

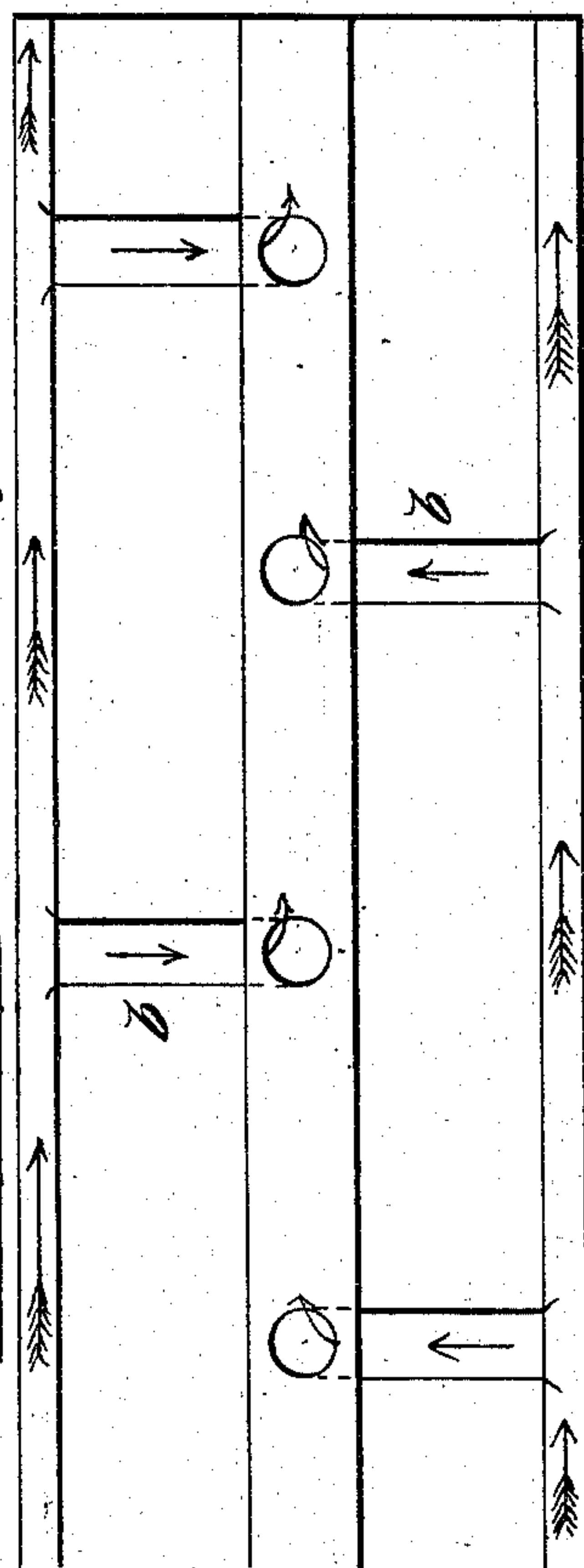
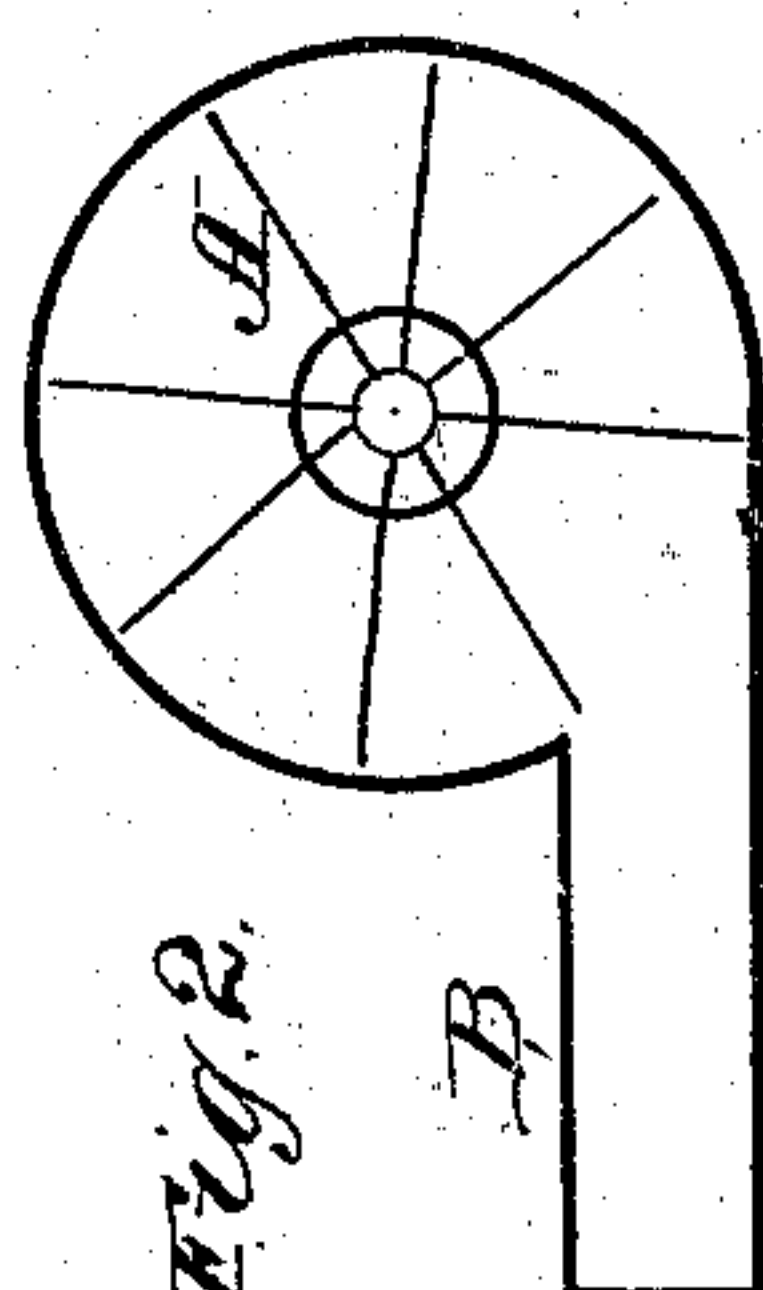
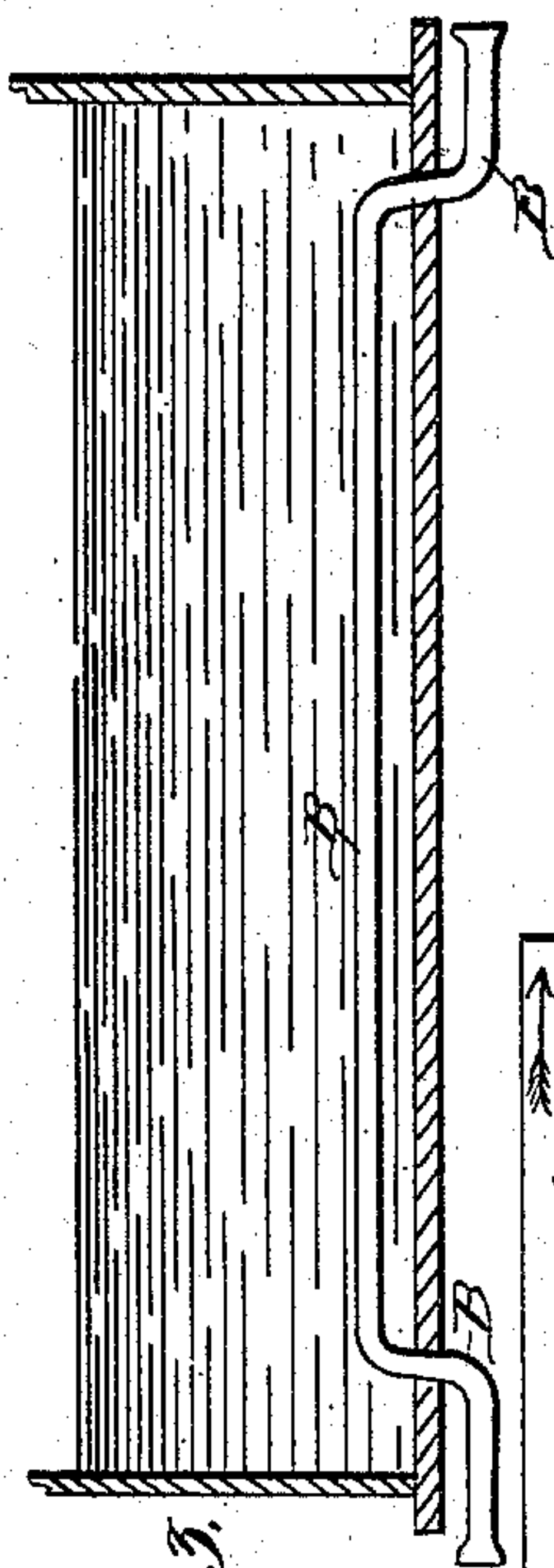
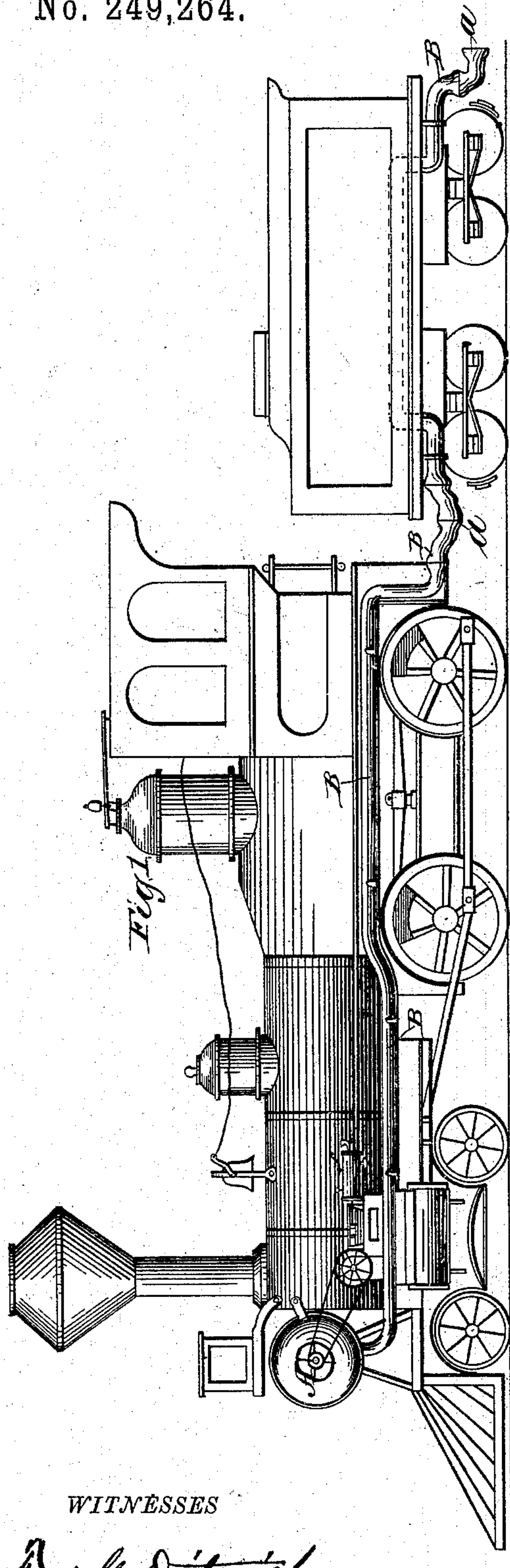
(No Model.)

2 Sheets—Sheet 1.

J. SHEPHERD.  
RAILROAD CAR VENTILATOR.

No. 249,264.

Patented Nov. 8, 1881.



WITNESSES

*Med. L. Dieterich*  
*Jas. H. Baxter*

INVENTOR  
*John Shepherd*  
By *Wyers & Co.*  
Attorneys



(No Model.)

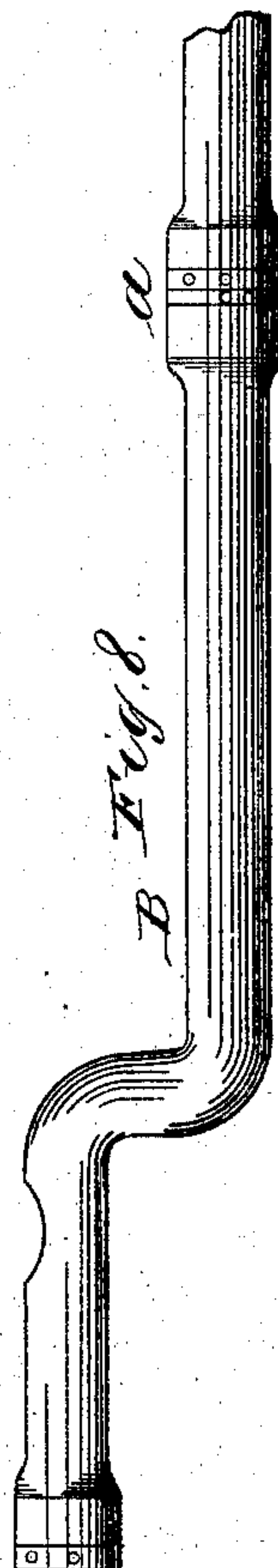
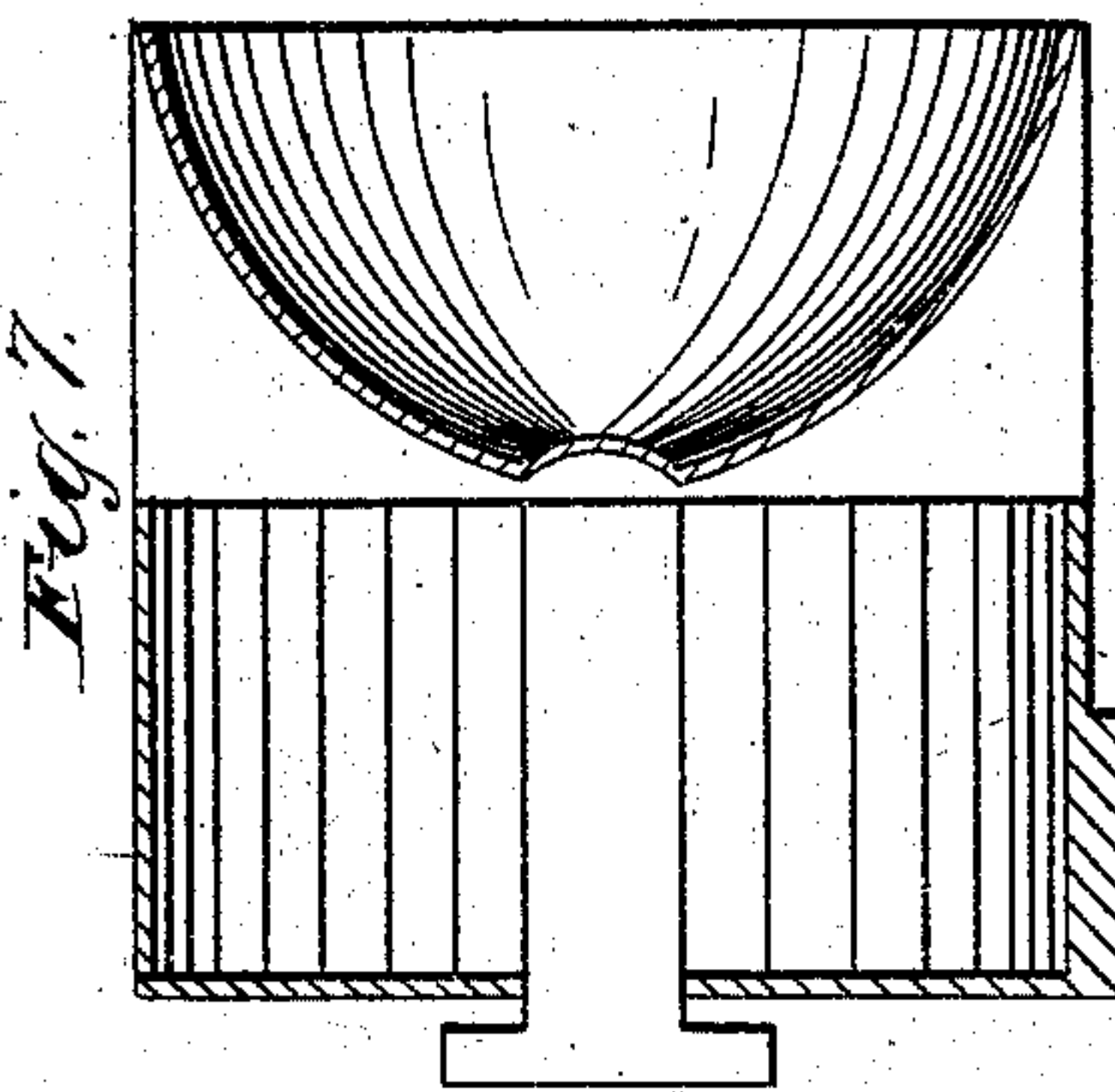
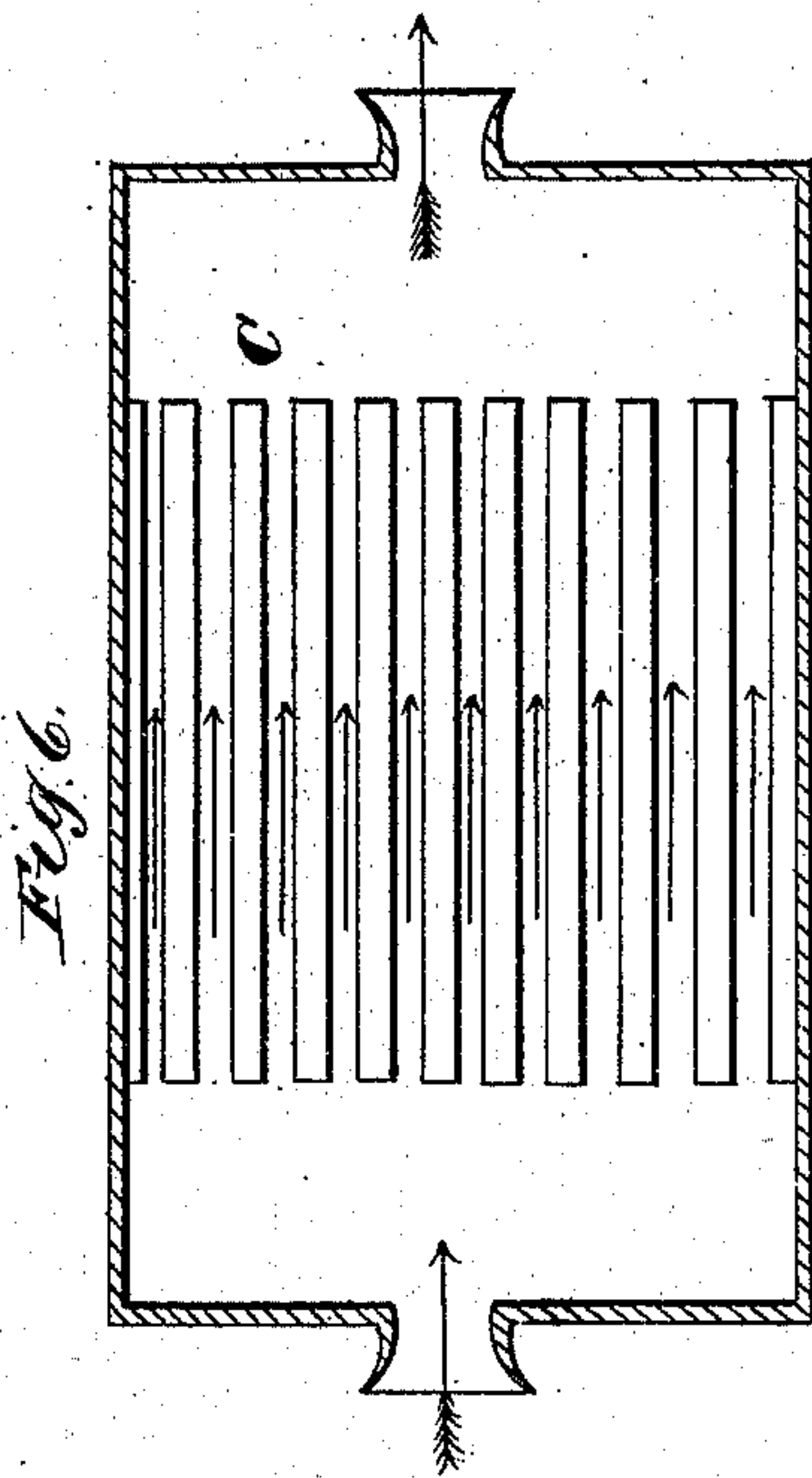
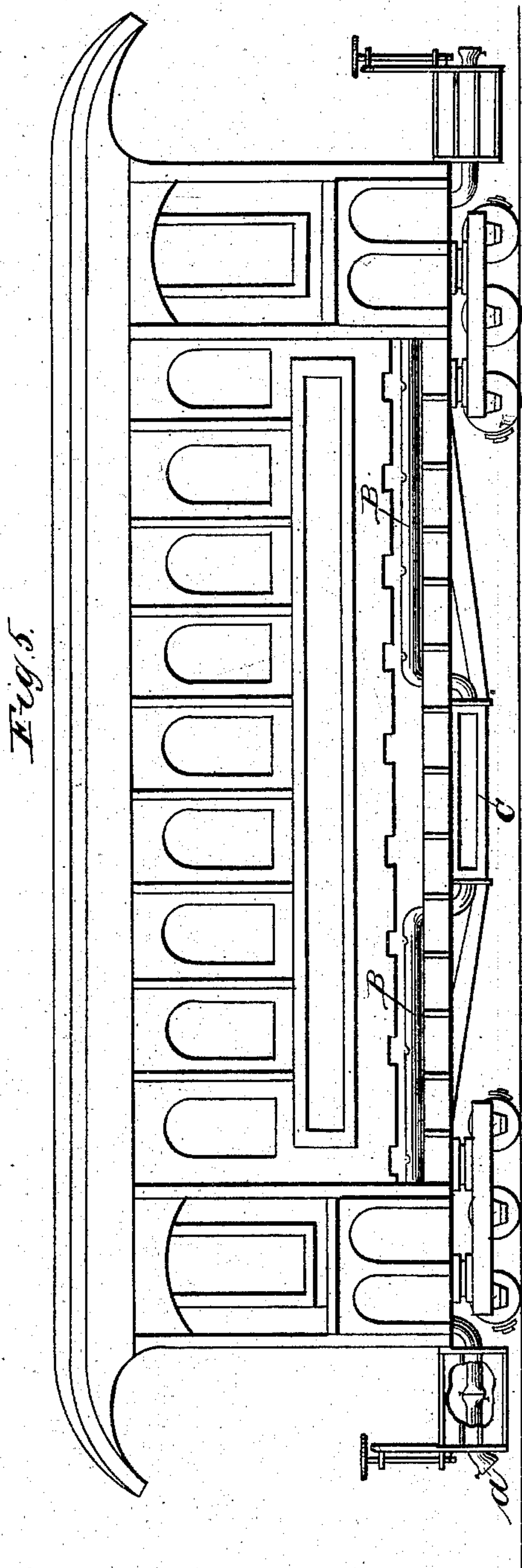
2 Sheets—Sheet 2.

J. SHEPHERD.

RAILROAD CAR VENTILATOR.

No. 249,264.

Patented Nov. 8, 1881.



WITNESSES

*Wm. L. Dieterich*  
*Jas. A. Baxter*

INVENTOR  
*John Shepherd*  
By *W. Myers*  
Attorneys



# UNITED STATES PATENT OFFICE.

JOHN SHEPHERD, OF MACON CITY, MISSOURI.

## RAILROAD-CAR VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 249,264, dated November 8, 1881.

Application filed September 17, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN SHEPHERD, a citizen of the United States of America, residing at Macon City, in the county of Macon and State of Missouri, have invented certain new and useful Improvements in Railroad-Car Ventilators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a view showing my improvement as applied to a locomotive. Fig. 2 is a sectional view of the fan, and Fig. 3 is a similar view of the locomotive-tender, with air-pipe passing through it. Fig. 4 is a plan view taken inside of a car, showing the air-inlet pipes. Fig. 5 is a side view of the passenger-car with my improvement, in part, applied thereto. Fig. 6 is a sectional view of the refrigerant-chamber under the car, through which the air is passed. Fig. 7 is a detailed section of my invention. Fig. 8 is a side view of a section of hose or pipe through which the air is conducted.

This invention has relation to an improvement in air-cooling apparatus for passenger-cars, to promote the comfort of the occupants, to supply the apartments with atmospheric air, and to effect the lowering of the temperature; and it consists in the combination and construction of parts, substantially as herein-after more fully set forth and claimed.

Referring to the accompanying drawings, A is a fan or blower, mounted at the front of the locomotive and driven by a miniature engine suitably located and receiving steam from the locomotive. The air is taken from the blower

along the locomotive to the adjoining car through sections of flexible hose-pipe B, connected together between the engine and tender of the locomotive, and between it and the car and each of the cars of the train by elastic or rubber couplings *a* to provide for the movement between them. The hose-section of the tender of the locomotive is passed through its water-chamber, as seen in Fig. 3, to reduce the temperature of the air and thus cool it. These sections of hose or pipe B are passed into the cars under the seats and provided with lateral outlets or tubes *b*, reaching the aisle or passage, to discharge the air into the cars. These pipes are also connected, at about the middle of each car, with refrigerant or cooling chambers C to lower the temperature of the apartments of the cars. These chambers are supplied with ice, which rests on slats to permit the air to pass under it, as well as above it, on its way into the cars. The apartments of the cars being thus supplied with pure atmospheric air in a cooled state, the comfort of the passengers or occupants is greatly promoted.

I claim and desire to protect by Letters Patent—

In a railroad-car ventilator, the combination, with the fan A and the tender of a locomotive, of the air-pipe B, having a bent portion extending up into, passing through and down out of the tender to cool the air passed into the adjoining car, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN SHEPHERD.

Witnesses:

D. E. WILSON,  
J. V. MILLER.