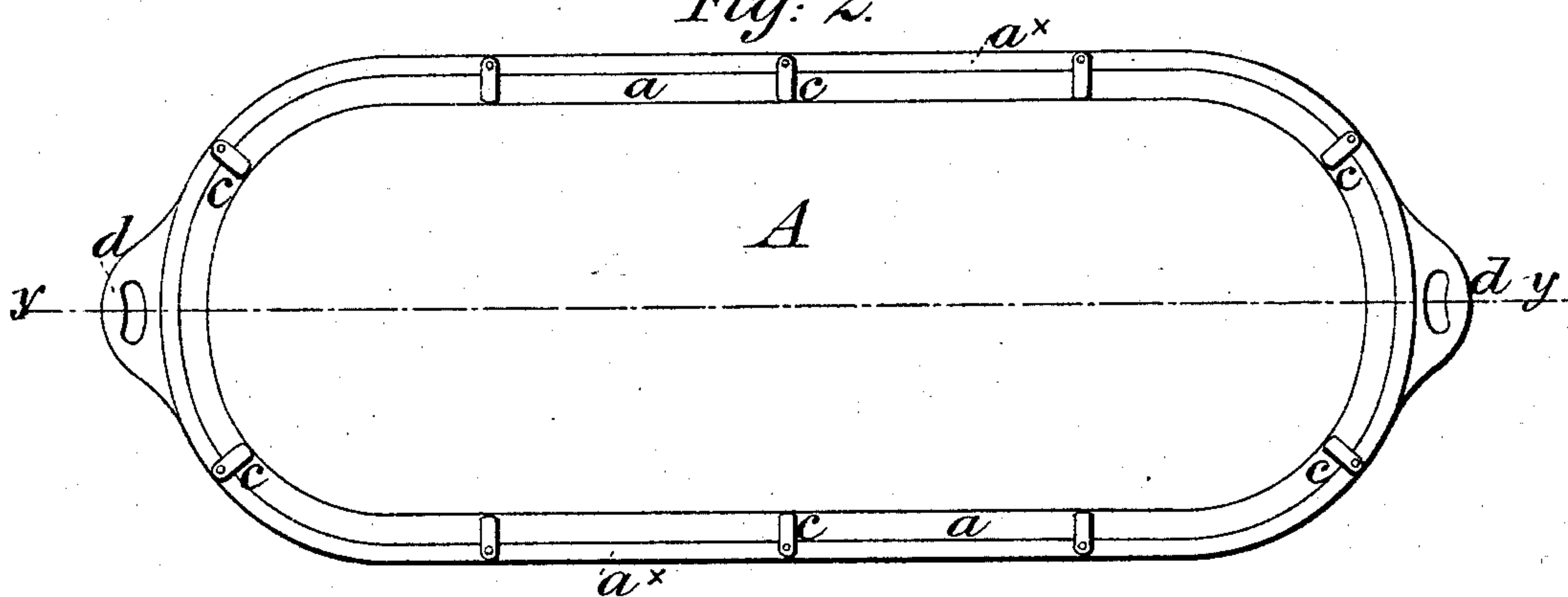
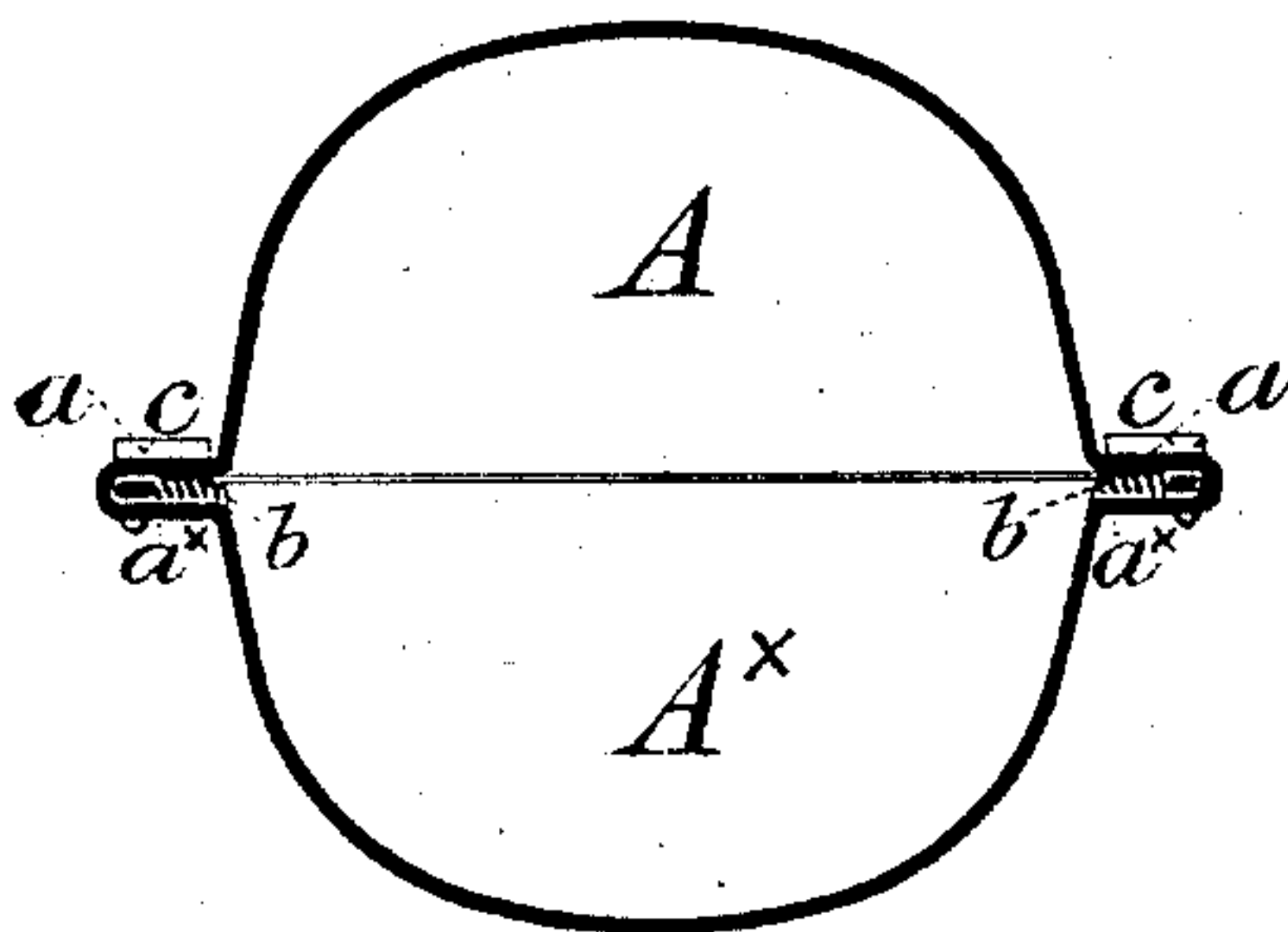


Fig. 3.



Witnesses.

*Ernest de laet*  
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Inventor.

*Alfred Hamlyn Williams*

(No Model.)

2 Sheets—Sheet 2.

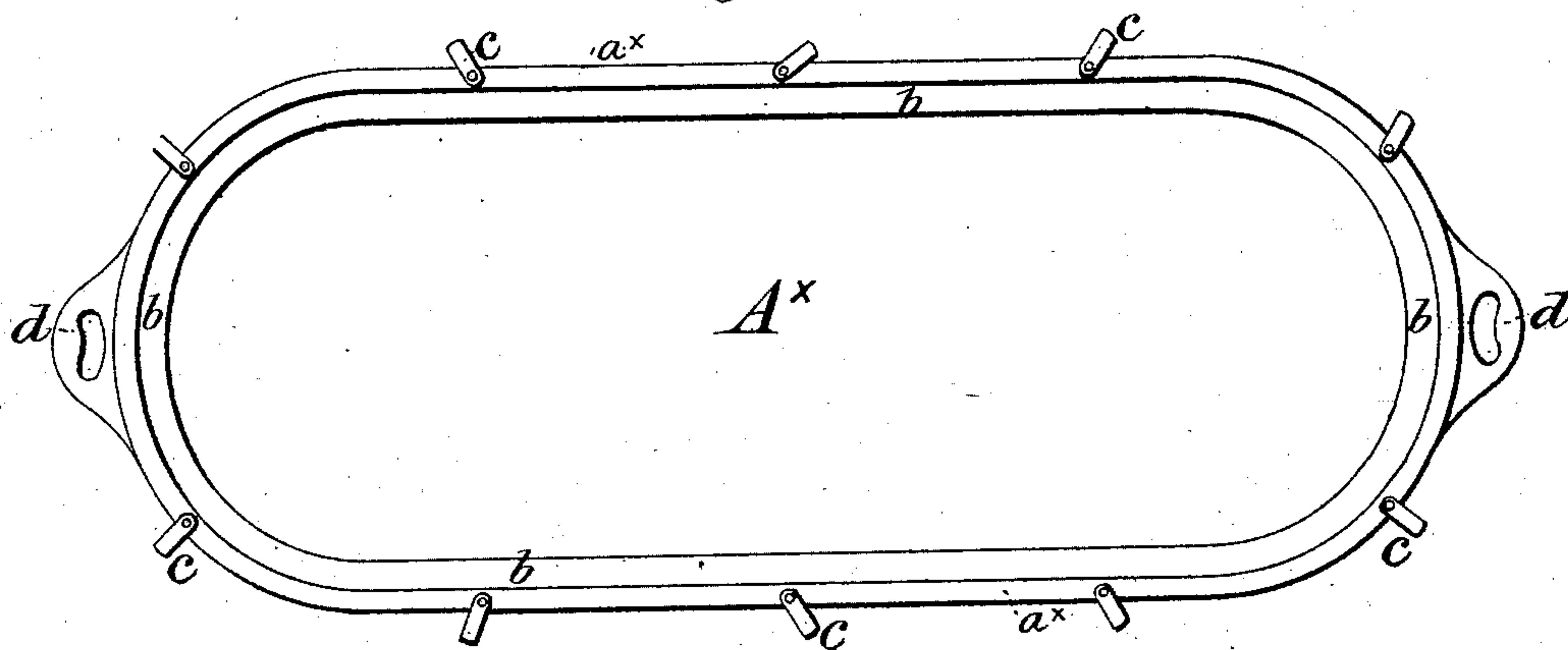
A. H. WILLIAMS.

PONTON.

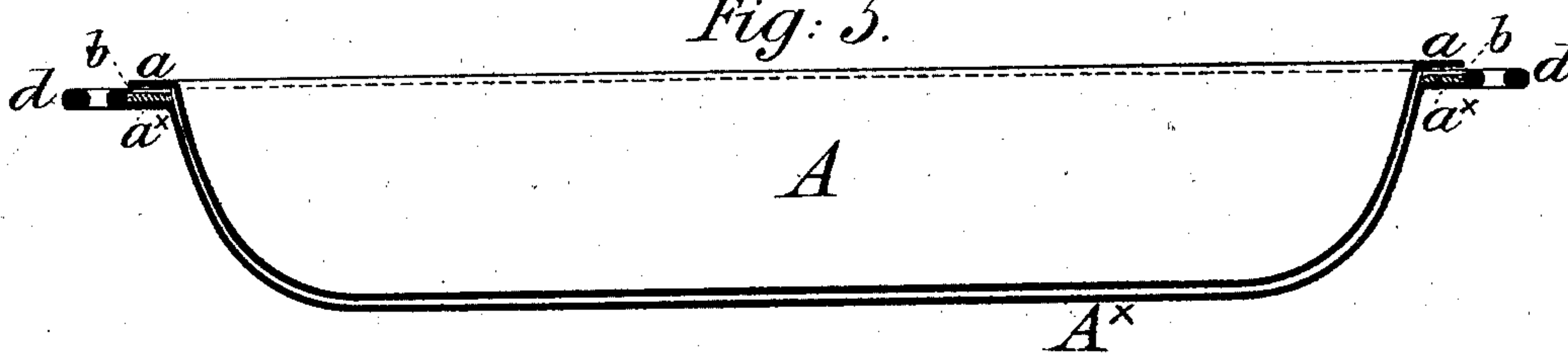
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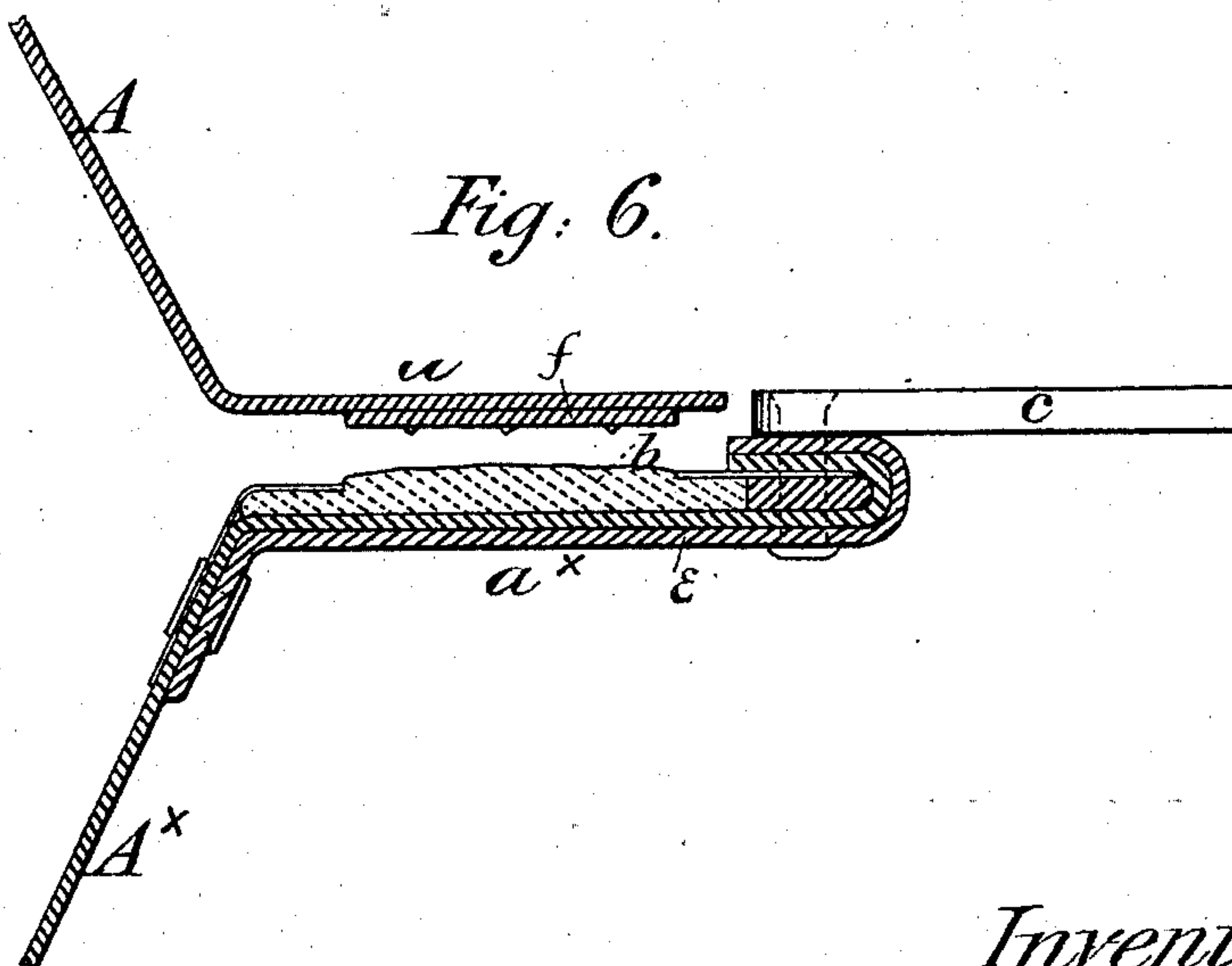
*Fig. 4*



*Fig. 5.*



*Fig. 6.*



Witnesses:

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Inventor:

*Alfred Hamlyn Williams*



# UNITED STATES PATENT OFFICE.

ALFRED H. WILLIAMS, OF PECKHAM, COUNTY OF SURREY, ENGLAND.

## PONTON.

SPECIFICATION forming part of Letters Patent No. 280,272, dated June 26, 1883.

Application filed March 1, 1883. (No model.) Patented in England August 16, 1882, No. 3,925.

*To all whom it may concern:*

Be it known that I, ALFRED HAMLYN WILLIAMS, a subject of the Queen of Great Britain, residing at Peckham, in the county of Surrey, England, have invented certain new and useful Improvements in Pontons, of which the following is a specification.

My invention relates to an improved construction of ponton or air-vessel for use in the formation of military bridges, for raising sunken vessels, for saving life and property at sea, and for other like purposes; and it consists in the peculiar form and construction of the same, as will be hereinafter more fully described.

My invention will be understood by reference to the accompanying drawings, in which Figure 1 is a side elevation of my improved ponton. Fig. 2 is a plan thereof; Fig. 3, a transverse section on line *xx* in Fig. 1; Fig. 4, a plan of one of the sections or halves detached; Fig. 5, a longitudinal section taken on line *yy* of Fig. 2, showing the sections or halves lying one within the other. Fig. 6 is a section, drawn to a larger scale, of the upper and lower flanges, showing the method of forming the same and the arrangement of the packing.

According to my invention my improved ponton or air-vessel is constructed in two detachable sections, *A A'*, preferably halves, which are of such shape or form that when not in use they may lie and be packed one within the other, as shown in Fig. 5, for the purposes of economizing space in storage and rendering them readily transportable. These portions are made of thin sheets of iron or other suitable material, and preferably of an oblong externally-convex form, as shown. Each portion or half is furnished with a flange, *a a'*, that marked *a'* being provided with suitable packing, *b*, which is held in place by the flange being turned over on it or reflexed, as shown in Fig. 6, so that when the two flanged portions or halves are put together to constitute the ponton an air and water tight casing or vessel is formed. The flanged portions or halves, when fixed in place, are held together by buttons *c*, which are pivoted to the flange *a'*, and are arranged to turn over the flange *a* when the sections of the ponton are fitted together.

*d* are handles, which are fixed at each end of the sections for the purposes of readily manipulating and transporting the portions of the pontons or the ponton itself when built up.

The flange *a*, I form on the portion or section *A* by simply bending over the edge of the latter; but the flange *a'*, I prefer to strengthen and back by a flange-plate, *e*, as shown in Fig. 6. To prevent the flange *a* from sliding on the packing *b*, I prefer to secure a roughened plate, *f*, to the under face of said flange to rest upon the packing. These features are shown best in Fig. 6, wherein the flanges are drawn to a larger scale.

It will be observed that the two halves or sections *A* and *A'* of my ponton are of the same size; but owing to their peculiar convex shape one fits snugly within the other, as shown in Fig. 5. This construction enables me to pack or nest the halves to any extent for convenience in transportation, as many as one hundred sections being readily packed within the space occupied by a single ponton when set up.

I am aware that pontons have been proposed made up of sections, and that it has been proposed to make a ponton of two cylindrical flanged sections, one section being capable of telescoping with the other; but it is obvious that only the two sections of one ponton can be thus fitted together, while with my construction the number capable of being nested is practically unlimited. This application of the principle of nesting like halves of pontons made convex exteriorly, and provided with suitable flanges and fastening devices, I believe to be new.

Having thus described my invention, I claim—

1. A ponton composed of two flanged sections of like size, and shaped substantially as shown, whereby they will nest or pack closely in any number, as described, for storage and transportation, and one of said sections provided with fastening devices, substantially as described, whereby the sections may be secured together in setting up the ponton, as set forth.

2. A ponton composed of two oblong externally-convex flanged sections, *A* and *A'*, one adapted to fit within the other for packing and transportation, and one of said sections pro-

vided with buttons adapted to take over the flange on the other for the purpose of securing the sections together, substantially as set forth.

3. The combination, to form a ponton, of the  
5 section A, provided with a flange, *a*, and the  
section A<sup>x</sup>, provided with a flange, *a*<sup>x</sup>, a pack-  
ing, *b*, retained in place by the reflexed edge  
of the flange, and fastening devices *c*, substan-  
tially as set forth.
- 10 4. A ponton constructed of two flanged sec-  
tions or halves, A and A<sup>x</sup>, provided with a  
suitable packing between the flanges, and with

fastening devices *c* and handles *d*, substan-  
tially as set forth.

In witness whereof I have hereunto signed 15  
my name in the presence of two subscribing  
witnesses.

ALFRED HAMLYN WILLIAMS.

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