

H. LEACH.
PROPELLER.

No. 10,474.

Patented Jan. 31, 1854.

Fig. 1

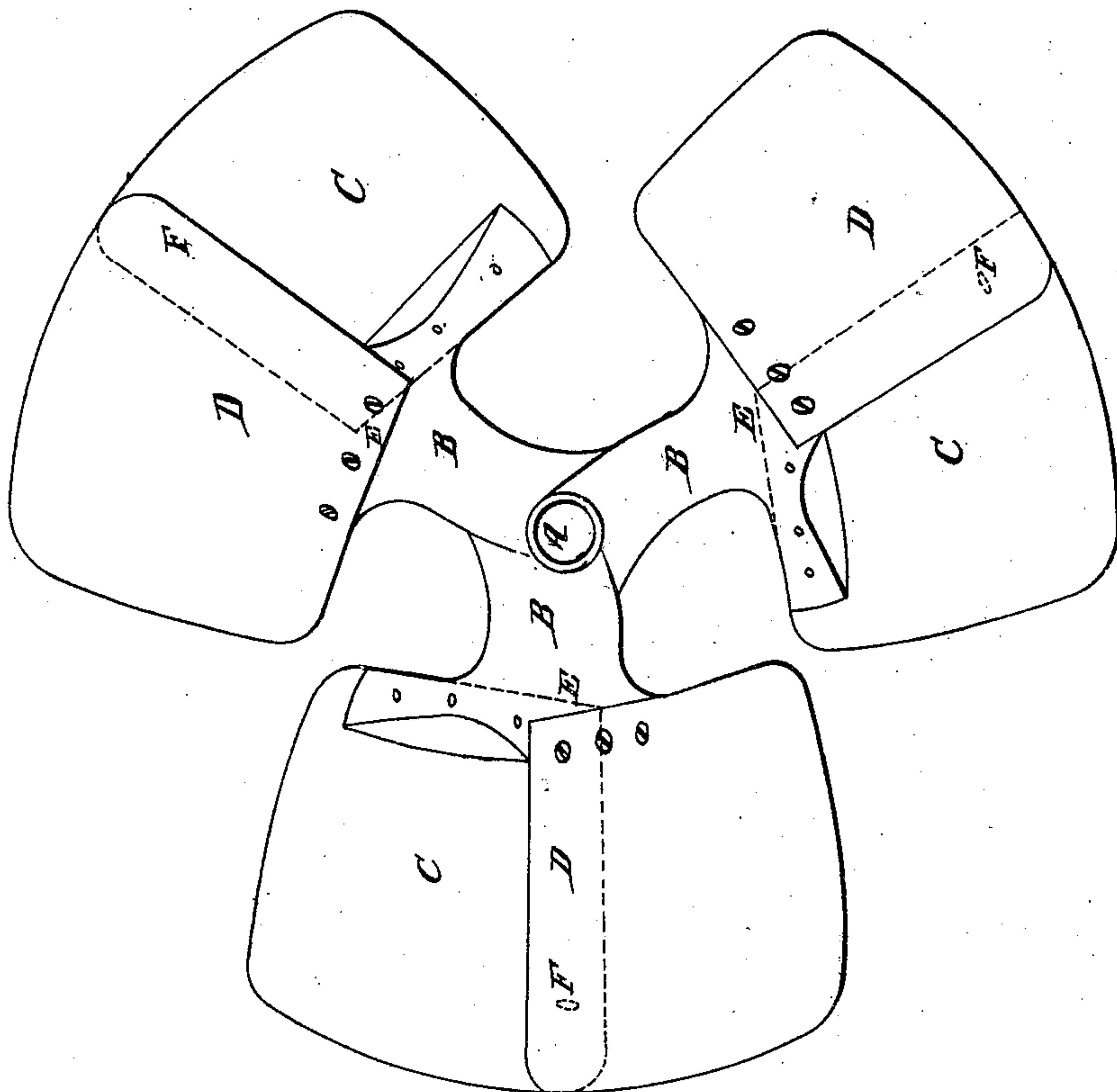
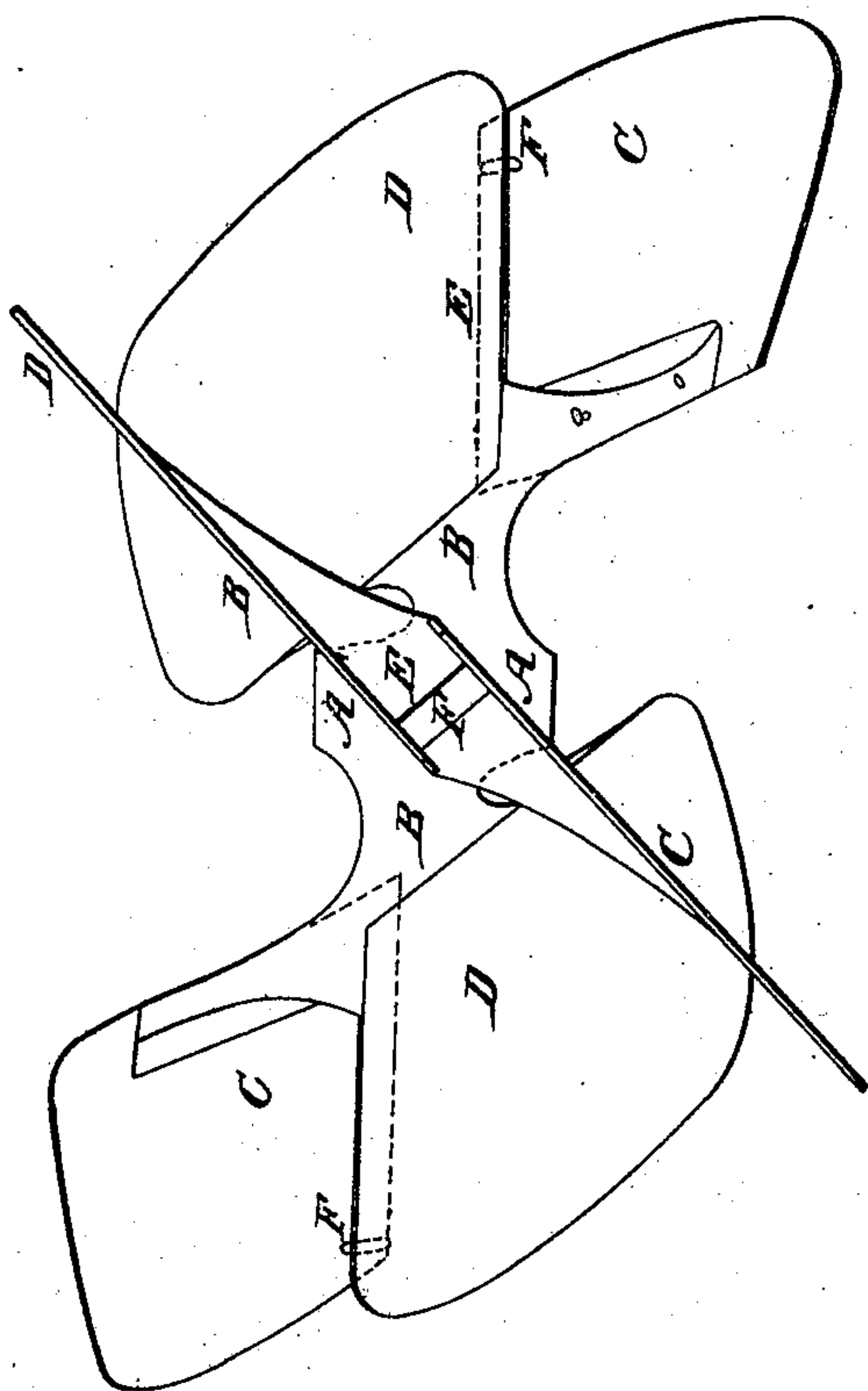


Fig. 2



UNITED STATES PATENT OFFICE.

HARRY LEACH, OF BOSTON, MASSACHUSETTS.

PROPELLER.

Specification of Letters Patent No. 10,474, dated January 31, 1854.

To all whom it may concern:

Be it known that I, HARRY LEACH, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvements in Propellers for Navigable Vessels; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, letters, figures, and references thereof.

Of the said drawings Figure 1 denotes an end elevation and Fig. 2 a side view of one of my improved propellers.

In the said drawings A denotes the hub of the propeller having three arms B, B, B, projected from it.

Instead of applying to each of these arms a wing composed of a single float in the usual way I make the wings in two parts or floats C, D, and so arrange them that there shall be an opening or passage E between them and that they shall extend or project in opposite directions, and that one of them or the greater part of it when the propeller is put in revolution shall move in a path separate or distinct from that of the greater part of the other. By such a construction of the propeller it is found in principle that

a large portion of the back water that usually obstructs the action of the wing will pass between the two floats C, D, and escape through the passage E whereby the wheel will be to a very great degree relieved from the retarding effects of the back water. One or more stays F is placed between the two floats or made to extend from one to the other for the purpose of steadying them or causing them to mutually support one another, while the propeller is in action.

I claim—

The above specified improvement in constructing a propeller, viz, of a combination with each of its arms B, B, B, of two parts or floats C, D, (projected in opposite directions) and an opening or passage E arranged between them for the escape of back water, the whole being substantially as above described.

In testimony whereof I have hereto set my signature this second day of November A. D. 1852.

HARRY LEACH.

Witnesses:

R. H. EDDY,
FRANCIS GOULD.