

(No Model.)

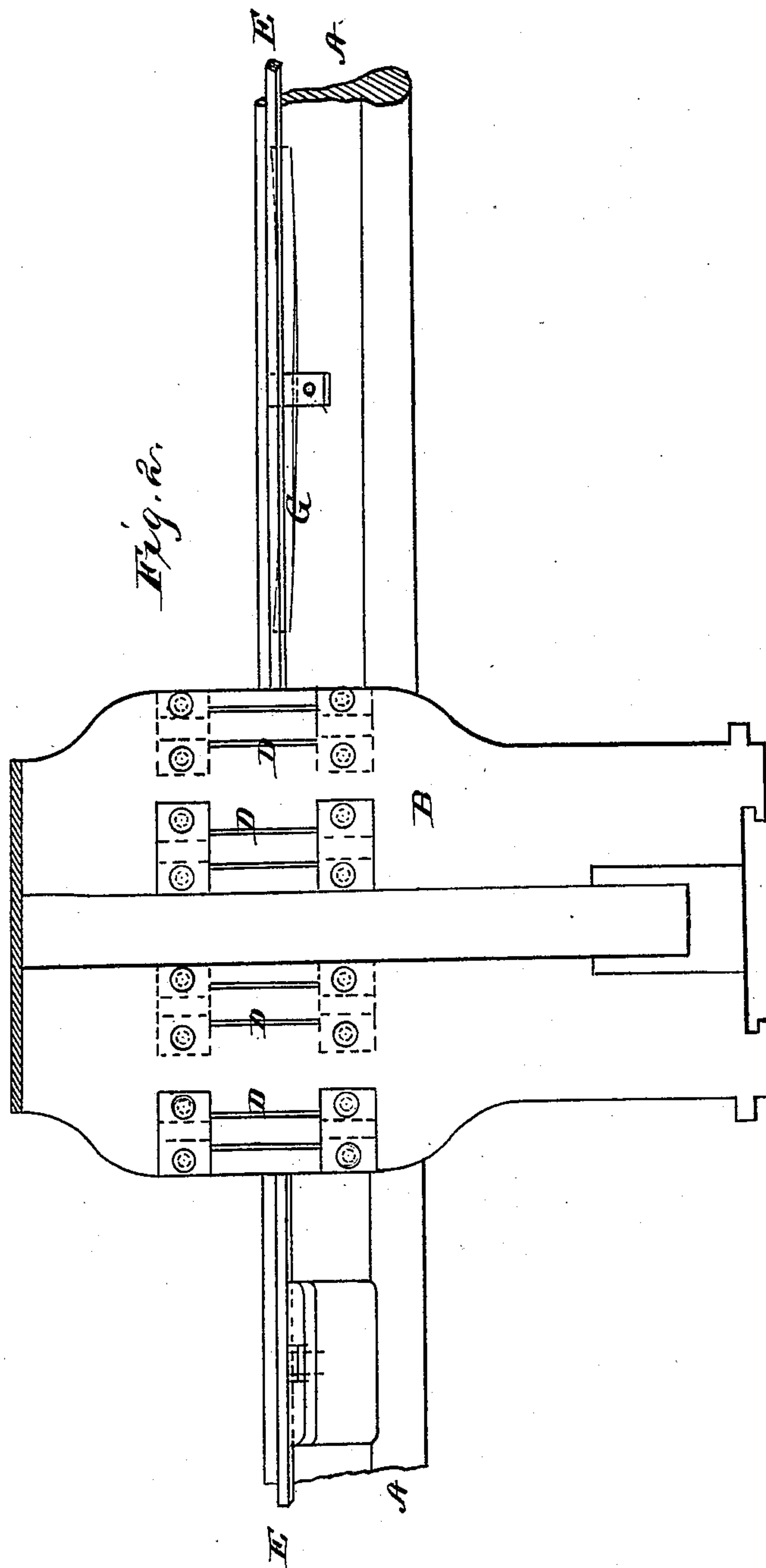
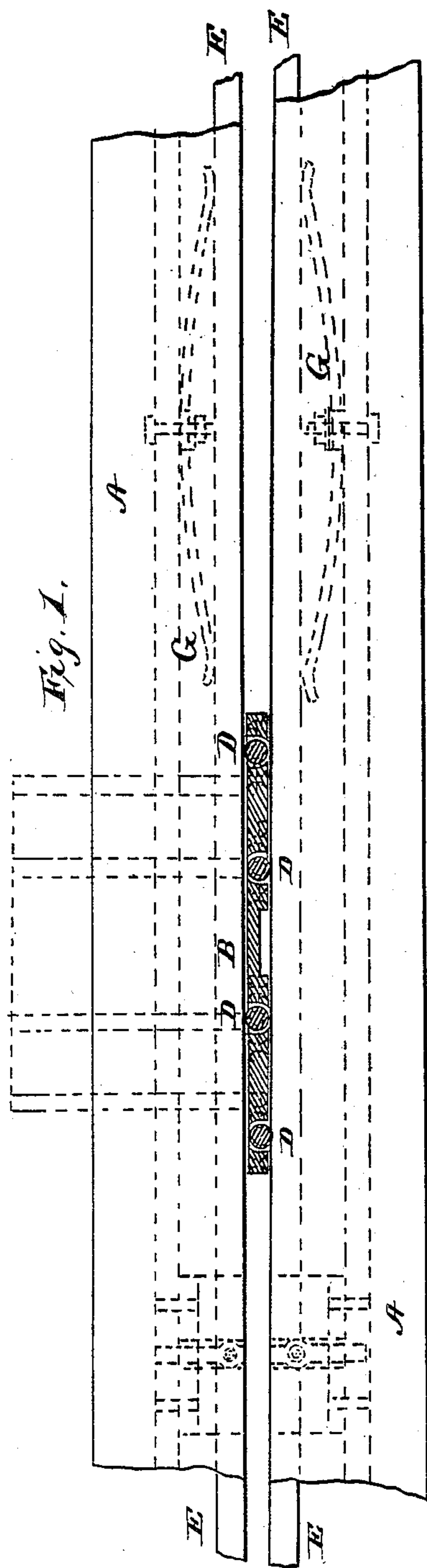
2 Sheets—Sheet 1.

C. S. DRAKE.

GUIDE RAIL FOR ROPE RAILWAY CLUTCHES.

No. 258,562.

Patented May 30, 1882.



Witnesses,
Edwin L. Yervell
J. J. McCarthy

Inventor,
Charles S. Drake,
per G. M. Alexander,
Attorney.

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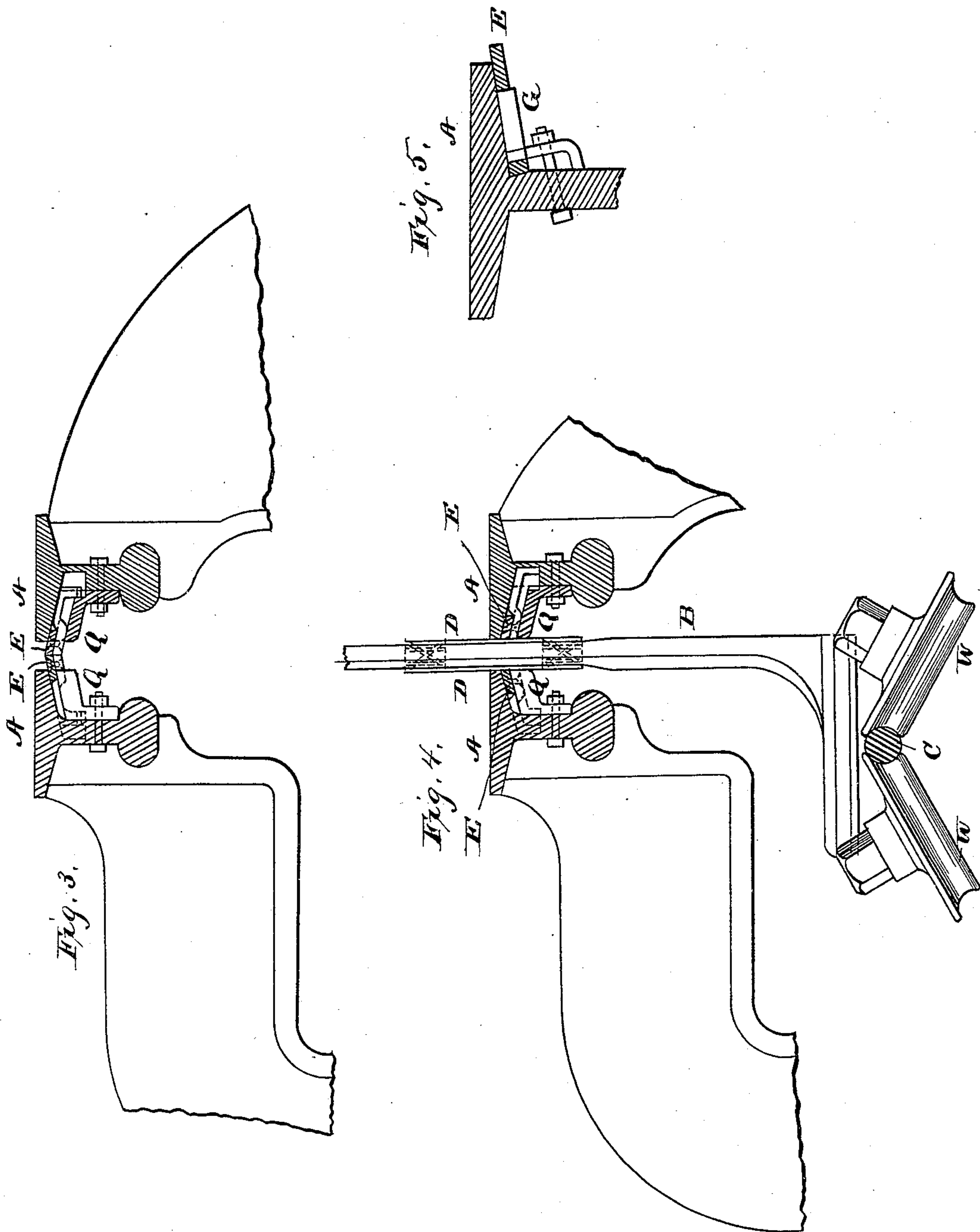
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UNITED STATES PATENT OFFICE.

CHARLES S. DRAKE, OF SAN FRANCISCO, CALIFORNIA.

GUIDE-RAIL FOR ROPE-RAILWAY CLUTCHES.

SPECIFICATION forming part of Letters Patent No. 258,562, dated May 30, 1882.

Application filed October 19, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. DRAKE, of San Francisco, in the county of San Francisco, and in the State of California, have invented certain new and useful Improvements in Guide-Rails for Rope-Railway Clutches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to an improvement which is applicable to street-railways where the cars are propelled by means of an endless rope or cable, which is arranged in a tube or channel beneath the surface of the roadway, and which receives a continuous rotary motion from a prime motor located at a convenient station.

My object is to prevent the filling up of the tube or channel in which the rope or cable is arranged by surface-washings, dirt, snow, &c.; and the nature of my invention consists in continuous yielding strips of steel or other suitable metal arranged in guides and so acted on by springs that while the shank which is attached to each car, and which bears the rope or cable grip, shall be allowed to pass freely between them, said strips will be kept closed before and behind the shank, as will be hereinafter explained.

In the annexed drawings, Figure 1 is a plan view in detail, showing sections of two rails forming the slot and a horizontal section of the shank. Fig. 2 is an elevation of the shank and one of the rails. Fig. 3 is a vertical cross-section of the rails, the closing-strips, and the rail-supports. Fig. 4 is a view similar to Fig. 3, but showing the shank in its place and the gripping-wheels embracing the cable. Fig. 5 is a sectional view, showing one rail and a spring for closing the slot or channel.

Similar letters of reference indicate corresponding parts.

A A designate two inverted-T-shaped rails, which are laid down parallel to each other, leav-

ing a slot or channel between them, through which a vertical shank, B, passes freely. This shank B is rigidly secured to a car-bed, and is provided at its lower end with annularly-grooved gripping-wheels W, adapted for gripping an endless rope or cable, C.

The gripping-wheels are provided with means, not herein claimed, whereby a person in the car can cause them to bind on the cable or to be freed from the cable at the will of the attendant.

The shank B is provided with vertical anti-friction rollers D, arranged so that they protrude alternately from opposite sides of the shank and roll against the edges of two closing-strips, E E, which are preferably made of steel, and which meet half-way between the rails A A, as shown in Fig. 3. These strips are designed for closing the slot or channel between the rails, and they are guided in brackets Q' and acted-on by means of springs G. The drawings represent the continuous strips E inclined in opposite directions and arranged just below the bases of the rails.

It will be seen from the above description that the closing-strips will yield and allow the shank B to pass freely between them, and then close by their own elasticity and the recoil of the springs behind them.

Having described my invention, I claim—

1. The combination of the inverted-T-shaped rails, the continuous elastic closing-strips, the guides therefor, and the bow-springs applied behind the said strips, substantially as described.

2. The combination of the anti-friction rollers, arranged as described, with the shank, substantially as and for the purposes explained.

In testimony whereof I affix my signature, in presence of two witnesses, this 17th day of September, 1881.

CHARLES S. DRAKE.

Witnesses:

SAML. S. MURFEY,
S. MUNRO.