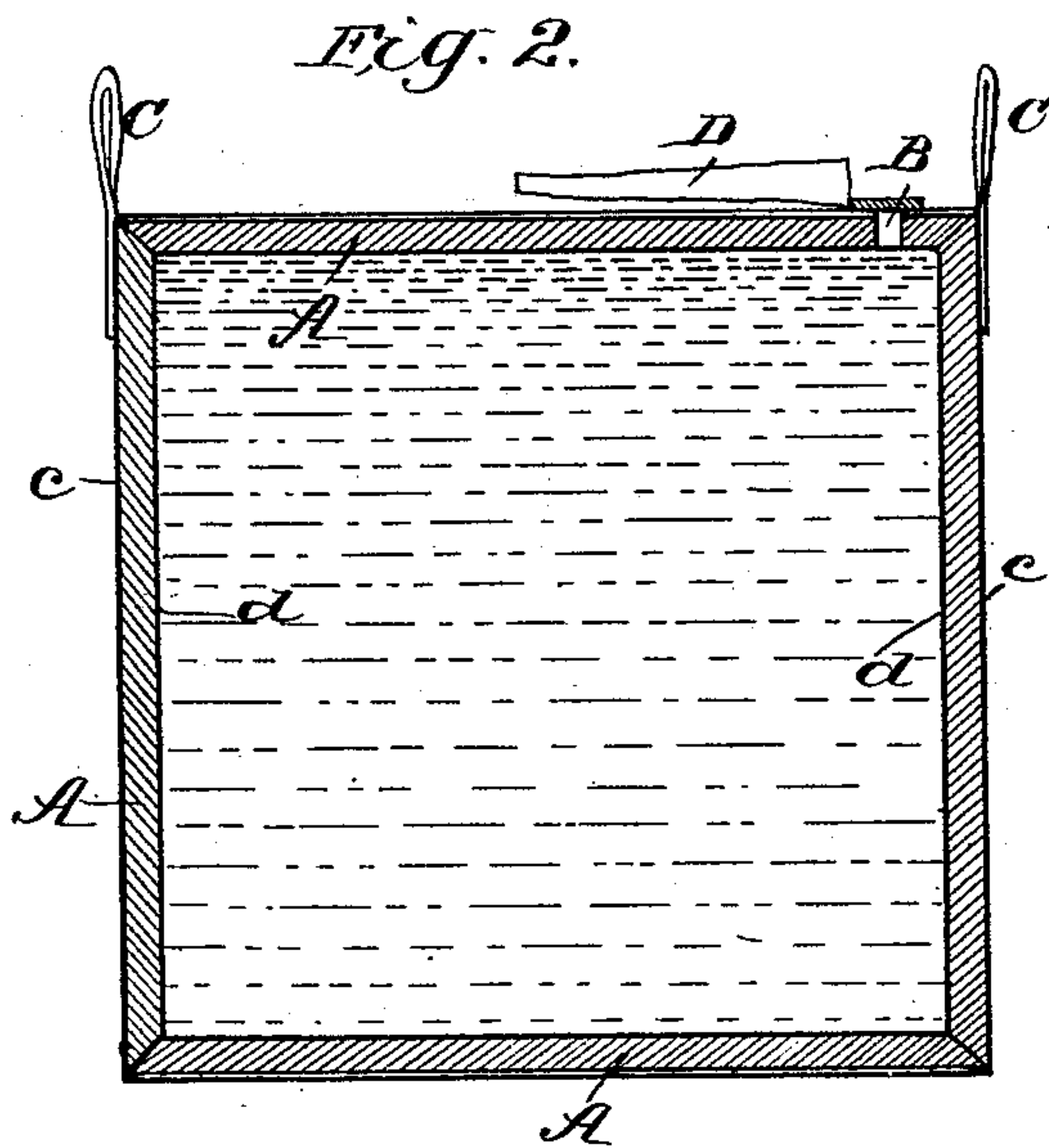
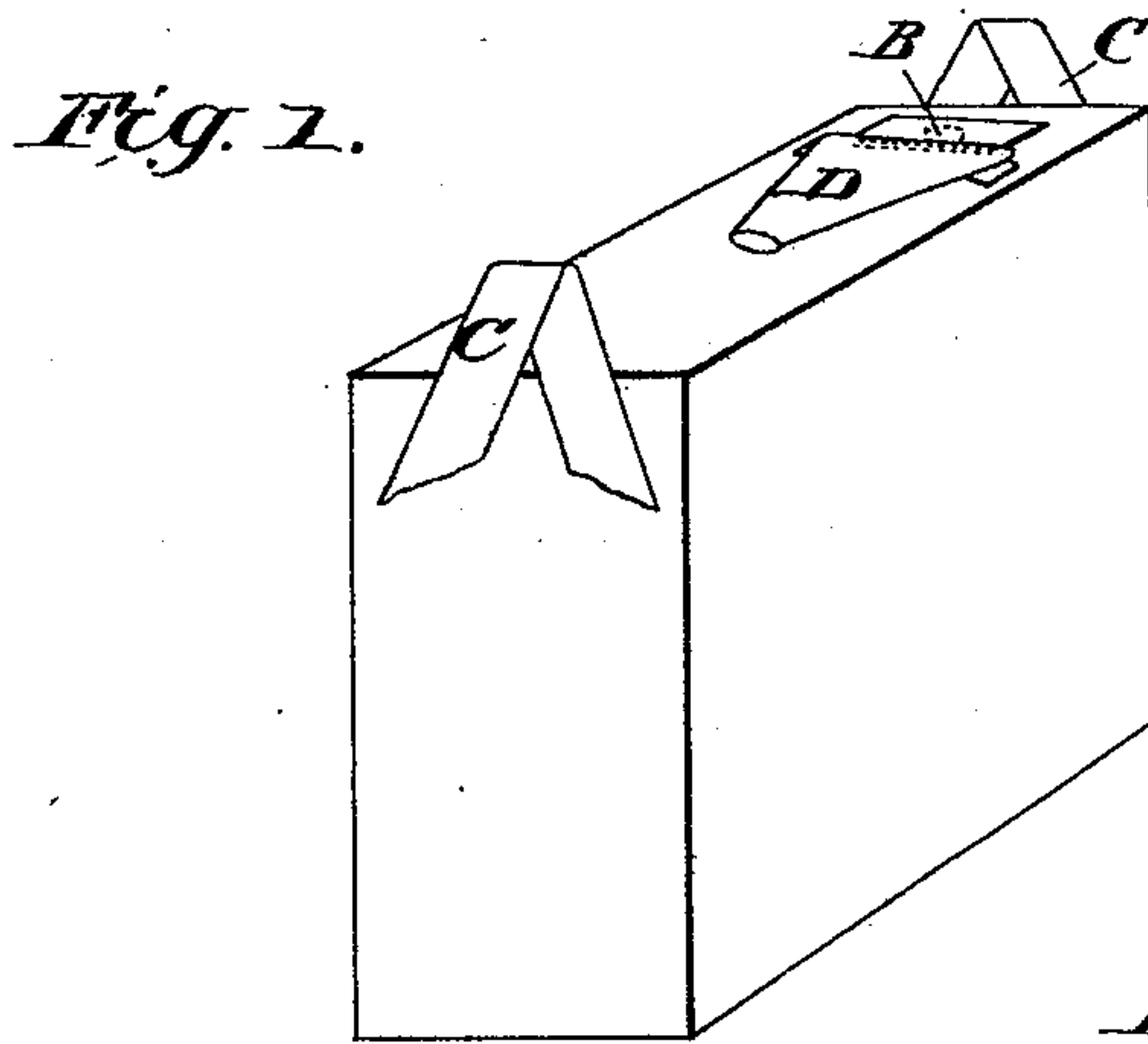


(No Model.)

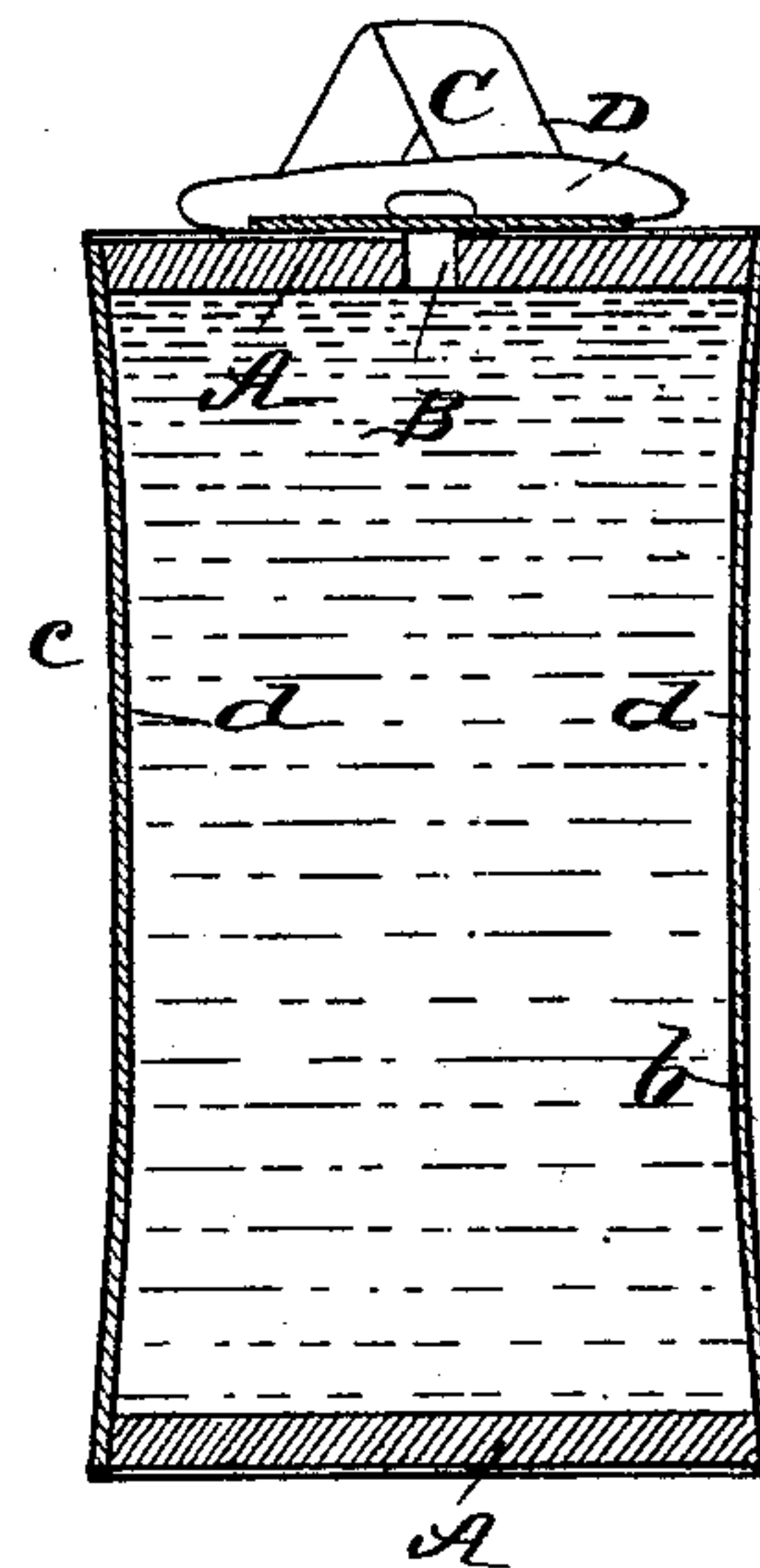
J. D. SPRUNT.  
CASK FOR PETROLEUM.

No. 500,245.

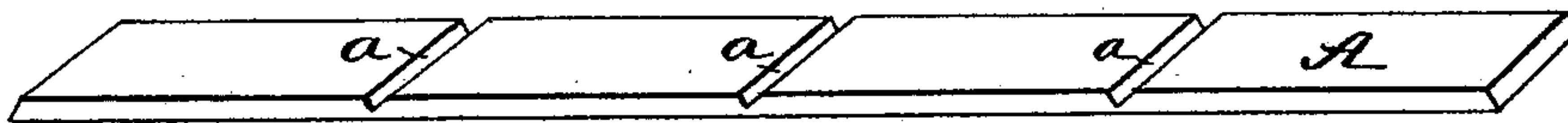
Patented June 27, 1893.



*Fig. 3.*



*Fig. 4.*



WITNESSES:

*John A. Ryan*  
*Edw. W. Ryan*

INVENTOR:

*John D. Sprunt.*

BY *Munn & Co.*

ATTORNEYS

# UNITED STATES PATENT OFFICE.

JOHN D. SPRUNT, OF LONDON, ENGLAND.

## CASK FOR PETROLEUM.

SPECIFICATION forming part of Letters Patent No. 500,245, dated June 27, 1893.

Application filed July 6, 1892. Serial No. 439,188. (No model.) Patented in England October 29, 1891, No. 18,707.

*To all whom it may concern:*

Be it known that I, JOHN DALZIEL SPRUNT, of London, England, have invented a new and useful Improvement in Vessels for Containing Petroleum or other Liquids, (for which I have obtained British patent, dated October 29, 1891, No. 18,707,) of which the following is a specification.

My invention has for its object to provide a cheap light and efficient receptacle or vessel intended more particularly for containing liquids of a penetrating nature such for example as petroleum, turpentine and the like but which may be used for containing other liquids and from which the contents can readily be removed when required.

In order that my invention may be well understood I will describe with reference to the accompanying drawings means whereby my invention may be carried out in practice, premising, however, that I do not restrict myself to the means described, as variations may be made in the shapes and modes of constructing the vessels without departing from the nature of my invention.

Figure 1 represents in perspective a rectangular box constructed partly of wood and partly of cardboard, or the like, according to my invention. Figs. 2 and 3 are vertical sections of the vessel drawn to a larger scale, the sections being taken at right angles to each other through the discharge passage, and Fig. 4 shows, drawn to a smaller scale, a strip of wood of which the frame, constituting the top bottom and ends of the vessel, is constructed.

To construct the vessel illustrated by Fig. 1, I take a strip of wood as shown in Fig. 4 of the necessary width and length according to the size of the vessel to be made, the grain of the wood being preferably in the direction of the length of the strip, and I score or groove this strip at the required distances apart as shown at *a* to form the angles of the vessel, and then after steaming or soaking the strip in water so as to render it pliable, I coat the scores or grooves *a* with strong glue, and then fold it into a rectangular form as shown in Fig. 2 and secure the ends by nails, glue, or other suitable cement. The open sides of the frame thus formed I close by gluing to the edges thereof sheets *b* of veneer, cardboard, or other suitable flexible material, and secure to

the outer surface thereof by means of glue or other suitable cement sheets of parchment or oil proof paper *c* preferably of sufficient size to turn over and cover the outer surface of the rectangular frame A. The joints of the angles may if desired be further strengthened by gluing therealong strips of cloth or other suitable material. If desired the veneer or cardboard sides *b* may be dispensed with and the sides of the vessel be formed by several layers of parchment or glued paper wrapped round and secured to the frame. An aperture B is made in the frame A preferably near one of the angles through which aperture the vessel may be filled or discharged.

The vessel may have glue or other suitable material forced in through the aperture B or it may be immersed in strong liquid glue or the like to fill up all crevices and form a lining to the vessel as shown at *d*, the surplus glue or the like being discharged through the said aperture B.

To facilitate carrying the vessel I secure preferably at the two opposite ends thereof handles C which may consist of tape secured by glue or other suitable means, and to facilitate the discharging of the contents from the vessel I secure by glue or otherwise in proximity to the aperture B a flexible funnel D which may be made of glued paper, parchment or other suitable material that will permit of being flattened against the vessel as will also the tape handles C.

Before the petroleum or other liquid is poured into the vessel it should be heated by any suitable means to some degrees above the maximum temperature to which it is likely to be subjected. When the vessel is full the flexible sides C will bulge outward. I then close the aperture B preferably by gluing over it a piece of veneer or other suitable material, which will prevent the liquid from escaping. The liquid contents as it cools will contract and would create a partial vacuum in the interior of the vessel, but owing to the flexibility of the sides of the vessel, the atmospheric pressure acting on the outside causes the sides to follow up the reduced bulk of the liquid as it contracts, and also when the contents again expands the sides of the vessel will yield to it, and thus maintain the interior of the vessel fully charged with the



liquid whatever may be variations of temperature to which it may be subjected.

I am aware of the fact that a complex vessel for containing beer has been formed with  
 5 a rigid outer casing, and a flexible inner receptacle with solid heads that would collapse inside the outer case with the diminution of the contents. I am also aware that a knock-down or collapsible receptacle for coal oil, &c., has  
 10 been made of paper with creases or joints and solid heads, and I make no claim to any such construction. My invention is distinctive in that it is simple and unitary in character and not compound or complex as in the first case  
 15 referred to, and is distinguished from the other case referred to, in having a rigid frame that permanently maintains its cubical shape, being non-collapsible, but only yielding in a resilient way at its flexible sides by a slight curving or concaving of the same.  
 20

Having thus particularly described the nature of my invention, what I claim is—

1. A non-collapsible receptacle for petro-

leum, turpentine and other liquids, consisting of a stable inflexible and rigid frame made of 25 wood or other suitable light material, defining the permanent cubical shape of the vessel, and a yielding or flexible plane or side composed of parchment, glued paper, or other suitable material that will yield to the contraction and 30 expansion of the contents of the vessel, the surfaces of said receptacle being coated with glue or other suitable material to close the joints and render the material impervious substantially as shown and described. 35

2. A vessel or container constructed with an aperture for the introduction and discharge of the liquids; in combination with a collapsible funnel attached to the vessel in proximity to the aperture substantially as and for the 40 purpose hereinbefore described.

J. D. SPRUNT.

Witnesses:

W. H. NEWMAN,

S. B. CHAMBERLAIN,

*U. S. Consulate-General, London, England.*