

G H Colbert
 No. 75125 *Steering Apparatus* Patented Mar 3. 1868

Fig. 1.

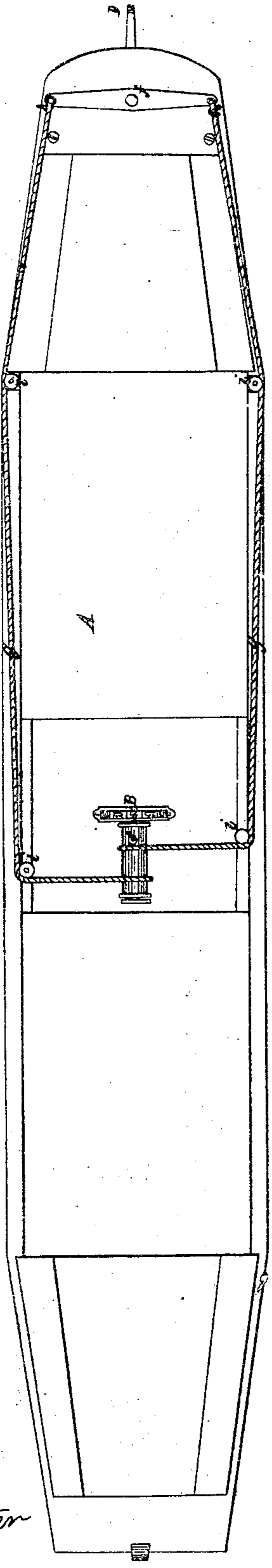


Fig. 3.

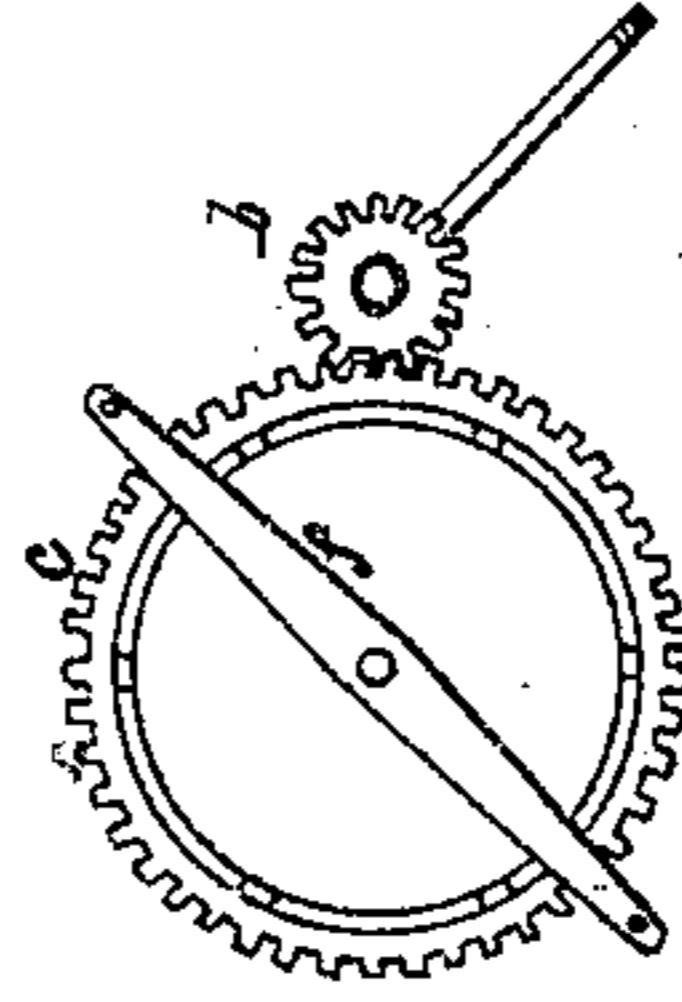
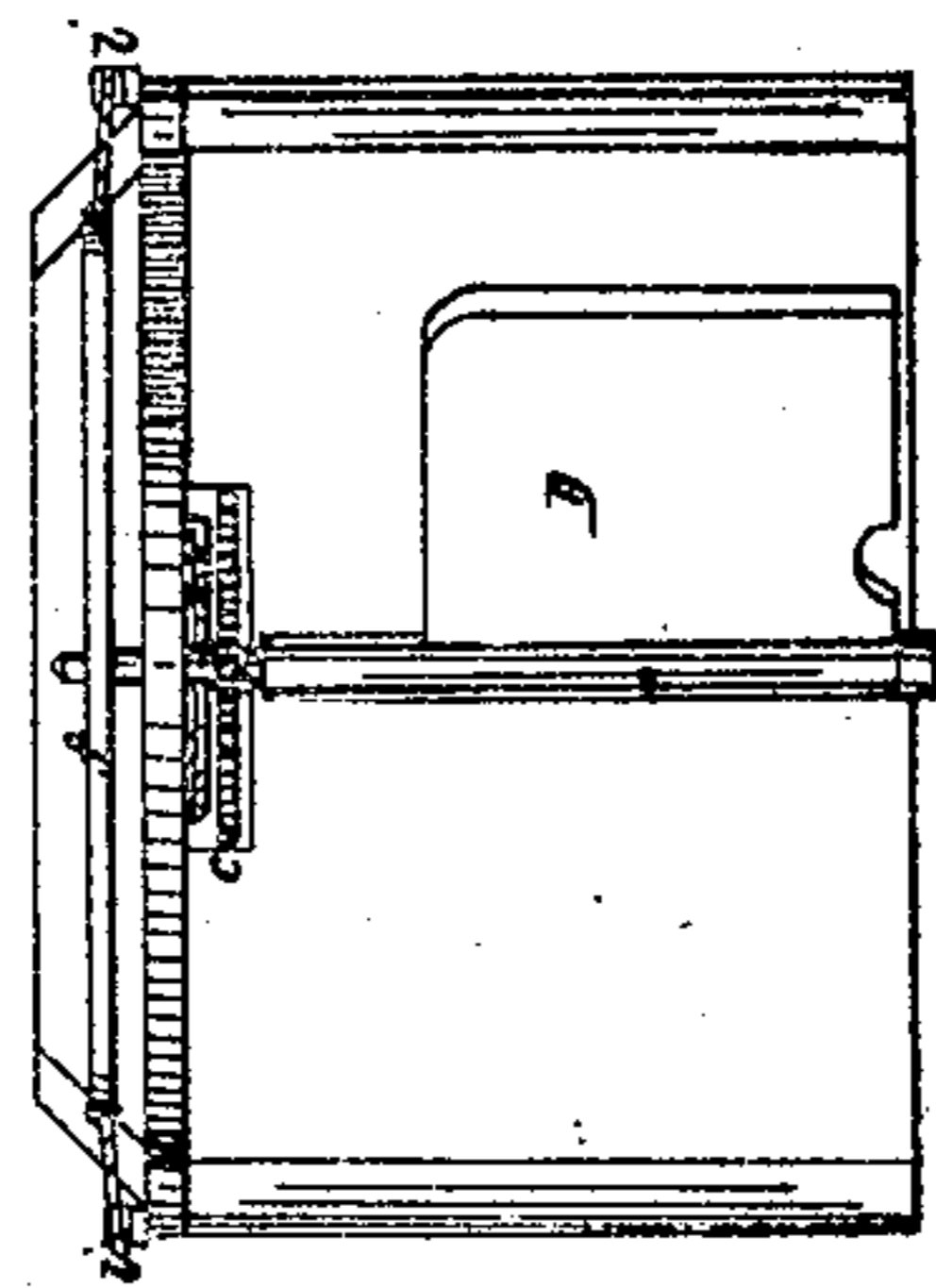


Fig. 2.



WITNESSES.

John A. Ellis
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INVENTOR.

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 per
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United States Patent Office.

GEORGE H. COLBERT, OF DOWNSVILLE, MARYLAND, ASSIGNOR TO HIMSELF AND S. S. HOLLENBERGER, OF THE SAME PLACE, AND J. W. DAILY, OF MARTINSBURG, WEST VIRGINIA.

Letters Patent No. 75,125, dated March 3, 1868.

IMPROVEMENT IN STEERING-APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE H. COLBERT, of Downsville, in the county of Washington, and State of Maryland, have invented certain new and useful Improvements in the Mode of Steering Boats; and I 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, which form a part of this specification, in which—

Figure 1 represents a plan view,

Figure 2 a rear view, and

Figure 3 a plan view of the rudder-attachment of my device.

The nature of this invention consists in the employment of a vertical shaft provided with a gear-wheel, so arranged and operating, in connection with the other devices hereinafter named, that a boat may be both easily and quickly steered or turned to any desired point.

To enable others to enjoy the benefits of my invention, I will now describe its construction and operation.

A represents a boat provided with the ordinary rudder, D. On the rudder-beam is rigidly secured the pinion *b*. *d* represents a vertical shaft, upon which is placed the gear-wheel *c*; said wheel is likewise secured to the shaft *d* in such a manner that it will only revolve or turn with it. The wheel *c* gears into the pinion *b*, as shown at fig. 3. At the top of the vertical shaft *d* is fastened at its centre the cross-lever *f*. B represents the common pilot-wheel, and *g g* are cords or chains attached to each end of the cross-lever *f*. These cords extend along down the sides of the boat over friction-rollers *i i*, and their opposite ends secured to the pilot-wheel B in the usual manner, as shown in fig. 1.

This arrangement, while it may be used for boats of all kinds, is particularly designed for canal-boats, where its advantages will be peculiarly appreciated, as the captain, while under shelter, can have complete and easy control of his boat.

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

The vertical shaft *d*, provided with gear-wheel *c* and cross-lever *f*, arranged in combination with pinion *b*, rudder D, cords *g g*, and pilot-wheel B, substantially as and for the purpose set forth and described.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

Witnesses:

JOHN W. DAILY,

SAMUEL S. HOLLENBERGER.

GEO. H. COLBERT.