

J. & A. Densmore, & G. W. Yost, 28 sheets, Sheet 1.

Petroleum Car.

No. 55,832.

Patented June 26, 1866.

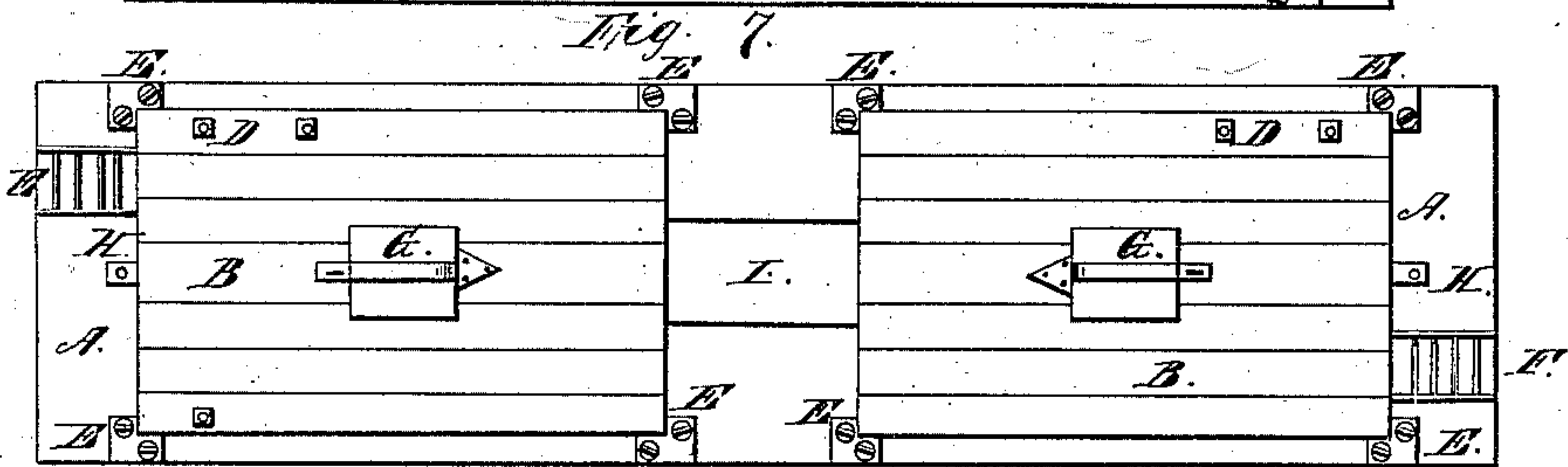
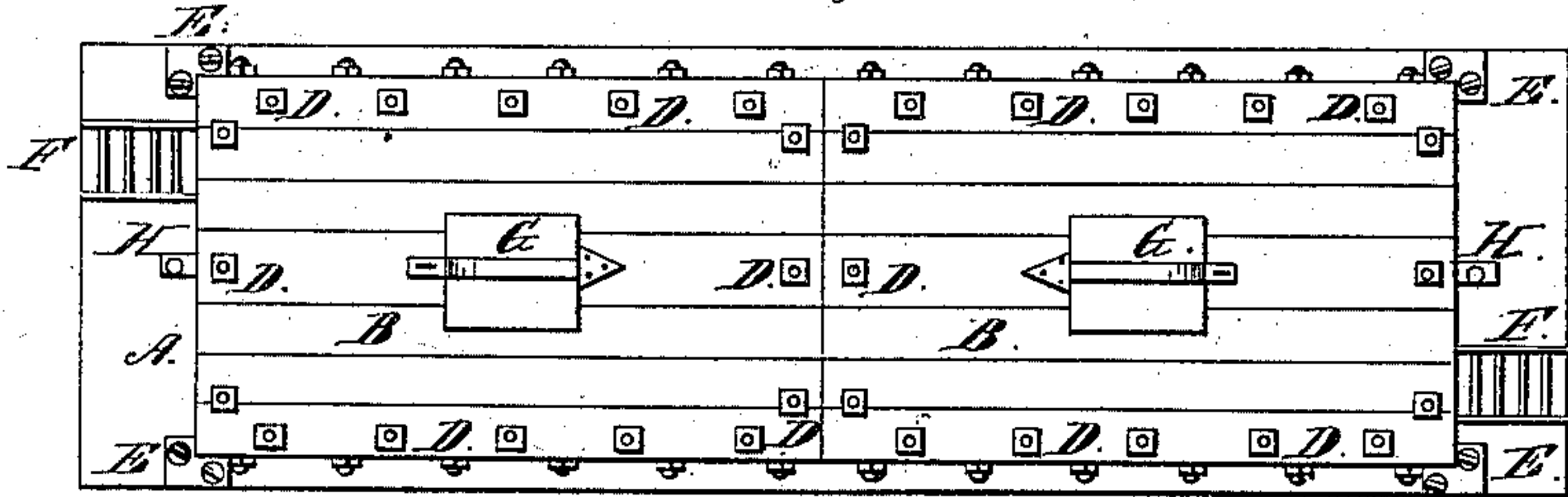


Fig. 8.

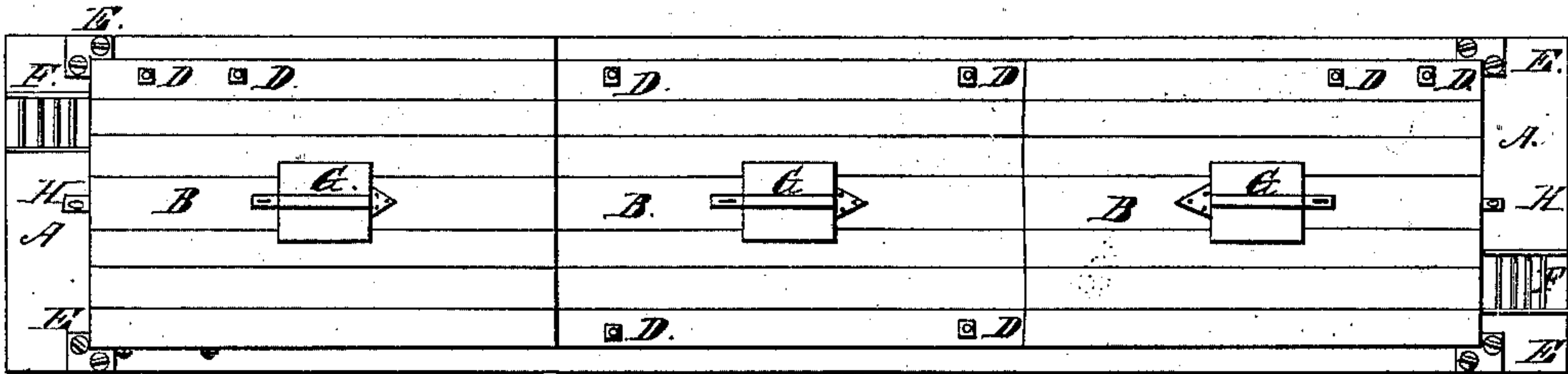
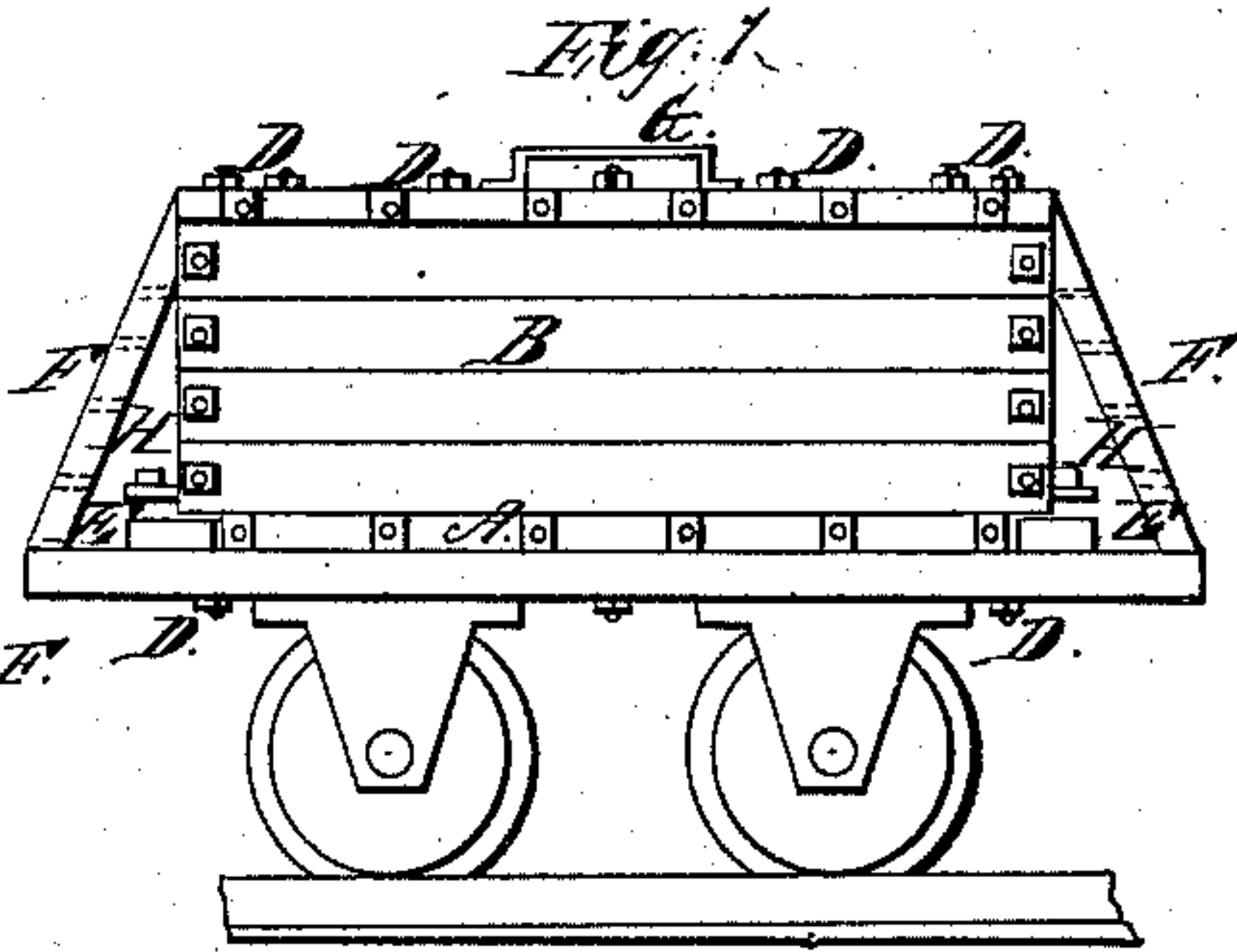
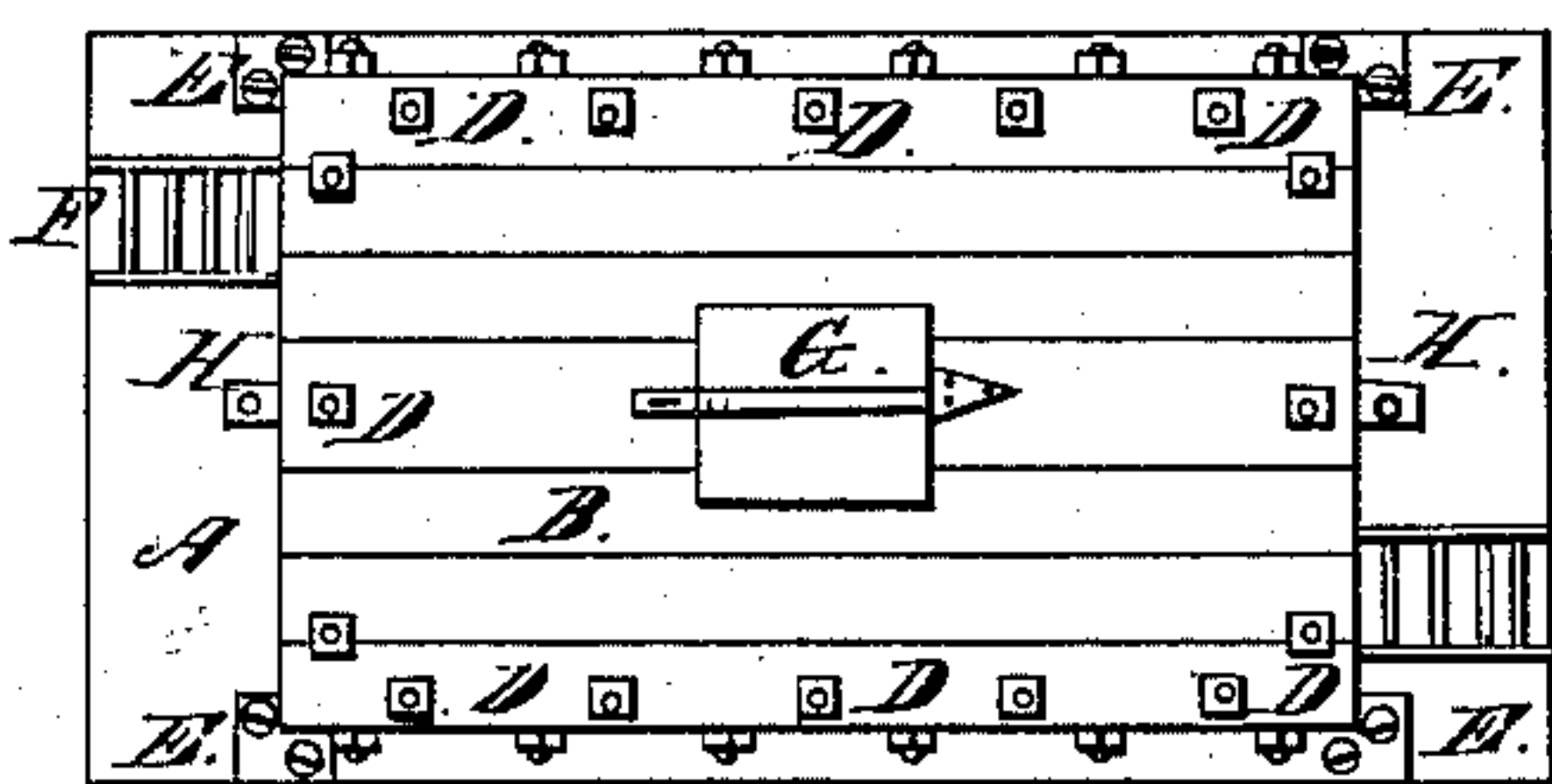


Fig. 5.



Witnesses.

A. A. Putnam  
O. Clayton

Inventor

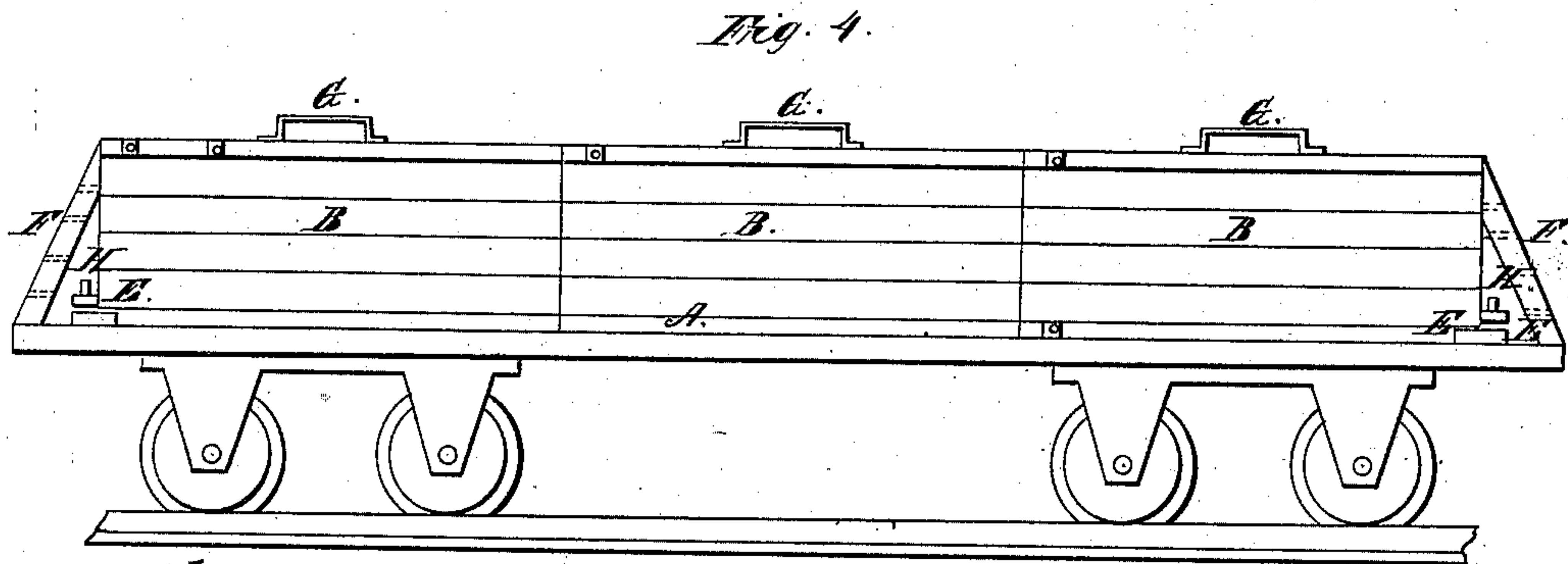
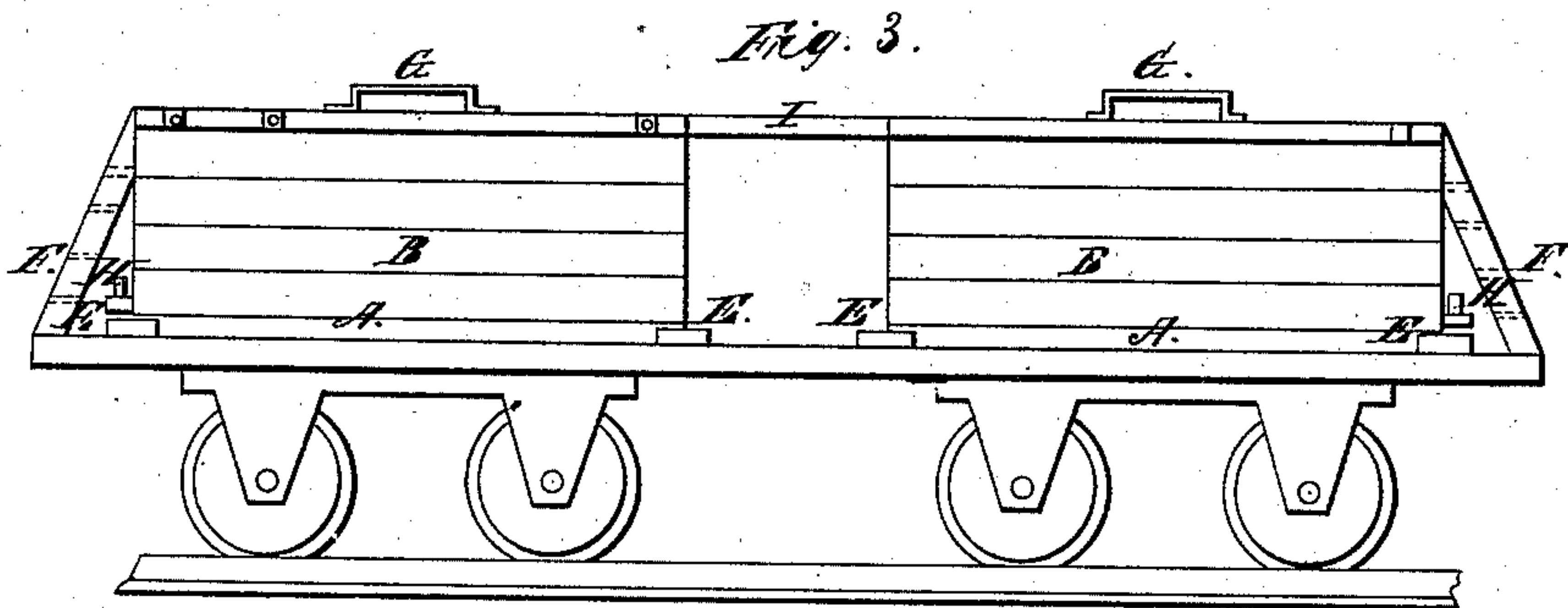
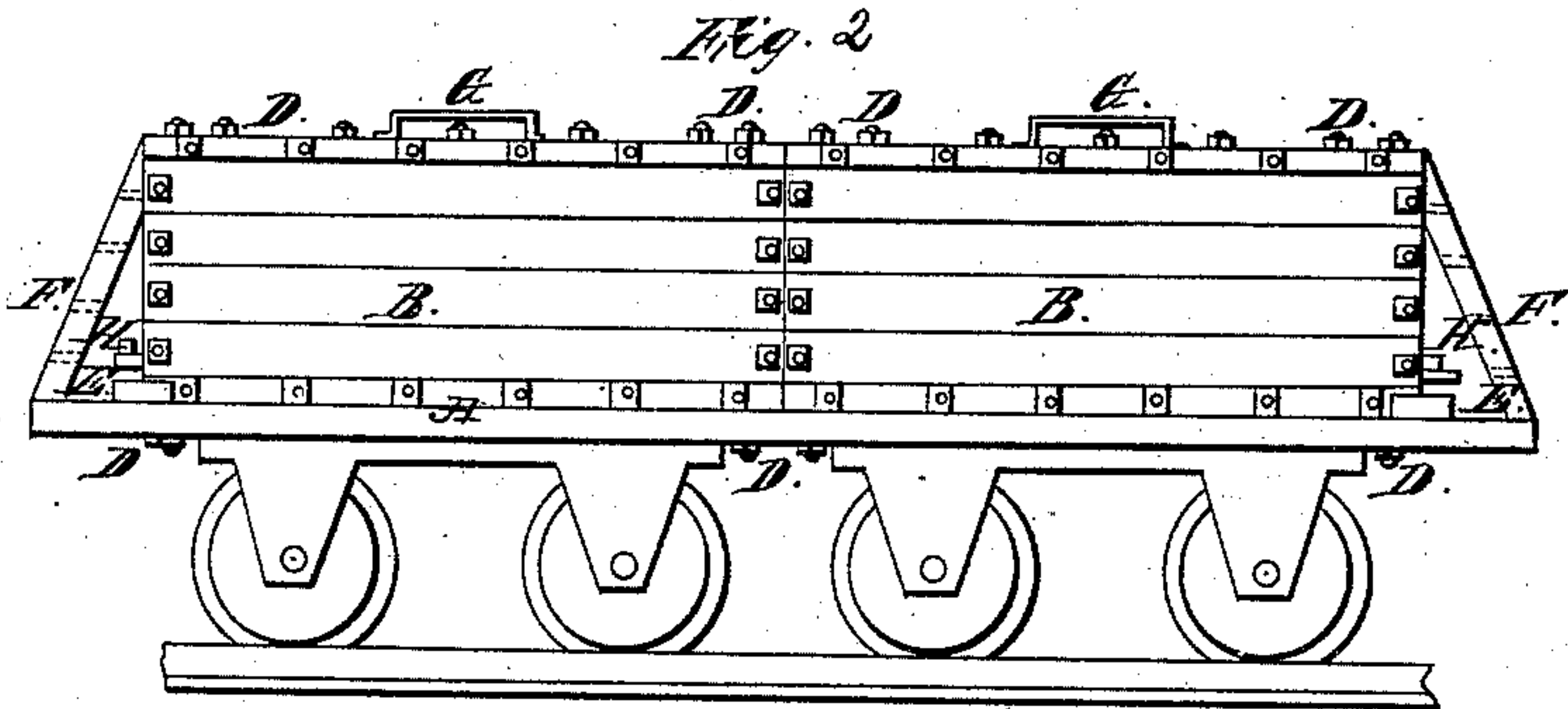
Jas. Densmore,  
Amos Densmore  
&  
Geo. W. Yost } by atty.  
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*J. & A. Densmore, & G. W. W. West, 2 Sheets, Sheet 2.*

*Petroleum Car.*

*N<sup>o</sup> 55,832.*

*Patented June 26. 1866.*



*Witnesses*

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*Anos Densmore, by Atty*  
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# UNITED STATES PATENT OFFICE.

JAMES DENSMORE AND AMOS DENSMORE, OF MEADVILLE, AND GEORGE W. N. YOST, OF CORRY, PENNSYLVANIA.

## IMPROVED CAR FOR TRANSPORTING PETROLEUM.

Specification forming part of Letters Patent No. 55,832, dated June 26, 1866.

*To all whom it may concern:*

Be it known that we, JAMES DENSMORE and AMOS DENSMORE, of Meadville, Crawford county, and GEORGE W. N. YOST, of Corry, Erie county, Pennsylvania, have invented a new Oil-Tank Car for Carrying Petroleum in Bulk on Railways, being a new and useful improvement on the improved car for transporting petroleum patented to two of us April 10, 1866, and on the inventions of two others of us of a one-tank oil-tank car, and of a three-tank oil-tank car, for which applications for patents have heretofore been made; and the following full, clear, and exact description thereof will show its construction and operation, and enable others to make and use it.

In the accompanying drawings, Figure 1 is a side view of a one-tank car; Figs. 2 and 3, of alternate forms of a two-tank car; Fig. 4, of a three-tank car; and Figs. 5, 6, 7, and 8 are top views of the same, respectively.

On the platform of a common railway-car, A A, erect one tank, two tanks, or three tanks, as shall be determined by the character of the materials and length of car, of square or oblong-square form, of pine or other wood planks, bolted together and fastened to the car.

The one-tank form is peculiarly adapted to such short cars the trucks of which come nearly together under the middle of the car, and to long planks, permitting the tank to be made of greater length, and enabling the sides of which to serve to support the platform from breaking in the middle; but it can be used on any car.

The two-tank form is adapted to any length of car, but more peculiarly to long cars, on which it is desirable to distribute the weight of the load more evenly than the one-tank form readily allows, and is of alternate kinds—first, two square tanks, one at each end, directly over the trucks; and, second, two oblong-square tanks, with one end of each abutting together in the middle of the car, and thus serving to support the platform from breaking.

The three-tank form is peculiarly adapted to short planks and to narrow cars, and may be of two alternate kinds—first, three square tanks, one over each end and one in the middle, and three oblong-square tanks abutting together in the middle of the car, and serving to support the platform from breaking.

To erect the tanks of the two-tank form the more practicable, simpler, and better, each tank directly over a truck,) and to make them eight feet square and four feet high, take thoroughly-dry wood planks, pine being the better kind, eight and a half feet long and of any convenient widths. Plane the edges so they can be put together and make perfectly tight joints. For each side of each tank B take planks of a united width of four feet. Bore five holes through the planks edgewise, through which to put bolts, with a square head at one end and a screw and burr and washer at the other. Make the bolts long enough to go through the thickness of the bottom and top in addition to the planks of the sides, so that the same pressure that screws the planks of the sides together will screw the bottom and top to them. For each bottom and top take planks of a united width of eight feet and the thickness of the two sides. Bolt these planks together, edge to edge, with five bolts running through them, like dowel-pins, edgewise. For the ends, take for each planks eight feet long and of a united width of four feet. Put these together edge upon edge, and bore five holes through them edgewise, through which to put five bolts four feet and the thickness of the top and bottom long between the head and the washer. Set the ends in, so that the bottom, top, and sides will jut or project over or by three inches at each end. Screw tight the several bolts running through the top, sides, and bottom, and through the top, ends, and bottom, and the tank will be tight at all but four joints. Outside of the ends, through the projections of the sides, pass five bolts through from side to side, equally interspaced from top to bottom, which, when drawn tight by the screws, will make the four remaining joints. To prevent the projections of the side planks from bending in under the pressure of the screws, set up a false end outside of the bolts to act as a brace. Two tanks of this size will hold ten tons, the ordinary load of a common car.

Of the one tank, alternate two tank, and three tank forms, make the tanks in the same manner, of bolts and screws and planks, differing only in proportionate lengths.

To prevent the tanks from moving backward or forward, or jarring from any sudden stopping or starting of the car, bolt down upon



the platform at each end and side, the cleats or stops E.

Make the steps F F, the man-heads G G, the faucets H H, and the runway plank I precisely as described in the specification of the patent granted to two of us on the 10th of April, 1866.

The capital letters in this description refer to the parts of the tanks and fixtures marked by the same letters in the drawings.

The nature of our invention consists in combining one, two, or three light, tight, sound, square, or oblong-square wood tanks with a common railway-car, so as to make it or them practically a part of the car, in which to carry petroleum or other liquid substances, instead of in barrels, casks, or other movable packages, and thereby save carrying the weight of the barrels, casks, or other movable packages.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The one tank B, square or oblong-square, of wood planks bolted together and attached to an ordinary railway-car, A, by means of the cleats E and the bolts D D D D, when the same are constructed and combined as hereinbefore described, and for the purposes set forth.

2. The two tanks B B, square or oblong-square, directly over the trucks or abutting together in the middle of the car, of wood planks bolted together and attached to the car A by means of the cleats E E and the bolts D D D D, when the same are constructed and combined as hereinbefore described, and for the purposes set forth.

3. The three tanks B B B, square or oblong-square, of wood planks bolted together and attached to the car A by means of the cleats E E E E and the bolts D D D D, when the same are constructed and combined as hereinbefore described, and for the purposes set forth.

4. The square or oblong-square tank or tanks, of wood planks, attached to an ordinary car, when constructed and combined by any other mechanical contrivance substantially the same and which will produce the same results.

JAMES DENSMORE.  
AMOS DENSMORE.  
GEORGE W. N. YOST.

Attest:

C. M. BOUSH,  
A. SAUERHEBER.