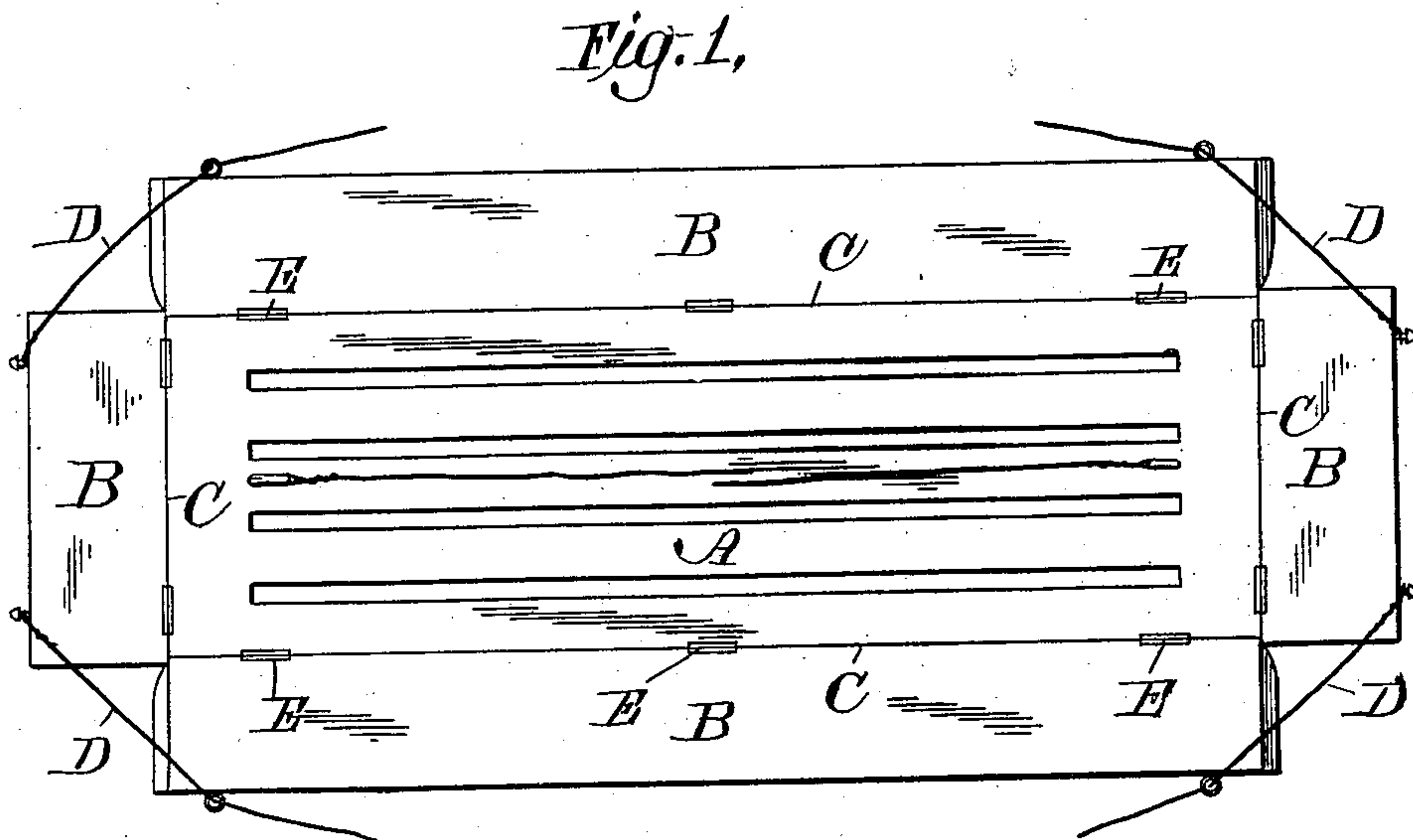
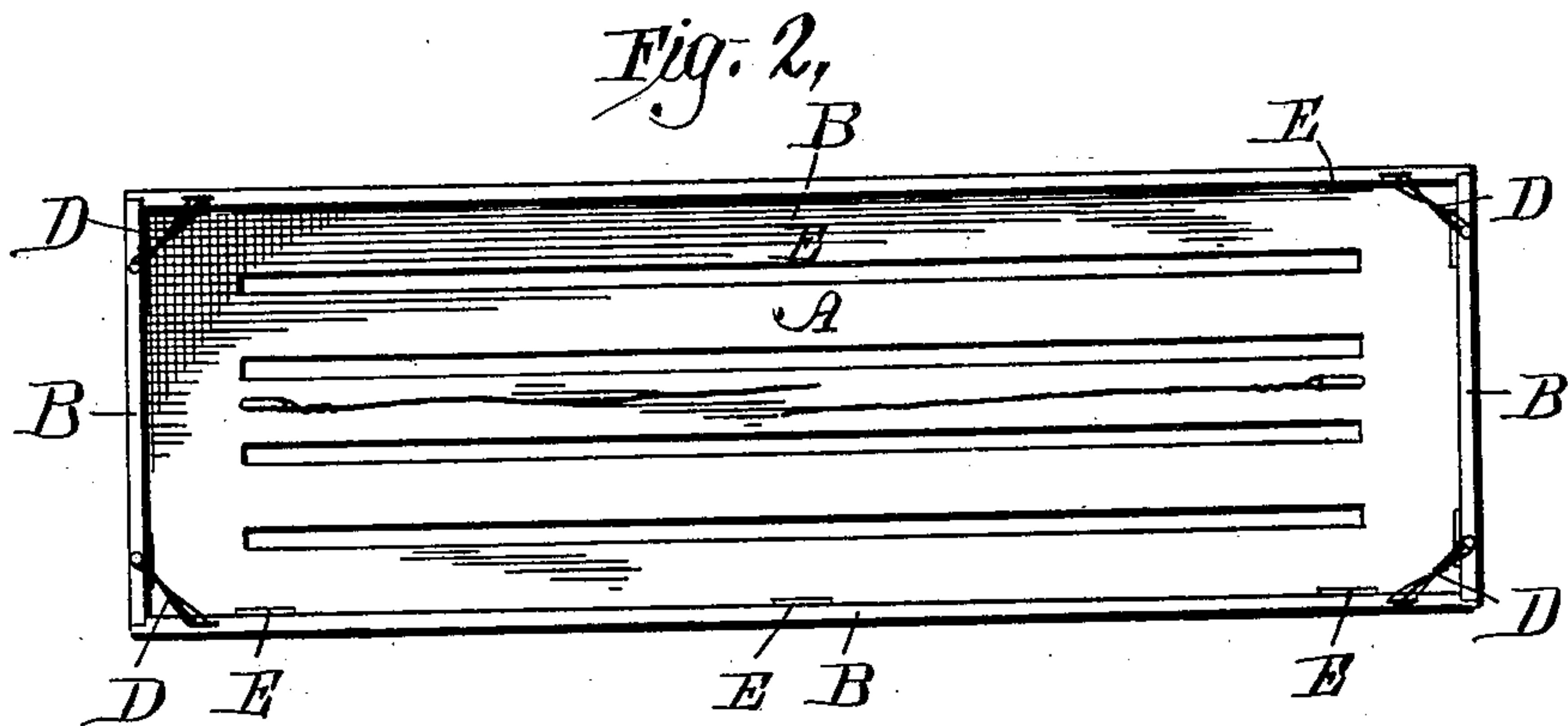


No. 667,456.

Patented Feb. 5, 1901

H. REDDEN.  
LIFE SAVING RAFT BOAT.  
(Application filed Nov. 30, 1900.)

(No Model.)



WITNESSES:

*D. H. Haymer*  
*Alfred H. Helbrook*

*Henry Redden* INVENTOR

BY

*Alfred L. Culloway* ATTORNEY

# UNITED STATES PATENT OFFICE.

HENRY REDDEN, OF NEW YORK, N. Y., ASSIGNOR OF TWO-THIRDS TO  
ERNEST E. M. BULLOWA, OF SAME PLACE.

## LIFE-SAVING RAFT-BOAT.

SPECIFICATION forming part of Letters Patent No. 667,456, dated February 5, 1901.

Application filed November 30, 1900. Serial No. 38,176. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY REDDEN, a citizen of the United States, residing in the city, county, and State of New York, have invented a new and useful Improvement in Life-Saving Raft-Boats, of which the following is a specification.

My invention relates to the form and construction of a life-saving raft-boat; and the object of my improvement is to construct a raft or boat that can be folded into compact form for storage and quickly restored to a safe and light boat or raft for life-saving or other purposes. I attain this object by the structure illustrated in the accompanying drawings, in which—

Figure 1 is a raft-boat folded or extended as a raft for storage, and Fig. 2 the raft-boat ready for use as a boat.

In the figures like parts are represented by the same letters, A being the bottom, B the sides, C the cracks between the bottom and sides, D the fasteners for joining the sides and ends, and E the hinges joining the bottom and sides.

My improvement consists in the form and construction of a folding and easily-portable raft-boat for life-saving or other purposes. The bottom A and the sides B are separately made and fastened to each other by the hinges E. The sides and ends B are beveled to each other closely when fastened together. The hinges E are reversible, permitting the sides B to be raised and fastened in position on either side of the bottom A. The bottom A, the sides B, hinges E, and fasteners D are composed of cork, wood, aluminium, rope, and other light and strong material and may be constructed of alternate strips of wood and cork.

In the life-saving rafts or boats before my

invention there was no possibility of change from raft to boat or boat to raft, and consequently much space was required for storage-room and the danger of overturning or sinking attended them. With my improvement the life-saving raft-boat, extended or folded in the shape of a raft, may be packed away or carried as easily and compactly as so much flat lumber. Then when needed on the water the sides and ends may be raised and joined together, forming a boat with cracks where the sides join the bottom, out of which any water shipped must readily escape. In any emergency the raft extended may be thrown upon the water with either side uppermost, and the hinges being reversible the sides and ends can be raised and fastened together by the first occupant of the raft, thus forming a boat for those who subsequently enter.

I claim—

1. A flat-bottomed boat with sides and ends hinged to the bottom, the sides and ends being so joined to each other that they may be unfastened and extended or folded in the same plane with the bottom, forming a raft, substantially as set forth.

2. A raft composed of cork and wood or other non-sinking material, with sides and ends attached by hinges to the main bottom and of such form that they may be raised and fastened together forming a boat that is non-sinkable, substantially as set forth.

3. A boat composed of cork and wood or other non-sinking material with sides and ends attached to each other in such manner that they may be separated or opened into a raft, substantially, as set forth.

HENRY REDDEN.

Witnesses:

ALFRED H. HOLBROOK,  
ALBERT S. MEYER.