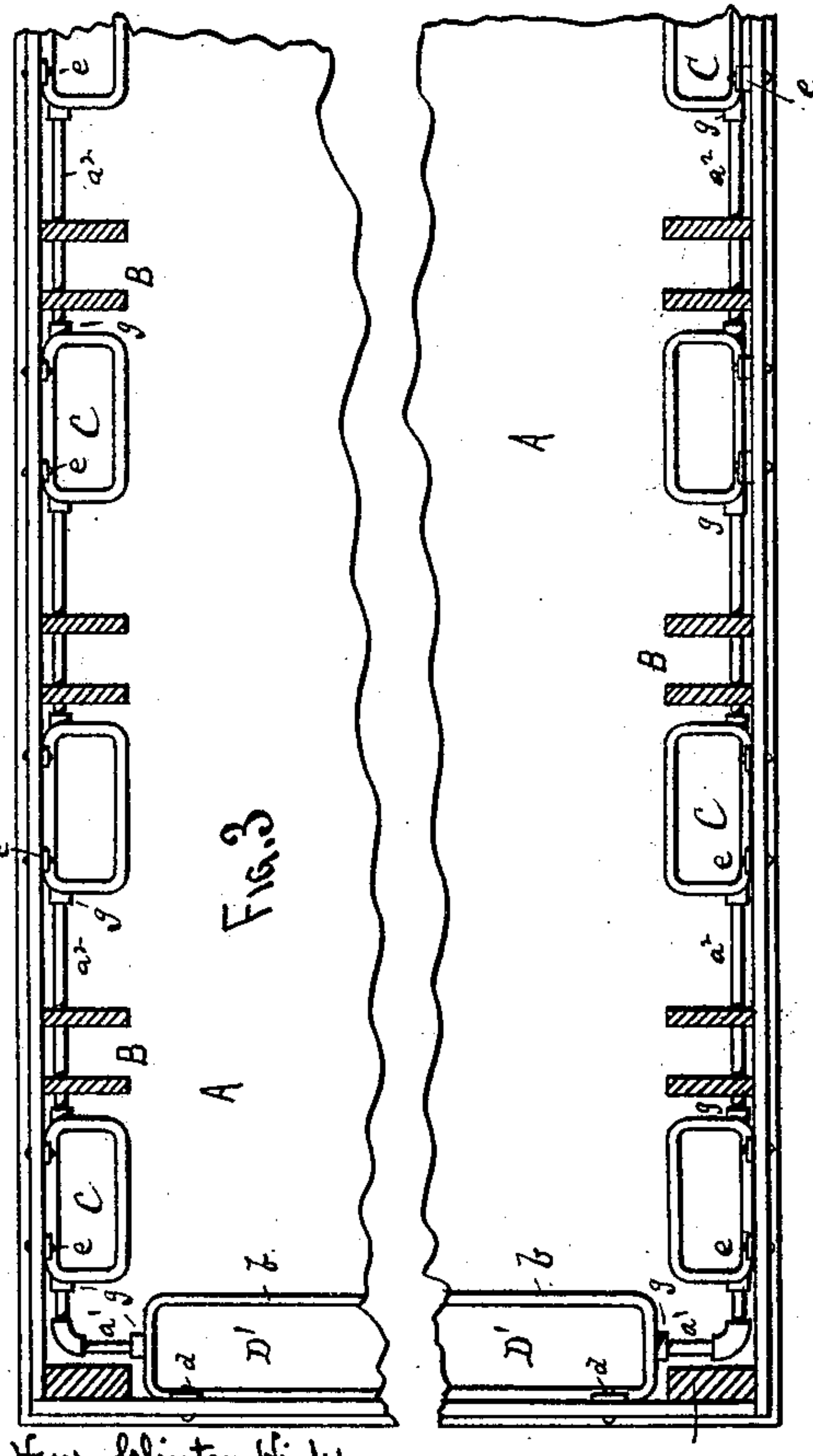
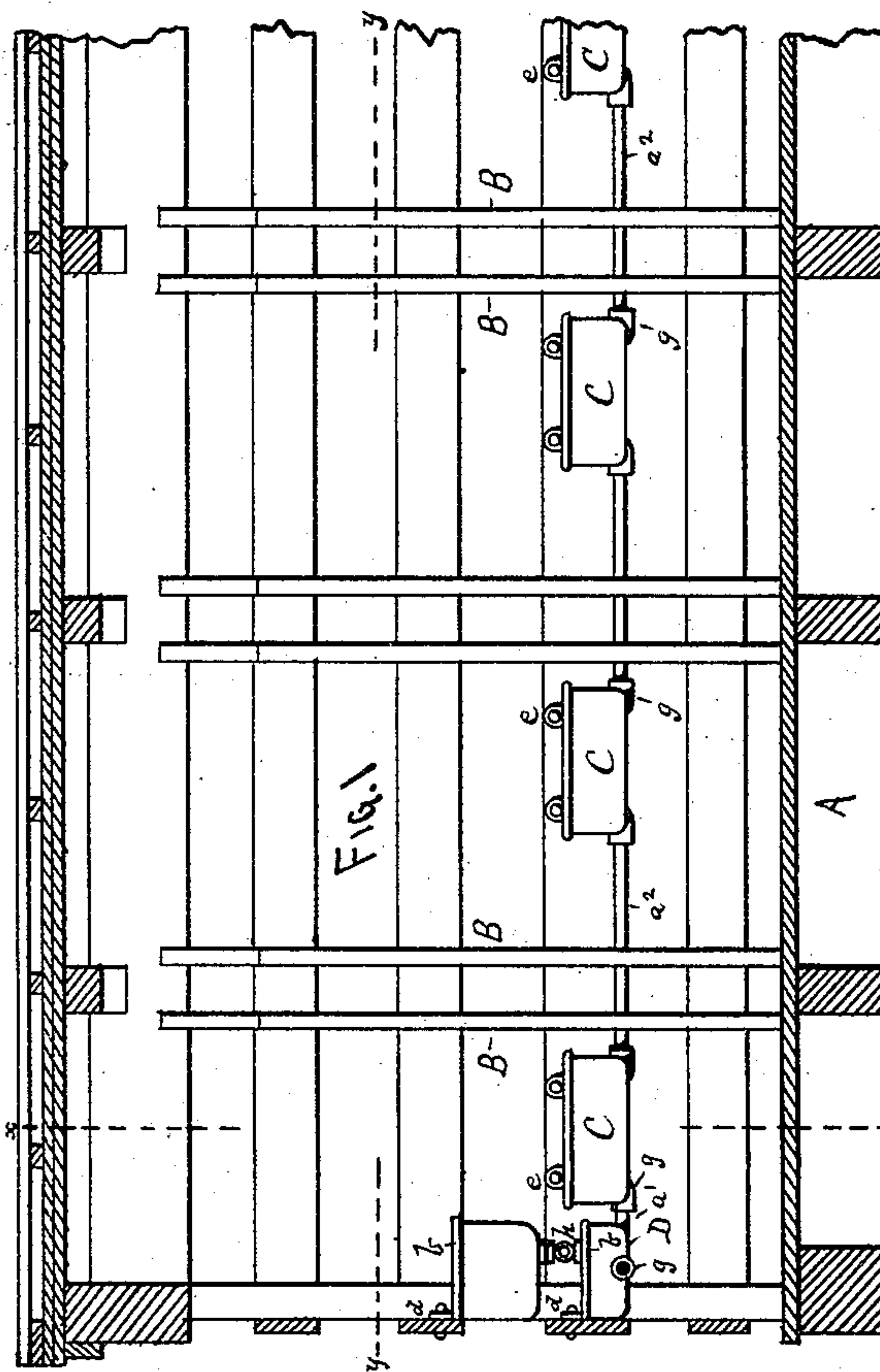
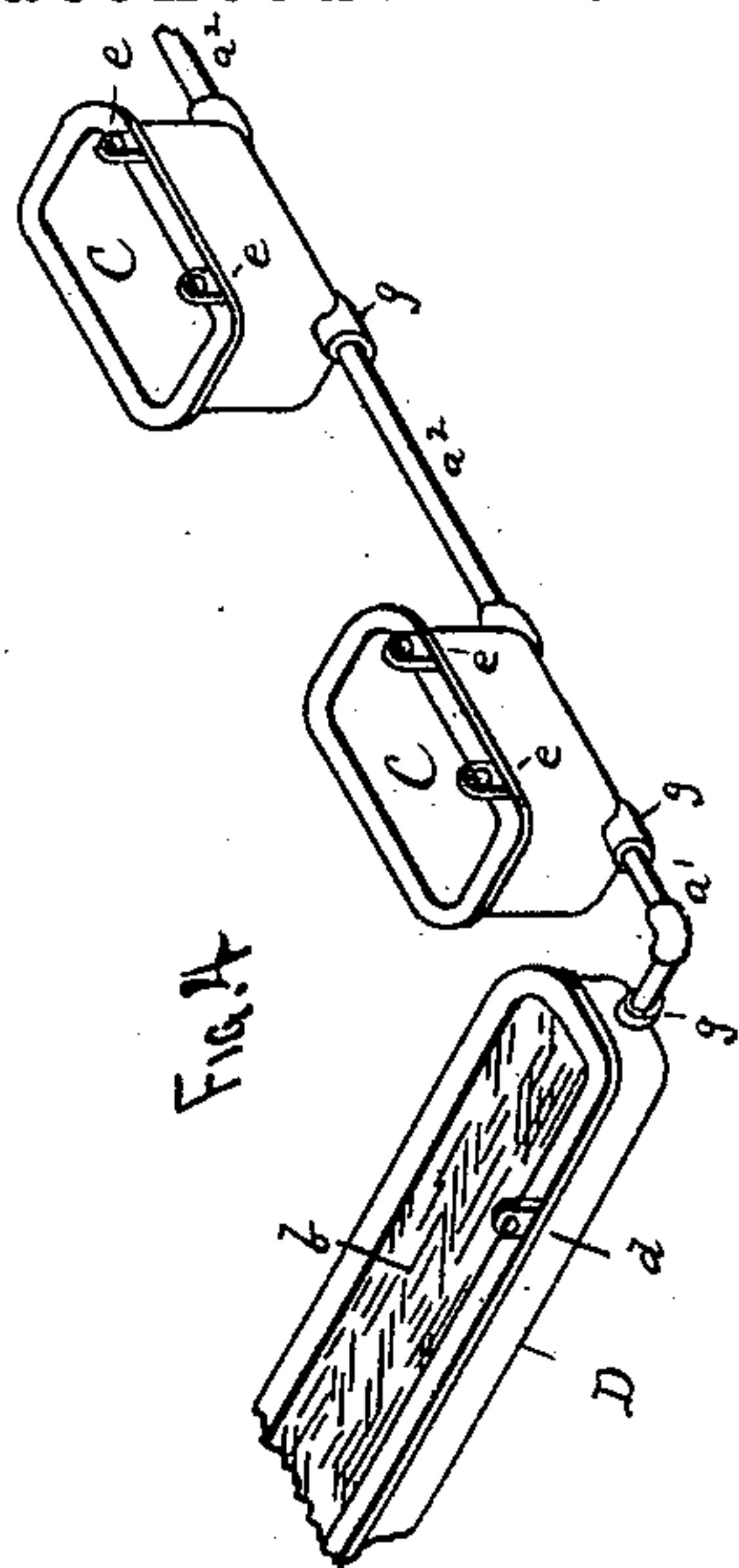
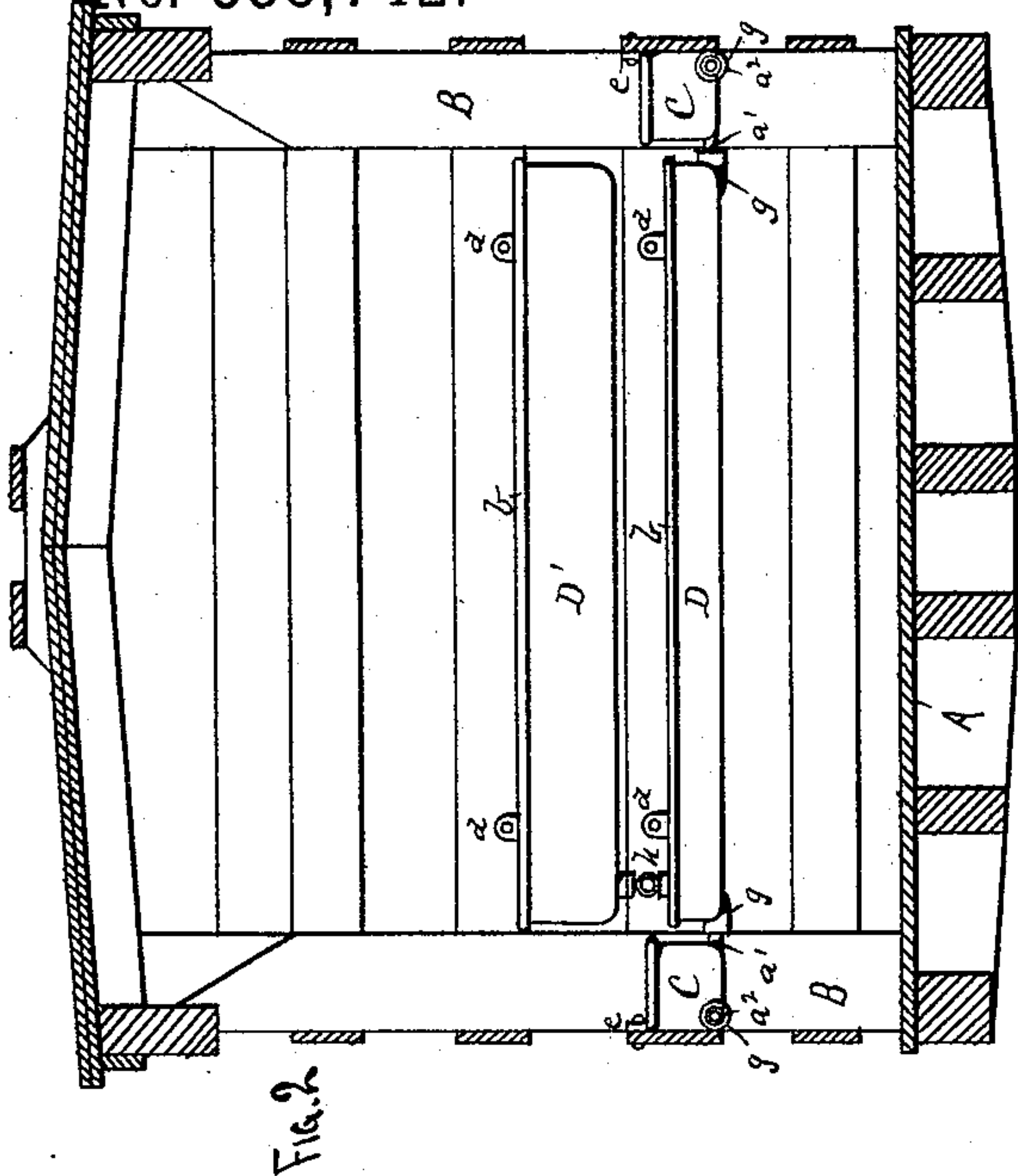


(No Model.)

H. C. HICKS.
STOCK CAR.

No. 338,742.

Patented Mar. 30, 1886.



WITNESSES.
W. E. Keough.
H. S. Webster.

Henry Clinton Hicks,
INVENTOR, BY
Charles H. Woodward atty.

UNITED STATES PATENT OFFICE.

HENRY CLINTON HICKS, OF MINNEAPOLIS, MINNESOTA.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 338,742, dated March 30, 1886.

Application filed September 12, 1885. Serial No. 176,975. (No model.)

To all whom it may concern:

Be it known that I, HENRY CLINTON HICKS, a citizen of the United States, and a resident of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Watering Attachments to Stock-Cars, of which the following is a specification.

In the drawings, Figure 1 is a sectional side elevation of a portion of one end of a stock-car with my improvements attached thereto. Fig. 2 is a cross-section on the line $x x$ of Fig. 1. Fig. 3 is a plan view in section on the line $y y$ of Fig. 1. Fig. 4 is a perspective view, detached, of a portion of one of the supply tanks or reservoirs and two of the watering-troughs.

A is the floor, and B the stanchions or open frame-work, of a stock-car, the stanchions being arranged, as shown, in pairs about six inches apart, and with about three feet of space from center to center of each pair of stanchions, the stanchions being intended to be used as guides for the stall-bars, as in my Patent No. 288,335, dated November 13, 1883. Between each pair of the stanchions are arranged watering-troughs C, at a convenient height from the floor to enable the animals to drink from them.

Across each end of the car will be arranged a tank or receiver, D, the lower line of the tanks being on the same plane as the lower lines of the troughs C, and the bottoms of each end of each tank connected to the bottoms of the nearest trough C by pipes a' , and all the remainder of the troughs connected to each other by similar pipes, a'' , so that water poured into the tanks D will run from thence into all the troughs. The troughs will extend from the ends of the car to the central doorways, each end of the car being supplied with its own tank D and system of connected troughs.

The tanks D will not be as deep as the troughs C, so that the latter cannot be filled to overflowing; hence the water will not be liable to be spilled therefrom by the motion of the car.

The tanks D will be provided with covers b , and may also be provided with ears or lugs d , by which they may be attached to the frame of the car; or, if preferred, the tanks may be supported by brackets or other suitable means. The troughs C are also provided with ears or lugs e , by which to attach them to the frame of the car.

Each of the troughs C and the tanks D will be provided with enlargements g , to form sockets into which the pipes a' a'' will be tapped.

The tanks and troughs may be of any suitable size or material; but they will generally be made of cast-iron, and connected by sections of ordinary wrought gas or steam piping.

I have shown in the drawings only a portion of one end of a car; but as both ends are precisely alike this is sufficient to fully and clearly illustrate the invention.

A second or auxiliary tank, D', may be arranged above each of the tanks D and supplied with stop-cocks h , by which the contents may be run into the tanks D when required. By this means a double supply of water may be carried to be used during long journeys. By this simple arrangement each of the animals occupying the car will be supplied with a separate drinking-trough, C, and by means of the tanks D and the connecting-pipes a' a'' all the troughs may be supplied at once by merely pouring the water into the tanks. Another advantage of this arrangement is that the tanks D hold a reserve supply of water of a quantity sufficient to replenish the troughs C with water as fast as the animals consume it, so that a sufficient amount can be carried at once to supply the animals during a protracted journey, and by using the auxiliary tanks D' this reserve supply is still further increased, so that no necessity exists for halting the animals during transit for watering.

Having thus described my invention, what I claim as new is—

In a stock-car, watering-troughs C, arranged along both sides of the car and connected together by pipes a'' , in combination with a tank, D, extending across the ends of the car in a substantially horizontal position and with its bottom in line with the bottoms of said troughs and with its top below the top line of said troughs and connected to said system of troughs by pipes a' , substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HENRY CLINTON HICKS.

Witnesses:

C. N. WOODWARD,
H. S. WEBSTER.