

G. BROWN.  
Adjustable Float for Paddle Wheels.

No. 201,740.

Patented March 26, 1878.

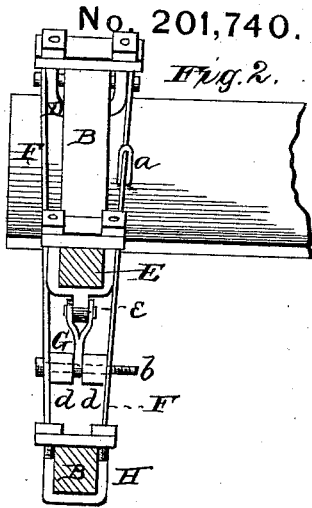
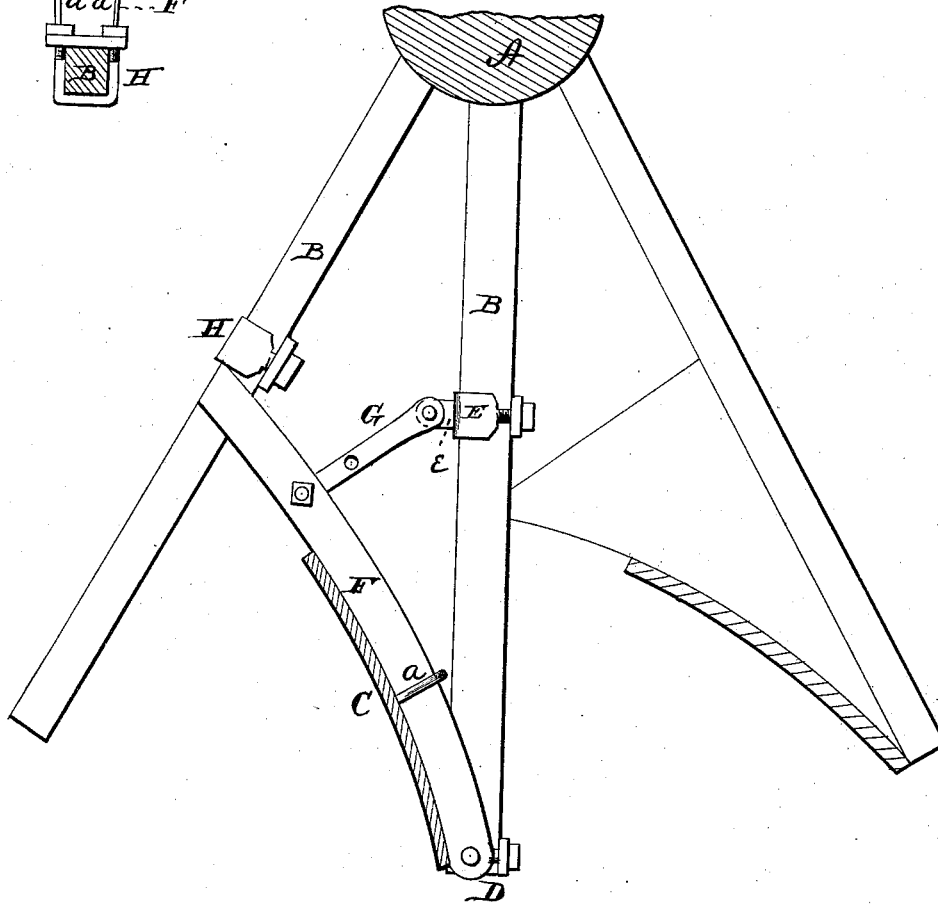


Fig. 1.



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# UNITED STATES PATENT OFFICE.

GEORGE BROWN, OF WASHINGTON, PENNSYLVANIA.

## IMPROVEMENT IN ADJUSTABLE FLOATS FOR PADDLE-WHEELS.

Specification forming part of Letters Patent No. 201,740, dated March 26, 1878; application filed March 12, 1878.

*To all whom it may concern:*

Be it known that I, GEORGE BROWN, of Washington, in the county of Washington, and in the State of Pennsylvania, have invented certain new and useful Improvements in Feathering-Buckets for Steamboat-Wheels; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in an adjustable feathering-bucket for paddle-wheels, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side view of my invention. Fig. 2 is a detailed section of a part thereof.

A represents the hub of the wheel, provided with the sets of radial arms B B, to which the buckets C are connected in the following manner: To the lower end of each arm B is fastened a clip, D, to the two sides of which are pivoted two slightly-curved arms, F F. The bucket C is fastened to one or both of these arms by means of a hook, a, riveted or otherwise fastened permanently to the bucket, and hooking over the inner edge of the arm. The bucket is, of course, fastened in similar manner to all the braces F connected to the arms B of each set in the wheel. Above the bucket C a bolt, b, is passed through the braces F F, and on said bolt is placed an arm, G, between the braces, said arm being held in the center by means of washers d d on said bolt. The other end of the arm G is forked and pivoted

to a lug or ear, e, projecting from the center of a clip, E, which is fastened on the same arm B as the clip D, thus holding the bucket firmly. The forward ends of the braces F F straddle the arm B in front of the bucket, and abut against a clip, H, fastened to said arm.

The bucket, by means of these fastenings, can be adjusted out and in on the wheel-arm to regulate the wheel, according as the boat is carrying a light or heavy load. It can also be adjusted at different angles to the wheel-arms, according as the boat may be loaded down by the bow or by the stern.

The buckets are arranged in such a manner that they will catch the water and strike it so that the solid body of water offers its resistance and not merely the top, and as the buckets do not lift or hold any dead water, there is no loss of power, but an increase of speed.

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

1. The combination, with the wheel-arm B and bucket C, the adjustable clips D and E, pivoted braces F F, with bolt b, and the pivoted arm G, connecting the bolt b with a lug, e, on the clip E, substantially as and for the purposes herein set forth.

2. The combination, with the adjustable bucket C, of the adjustable clip H and the braces F F abutting against the same, as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of March, 1878.

GEORGE BROWN.

Witnesses:

ALVAN DONNAN,  
FREDERIC H. DYER.