

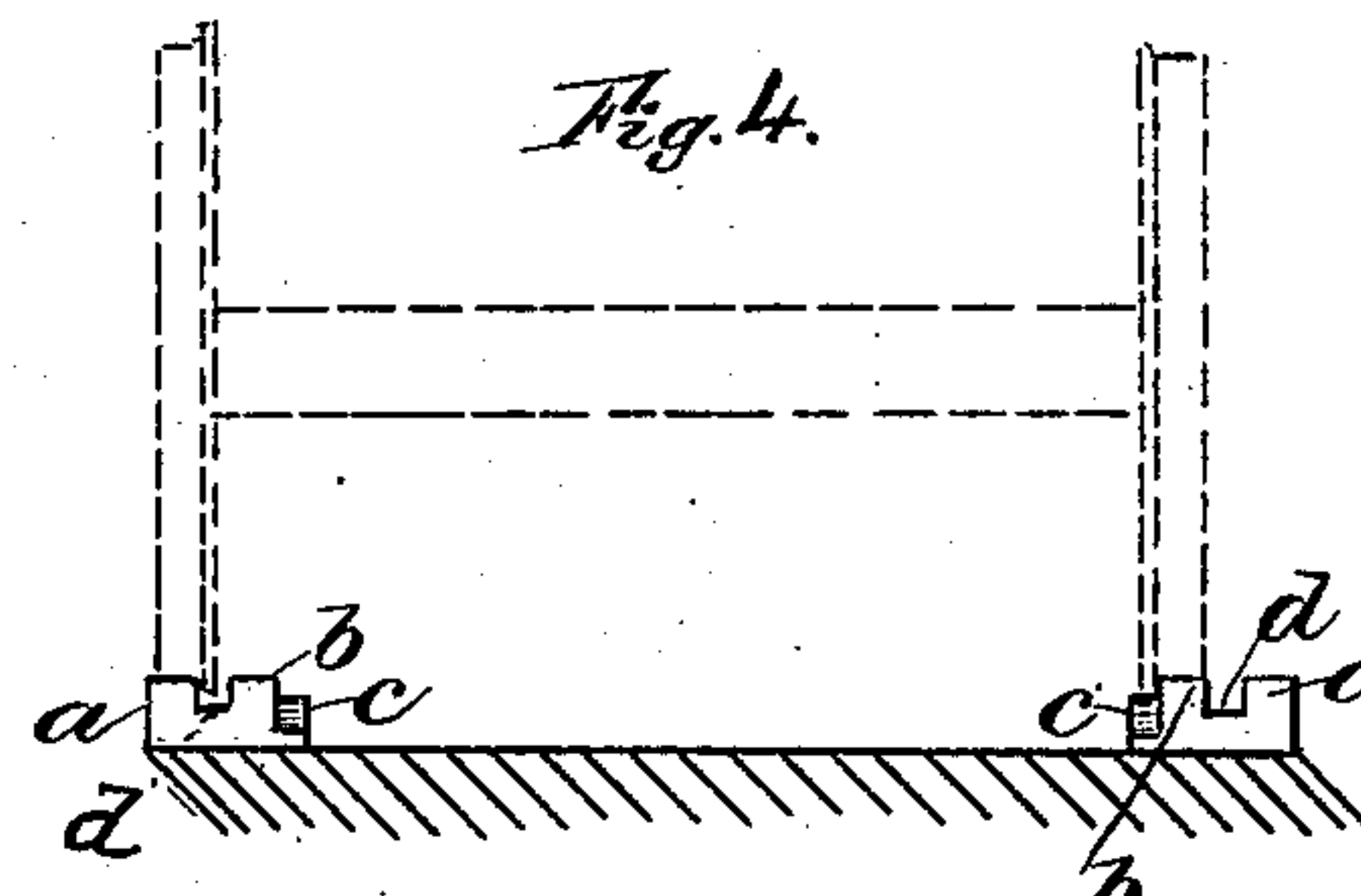
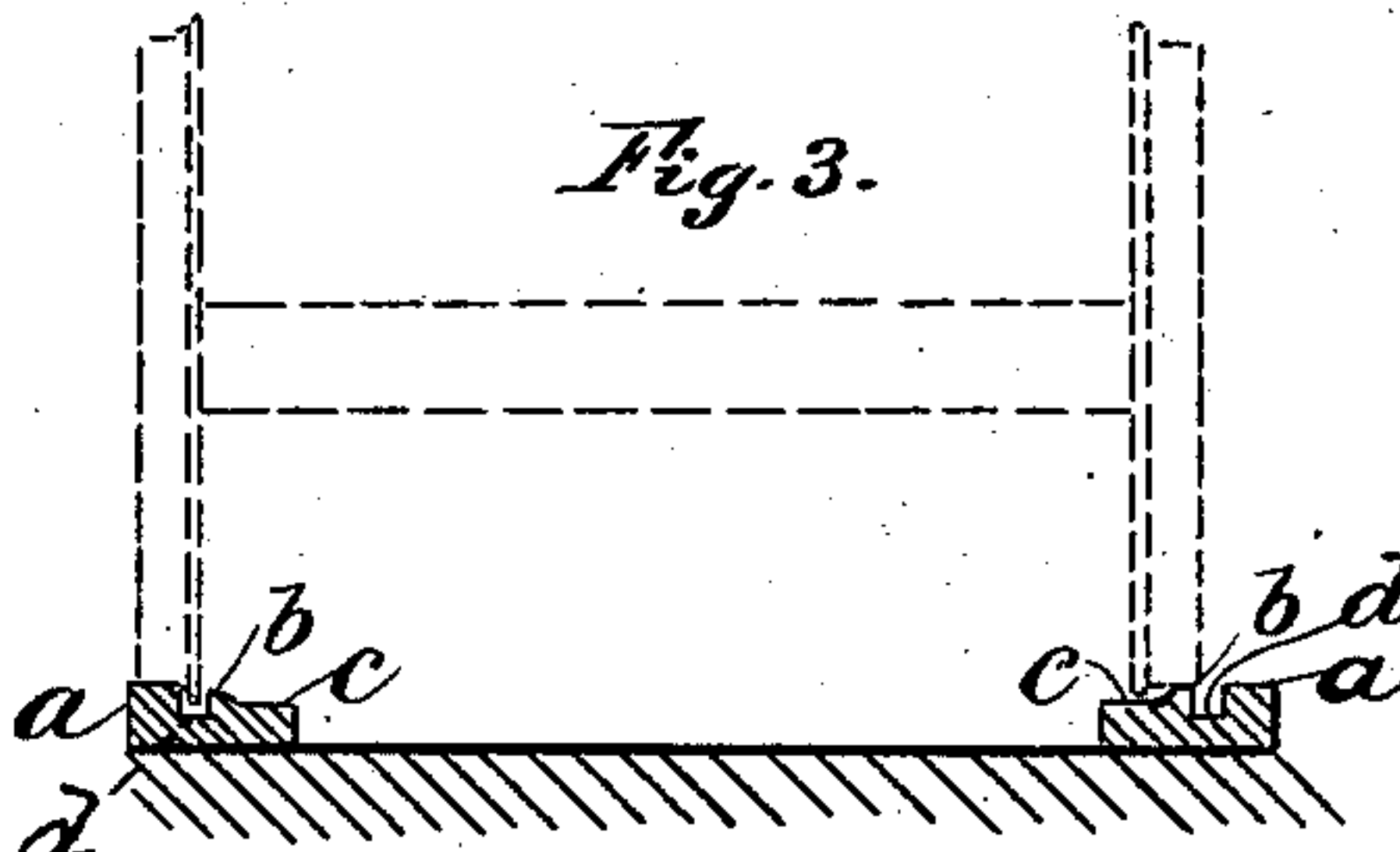
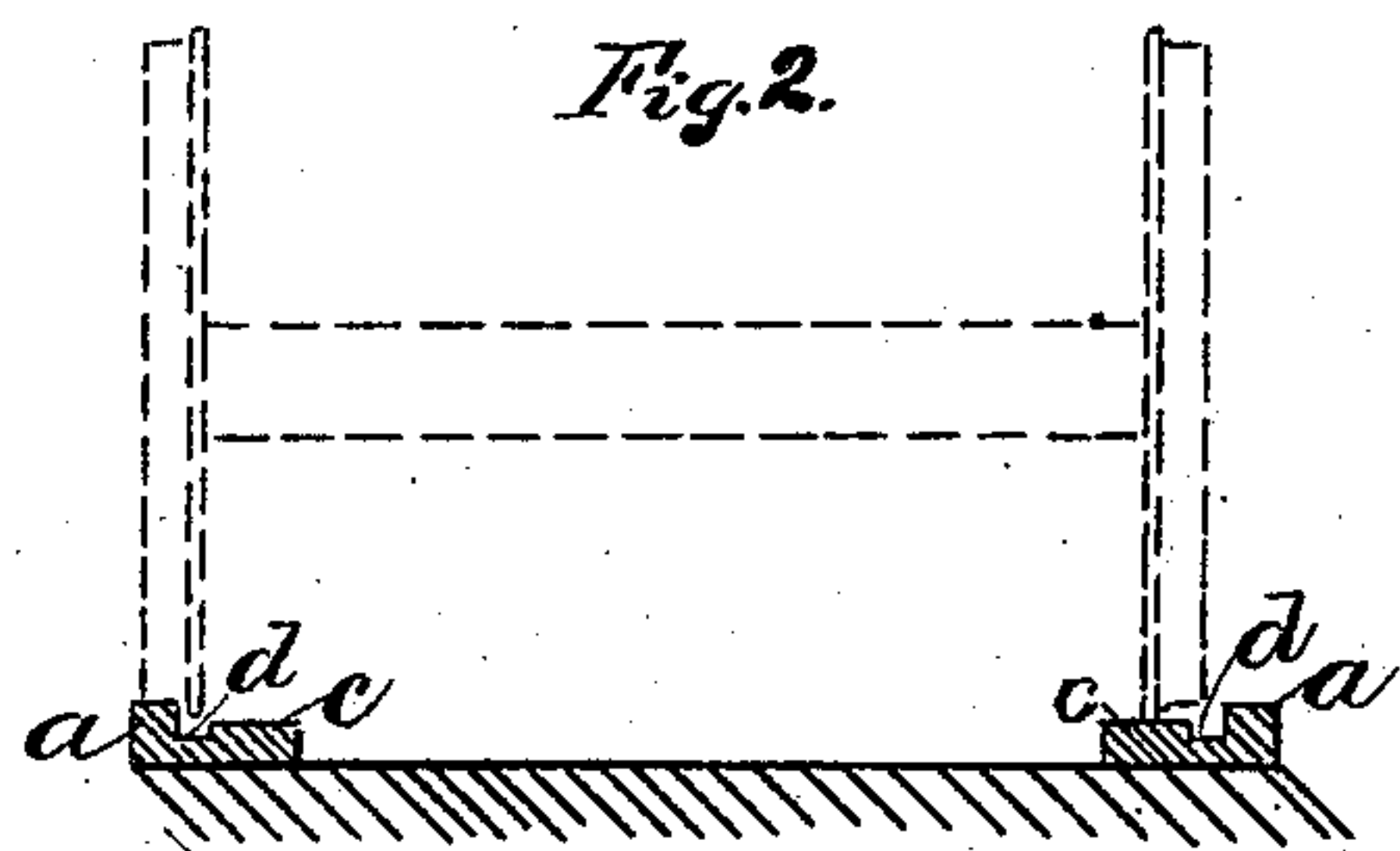
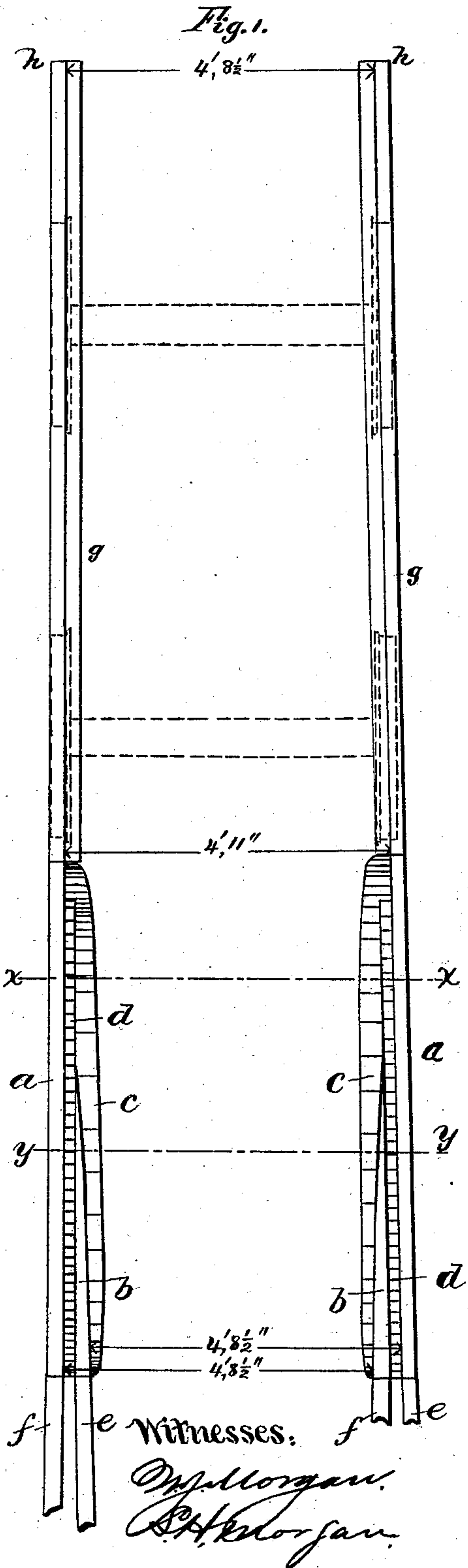
(No Model.)

F. W. KALBFLEISCH.

RAILROAD SHUNT.

No. 373,294.

Patented Nov. 15, 1887.



Inventor:
Fred W. Kalbfleisch
By N. P. Hager.
att'y

UNITED STATES PATENT OFFICE.

FREDERICK W. KALBFLEISCH, OF BROOKLYN, NEW YORK.

RAILROAD-SHUNT.

SPECIFICATION forming part of Letters Patent No. 373,294, dated November 15, 1887.

Application filed October 27, 1884. Serial No. 146,624. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. KALBFLEISCH, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Railroad-Shunts, of which the following is a specification.

My invention consists of a simple contrivance of permanently-fixed rails and points, whereby the cars may be automatically shunted onto the branch or be run along the main track, as preferred, as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1 is a plan view of my improved railroad-shunt, with dotted lines showing the positions of the wheels of the car when running onto the branch. Fig. 2 is a cross-section of Fig. 1 on the line xx , with dotted lines showing the position of the wheels thereat when running onto the branch. Fig. 3 is a cross-section of Fig. 1 on the line yy , with dotted lines showing the position of the wheels thereat when running onto the branch; and Fig. 4 is an end view of the ends of the shunting-rails, which join with the main line and branch, with dotted lines showing the position of the wheels on the branch.

I make a pair of shunting-rails, a , of full dimensions from end to end, having an inside point-rail, b , extending, preferably, but not necessarily, about the distance between the axles of the car, and an inside flange, c , extending the whole length, with a groove, d , for the wheel-flanges, separating the point-rail b and the high part of the flange c from the outside rail, a , suitably for the flanges of the car-wheels to pass between rail a and point b when the wheels run along rail a .

At the point ends of the point-rails b , the flanges c are high enough to carry the wheel-treads onto the point-rails by the wheel-flanges running on them, and each way therefrom said flanges descend sufficiently for the wheel-flanges to roll on and off without shocks; but the flange c may be of uniform height throughout the length, and the point may slope downward, if preferred, to receive the wheels. The rails so made I connect with the main line e and branch f by joining the ends of rails a with one main line, e , and one branch

rail, respectively, and joining the ends of point-rails b with one main-line rail e and one branch rail, f , respectively—that is to say, the main rails a of the shunt-rails are outside of the point-rails and connect with the main line and branch, respectively, and they are divergent toward the main line and branch, while the point-rails are inside of the main heads a of the shunt-rails, and they are convergent toward the main line and branch, and connect with said main line and branch, respectively, the gage of both the main line and branch being the normal measure at the junction of the shunt-rails therewith; but the distance between the rails a at this point is as much greater than the normal gage as the flange-space d and the head of point-rail b of one shunt-rail. From this point the shunt-rails a and the first rails, g , of the track in advance of the shunt-rails range in straight lines to the joints h , where the gage is also normal, which makes the gage wider at the junction of the shunt-rails with the rails g , so that if by any cause the car is made to incline to the rail of one side it will leave the rail of the other side, and run along flange c onto point-rail b , and thus will take the main line or the branch according as the car is made to follow one rail or the other before arriving at the shunt-rails, and this, too, it is to be observed, without any lateral shift or slide of the wheels on the track, nothing more being required than to cause the car to incline to one side or the other while running onto and along or partly along rails g , which may be readily done by the team in the case of horse-cars.

It will be seen that with this improved shunt no movable points or other movable parts are required to shunt the cars or not, the same as movable point-switches do; and it will also be seen that it dispenses with the use of inside treads of the car-wheels and the elevating-rails sometimes used for running up and thrusting the wheels laterally for automatic shunting.

I am aware that “shunts” or “points,” as they are technically called, are in use on street-railways that somewhat resemble mine; but they differ in this essential particular, that whereas in mine the gage of the track is gradually increased for some distance before reach-

ing them, the gage of those in use is maintained up to or near the point of shunting, making a heavy sliding or lateral motion necessary to transfer a car from one track to another, which is entirely obviated in mine.

What I claim, and desire to secure by Letters Patent, is—

The combination, with shunt-rails *a*, having inside fixed point-rail, *b*, and flange *c*, and joining one main-line rail, *e*, and one branch rail, *f*, of rails *g*, in advance of the shunt-rails, which, together with the shunt-rails *a*, diverge from the point *h* in advance of the point-rails

and to the junction with the main line and branch, and thereby widen the gage of the rails *g* to the point-rails, enabling the cars to automatically run on the main line or branch, according as the cars are inclined to run along one rail or the other, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

FREDERICK W. KALBFLEISCH.

Witnesses:

W. J. MORGAN,
S. H. MORGAN.