

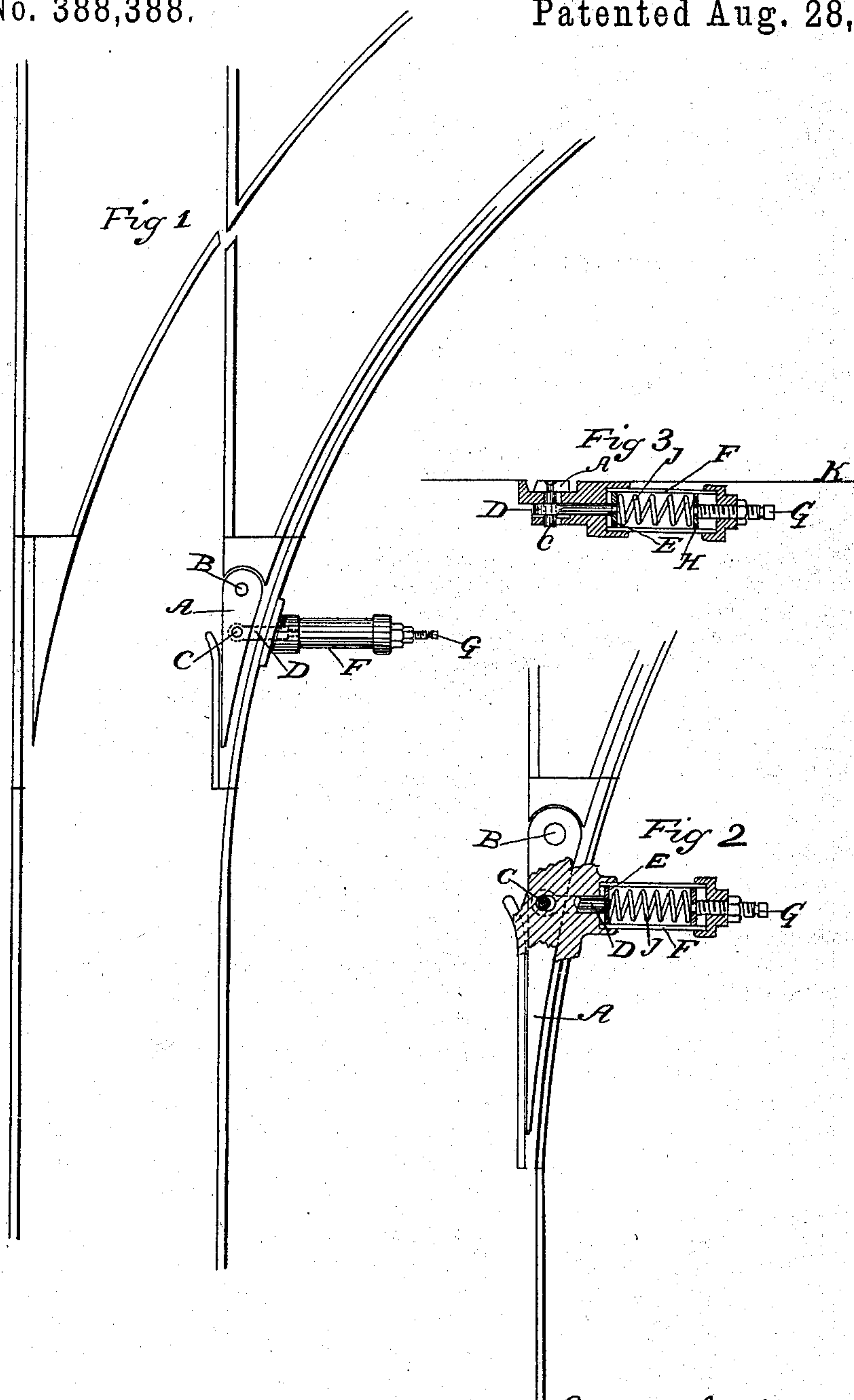
(No Model.)

C. E. ANDERSSON.

TRAMWAY SWITCH.

No. 388,388.

Patented Aug. 28, 1888.



WITNESSES:

O. Bulow
R. H. Hedensborg

Charles E. Andersson
INVENTOR,

UNITED STATES PATENT OFFICE.

CHARLES E. ANDERSSON, OF DENVER, COLORADO, ASSIGNOR TO AUGUSTUS L. PERRY, OF SAME PLACE, DENSMORE H. SANDERS, OF SALT LAKE CITY, UTAH TERRITORY, AND WILLIAM E. JOHNS, OF SIOUX CITY, IOWA.

TRAMWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 388,388, dated August 28, 1888.

Application filed February 27, 1888. Serial No. 265,384. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. ANDERSSON, a citizen of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Tramway Switches, of which the following is a specification.

My invention relates to improvements in the construction of the switch as used on a street-tramway.

The objects of my invention are to provide an automatic return of the tongue of the switch by means of mechanism that is beneath the ground-level, that is not liable to become deranged by the clogging of the earth and that has a surplus of power for displacing any small accumulation of earth or foreign matter from the side of the tongue that might otherwise prevent the tongue assuming its proper position. I attain these objects by mechanism represented by the accompanying drawings, in which—

Figure 1 is a general view, in plan, of the tramway-switch. Fig. 2 is an enlarged sectional plan of the automatic device; and Fig. 3 a sectional elevation of same.

Similar letters refer to similar parts in all views.

A is the movable tongue of the switch, hinged at B to a casting known as a "frog." To the tongue A is secured a pin, C, that extends downward into a recess cast in the frog, and to this pin C is hinged a rod, D, at the other end of which is secured a disk, E. This rod D lies wholly within a recess in the frog and enters a box or casing, F, secured to the frog. The outer end of this box or casing F is closed by a lid, in which is fitted a screw, G, for the purpose of adjusting the position of the disk H. Between disks H and E is placed a spiral

spring, J, preferably in compression, the tension of which tends to separate the disks, and by means of the connections between disk E and the tongue A the latter is continuously forced toward or against one side of the frog and automatically assumes that position after it has been displaced by the flange of the car-wheel, or otherwise. The tension of the spiral spring J and the force with which the tongue A is thrust against the side of the frog is adjustable by the screw G and disk H until the tongue is able to squeeze out from between it and the frog any small accumulation of earth or foreign matter that might otherwise prevent the tongue assuming its proper position.

It is observed that the whole of the mechanism is below the ground-level K, and, being so well protected, cannot become deranged by accident or by the clogging of the earth about it.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a street-tramway switch, the combination of a movable tongue or point, a spiral spring, a mechanical connection from the spring to the tongue below the level of the latter, a closed box or casing containing the spring and secured directly to the frog, and a screw for adjusting the tension of the spring, substantially as set forth.

2. In a street-tramway switch, the combination of a movable tongue, A, a pin, C, a rod, D, with disk E, a closed box or casing, F, with lid and adjustable screw G, and disk H, together with a spiral spring, J, substantially as and for the purpose described.

CHARLES E. ANDERSSON.

Witnesses:

E. D. WILLS,
CHAS. E. MAJOR.