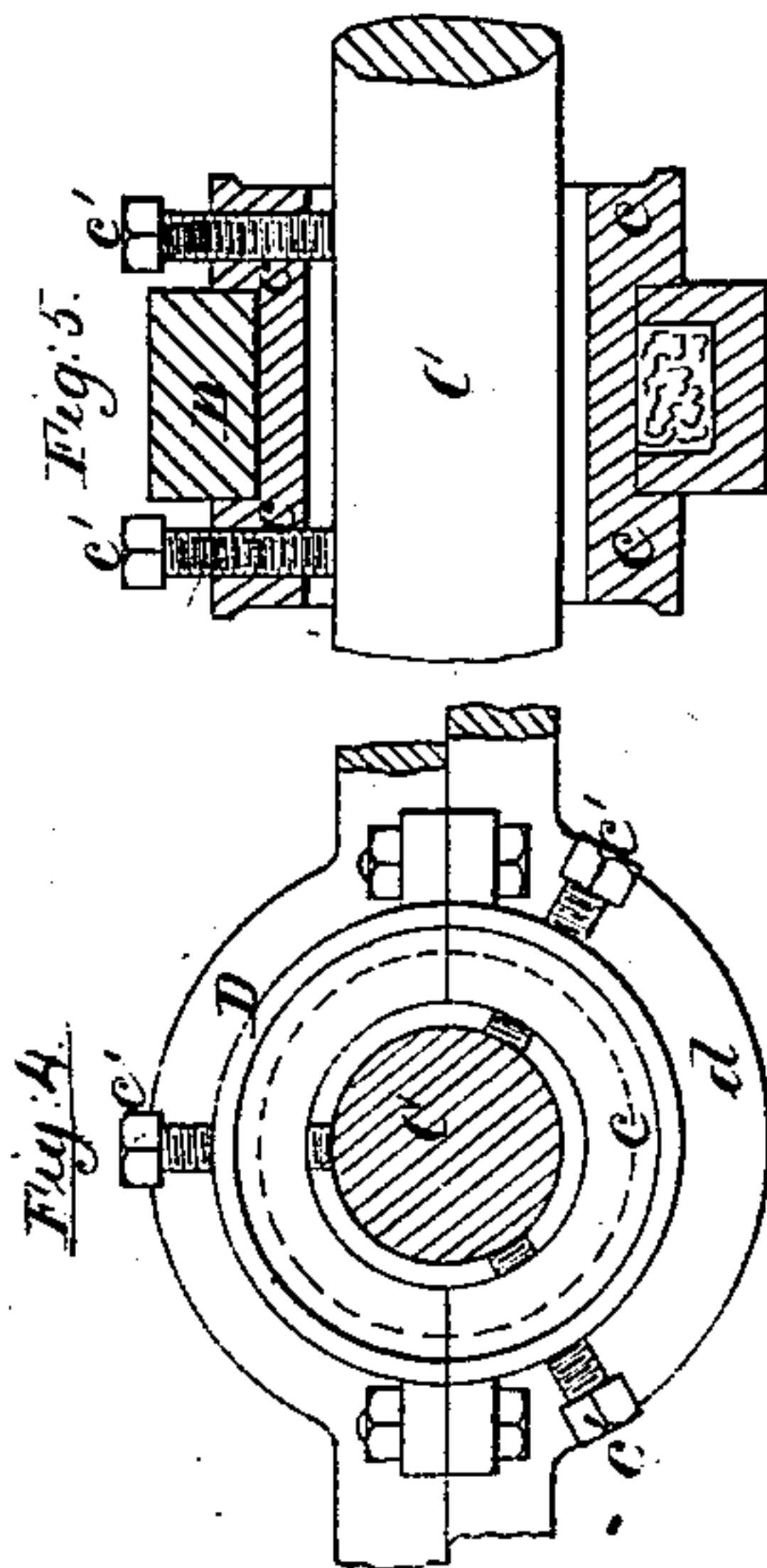
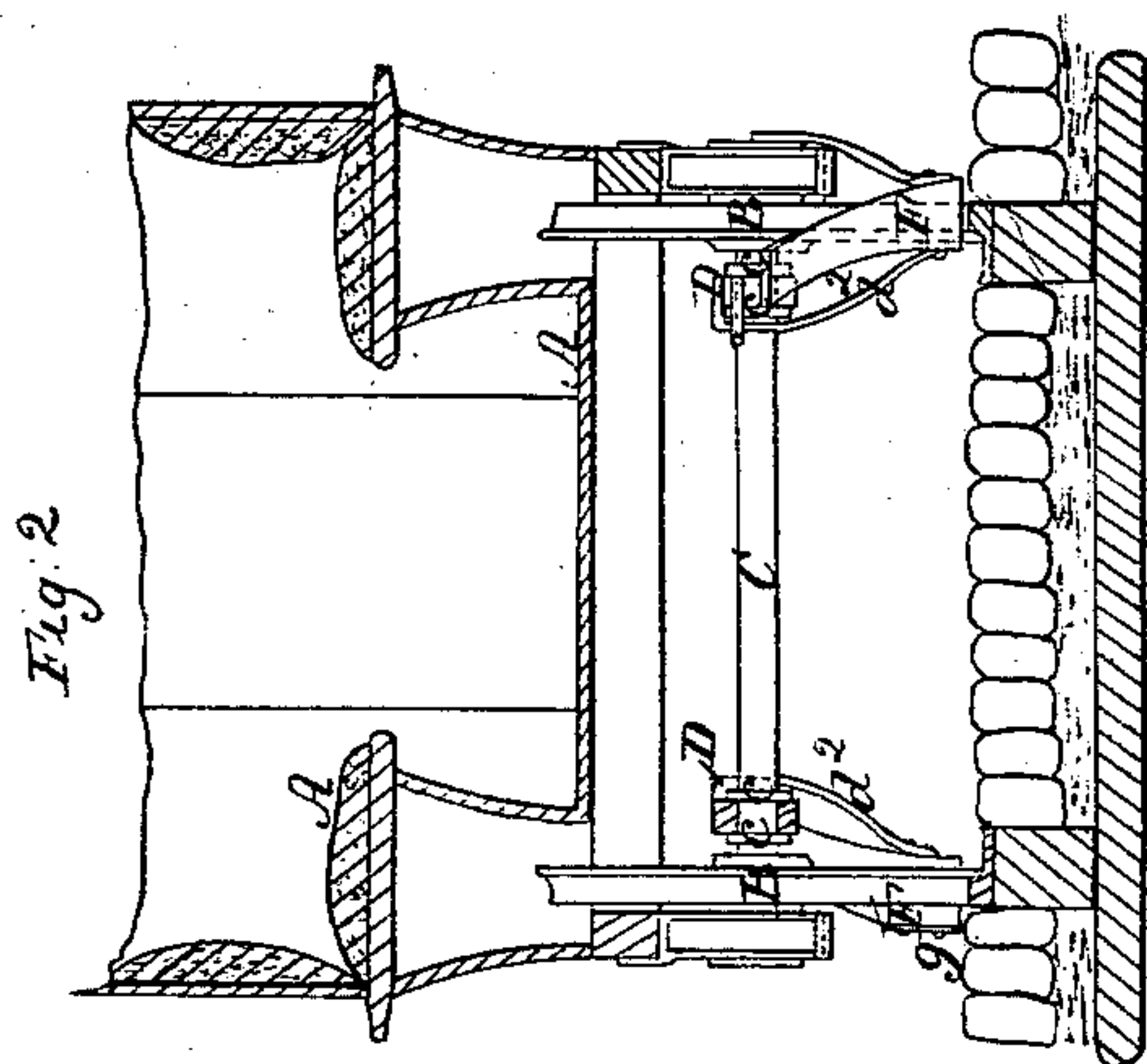
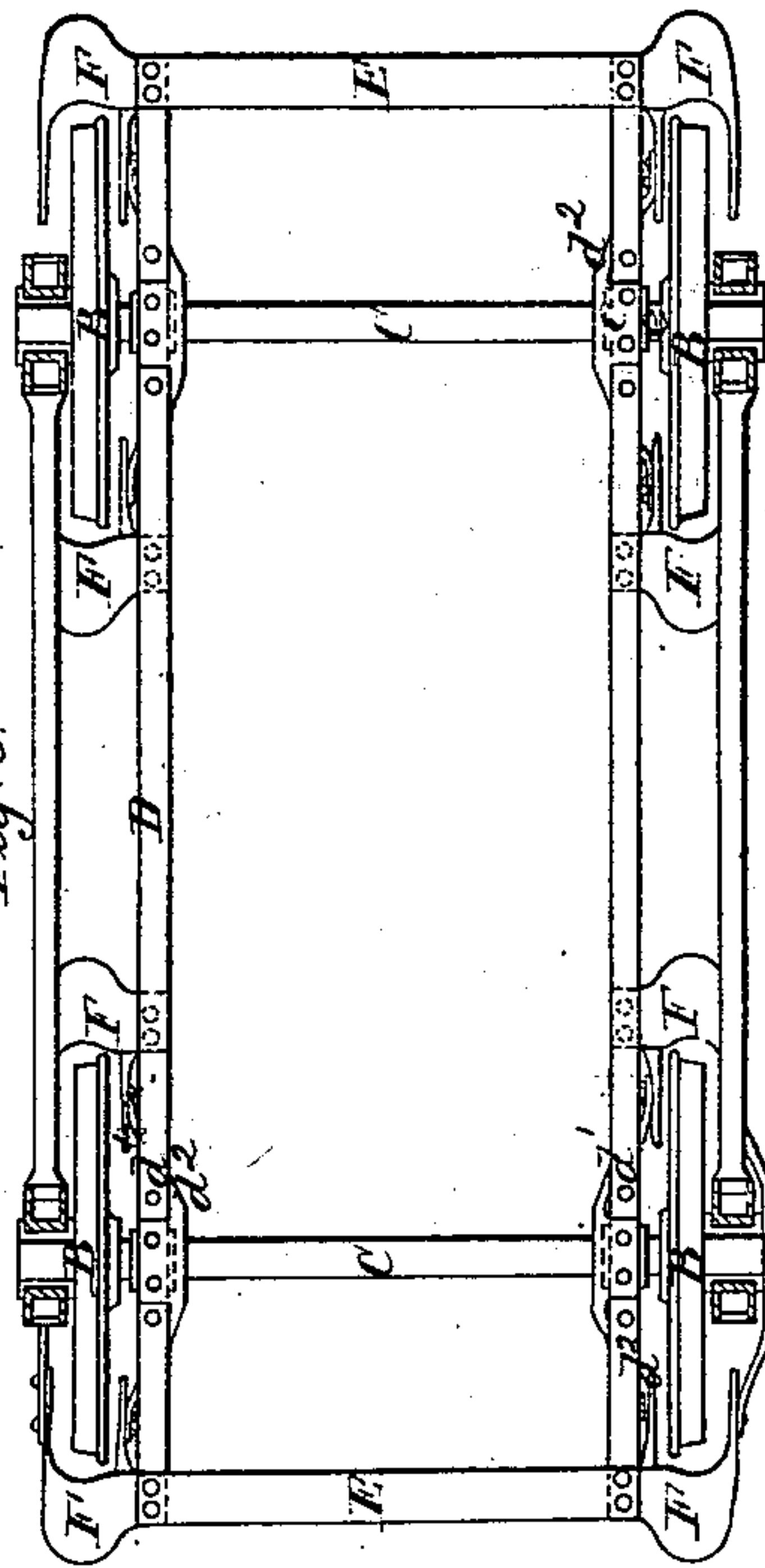
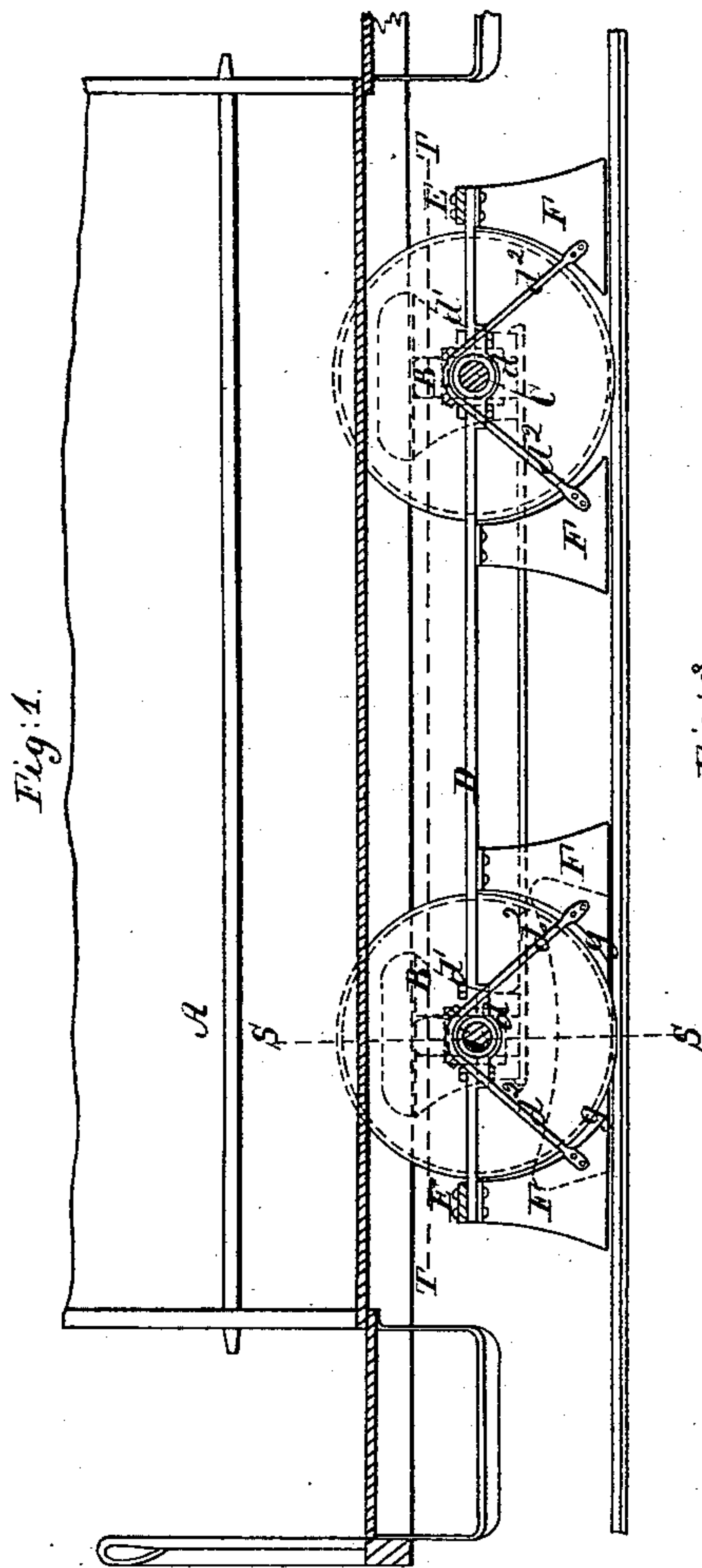


W. SIEFERT.
TRACK CLEARER.

No. 61,637.

Patented Jan. 29, 1867



Witnesses;
John Price
Emil Vofnash

Inventor;
William Siefert

United States Patent Office.

WILLIAM SIEFERT, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND
JOHN PRICE, OF SAME PLACE.

Letters Patent No. 61,637, dated January 29, 1867.

IMPROVED SAFETY-GUARD FOR RAILROAD CARS.

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, WILLIAM SIEFERT, of New York, county and State of New York, have invented certain new and useful Improvement in Safety-Guards for Cars; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a central vertical longitudinal section.

Figure 2, a cross-section on line S S, fig. 1.

Figure 3, a horizontal section through line T T.

Figure 4, an elevation of a part of my invention.

Figure 5, a section of the same.

Similar letters of reference indicate corresponding parts in the several figures.

The object of my invention is to provide means for effectively preventing the serious disasters so often occurring in our crowded streets and on our railroads; to provide cheap and adequate means, easily applied to any cars already running and to such building.

The nature of my invention consists in arranging guards to the wheels, which always keep their proper elevation above the track, in case of street cars one-half inch above the rail, which may be more or less as the case may require. To obtain this object, I secure my guards to a stout frame, which latter is secured to the axles of the wheels in such a manner that they turn freely in the frame, and yet hold the latter firmly. The guards being close to the wheels, and having, by reason of being secured to axles of the same wheels, the respective motions of the same, it will be easily understood that the guards will rise and fall with the wheels as the unevenness of the track will require.

A, figs. 1 and 2, represents the body of the car; B B are the wheels; C C the axles. In new cars I provide on the axles, close to the wheels C C, collars *c c*. Between these collars rest the two longitudinal guard carrier-bars D D, which are connected at their respective ends by the cross-bars E E. If my invention is to be applied to cars already running, I make the collars, little, *c c*, in two halves, as shown in figs. 4 and 5, which are secured to the axle by three pairs of set-screws, *c' c'*, which allow also the adjustment of the collar on the axle concentric with the wheels. To secure these bars D D to the axles, they are provided at the places with boxes formed partly on the bars D D, and by a cover, *d*, secured to the bars from below by bolts, *d' d'*. Oil holes are provided on the boxes. The cover *d* is hollow, to form a receptacle for the oil, and being supplied in the common way with waste, forms a self-oiler similar to all railroad axle-boxes now constructed. To the bars D D are firmly secured the guards F F, one before and one behind each wheel, or only before each wheel, as may be found advisable. Where two guards to each wheel are employed, I deem it advisable to connect the same on the outside by a plate, *g*, as shown in the drawings, thereby forming an additional guard on the outside, and at the same time a truss, so that the strain thrown on one guard will be borne by both; by these means the guards are secured to D firmly, and may be constructed with comparative lightness. The guards may, for the same object, be connected at the outside to the axle-boxes by truss-bars, but I prefer the former. The guards are trussed to the frame by truss-rods, *d'' d''*, which are riveted to the guards and bolted to the frame. The guards are rounded on the lower edges, so as to prevent them from cutting the obstacles they may encounter.

Having now fully described my invention, I claim, and desire to secure by Letters Patent, as follows.

The arrangement of the stationary guards F F, in combination with the axles C, carrying-bars D, truss-plate *g*, and truss-rod *d''*, substantially as and for the purpose set forth.

WILLIAM SIEFERT.

Witnesses.

JOHN PRICE,

EMIL VOSSNACK.