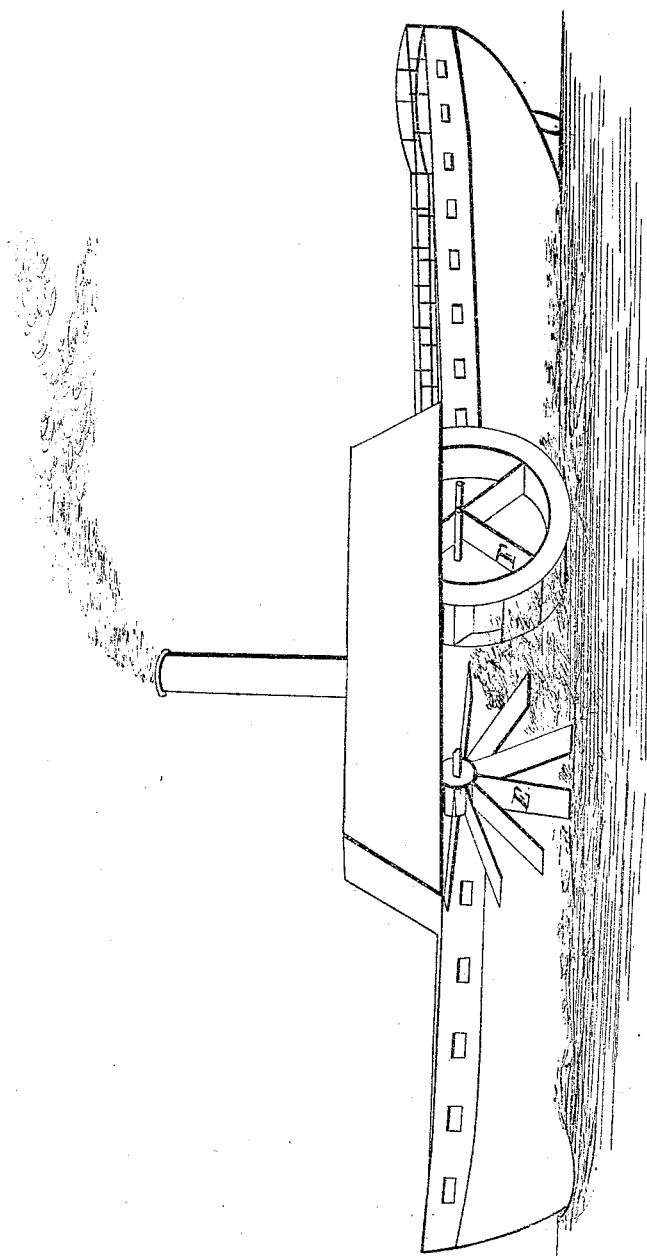


*M. Mallory.* *Sheet 1, 2, Sheets.*

*Paddle Wheel.*

*N<sup>o</sup> 2,210.*

*Patented Aug. 4, 1841.*



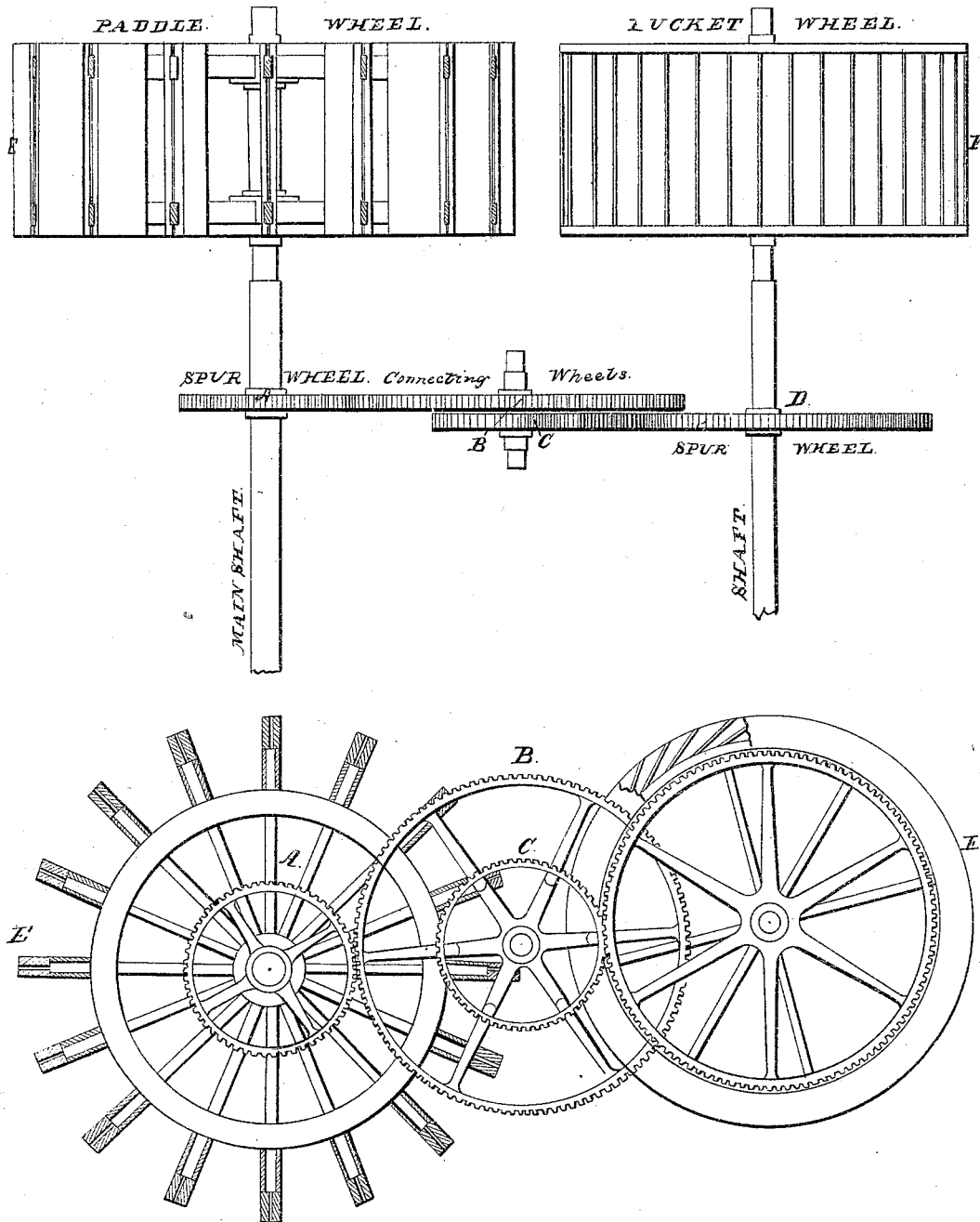
M. Mallory.

Sheet 2, 2 Sheets.

Paddle Wheel.

No. 2,210.

Patented Aug. 4, 1841.



Scale 4 feet to 1 inch

# UNITED STATES PATENT OFFICE.

MEREDITH MALLORY, OF URBANA, NEW YORK.

## IMPROVEMENT IN THE METHOD OF PROPELLING BOATS.

Specification forming part of Letters Patent No. 2,210, dated August 4, 1841.

*To all whom it may concern:*

Be it known that I, MEREDITH MALLORY, of Urbana, in the county of Steuben, State of New York, have invented a new and useful Improvement in the Propelling Power of Steamboats, for which I desire Letters Patent; and I declare that the following is a full and exact description.

The nature of my invention consists in placing tight bucket-wheels abaft the paddle-wheels to catch the water thrown up or elevated by the paddles, the weight of the water thus thrown up aiding the steam-power in driving the paddle-wheels.

The annexed drawings represent a steamboat with a paddle and tight bucket-wheels, (also showing the manner of gearing;) E, the paddle-wheel; F, the tight bucket-wheel with buckets of common construction, corresponding in length to those of the paddle-wheels. They are to be placed abaft the paddle-wheels from six inches to two feet, varying according to the size of the wheels. The bucket-wheels may be of the diameter of the paddle-wheels, less six inches added to the distance the paddles are designed to run in the water, the top of the wheels to be on a level with the top of the paddle-wheels and the bottom six inches above the surface of the water when the boat is loaded.

The drawings annexed also represent the gearing connecting the tight bucket and paddle wheels.

E represents the paddle-wheels; F, the tight bucket-wheel; A, the spur-wheel on the paddle-wheel shaft; D, the spur-wheel on the tight bucket-shaft; B, the large, and C the small spur-wheels on a short shaft forming a connecting-wheel by which the power of the tight bucket-wheels is brought to aid in driving the paddle-wheels, the paddle-wheels making four revolutions to one of the tight bucket-wheels.

The gearing may be placed inside of the boat and the connecting-wheel so constructed as to throw out or into gear at pleasure. One set of spur-gears is sufficient for a boat, provided the water-wheel shafts both extend across the boat.

Now what I claim as my invention is—

The applying the water lifted or thrown up by the paddle-wheels of steamboats so as to produce an auxiliary propelling power, in the manner before described, or in any way analogous thereto.

M. MALLORY.

Witnesses:

M. S. KIMBALL,  
P. H. GREEN.