T. J. GIFFORD.

Spring Seat for Railway Cars.

No. 108,777. Patented Nov. 1, 1870.

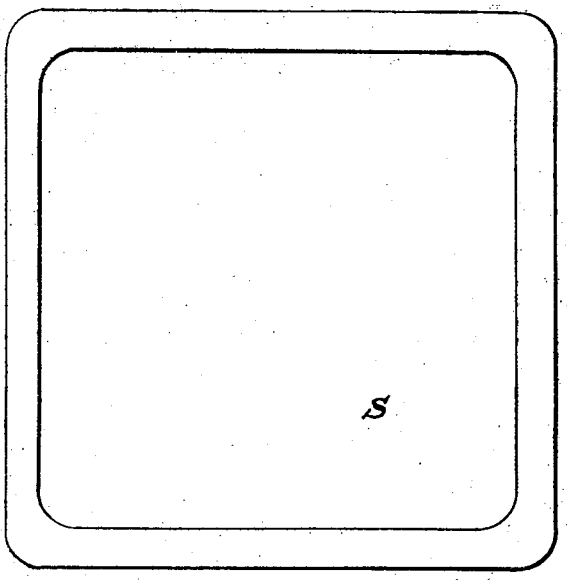



Fig. 3

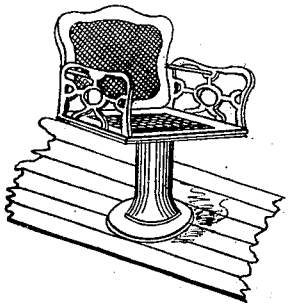
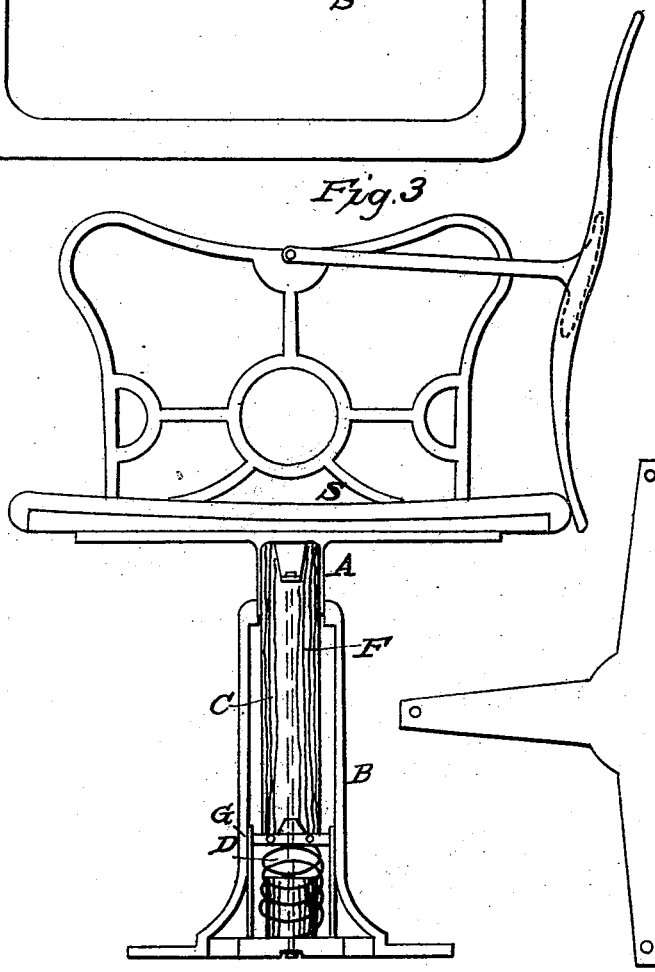


Fig. 4



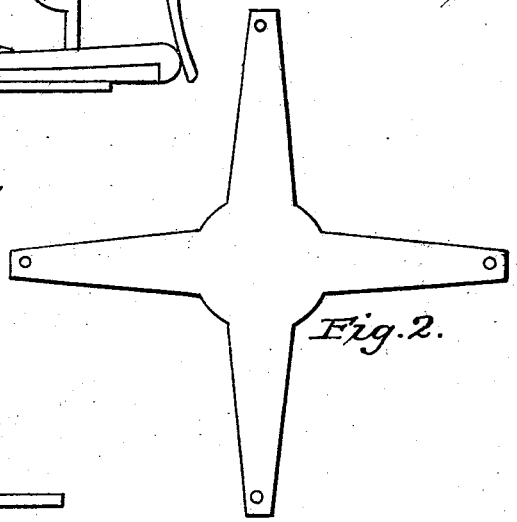



Fig. 2.

# United States Patent Office.

THOMAS J. GIFFORD, OF SALEM, MASSACHUSETTS.

Letters Patent No. 108,777, dated November 1, 1870.

## IMPROVEMENT IN SPRING-SEATS FOR RAILWAY-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, THOMAS J. GIFFORD, of Salem, in the county of Essex and State of Massachusetts, have invented a new and improved "Spring-Seat;" and I hereby declare that the following is a full, clear, and exact description, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 represents a side elevation of a chair, showing my improved mode of connecting the seat to the stand or base which supports it.

Figure 2 represents the metal cross or spider, having a hollow socket, as seen at A, fig. 1.

Figure 3 represents the frame for the seat of the chair.

Figure 4 is a perspective view of the improved seat.

The object of my improvement is to construct a seat, designed more especially for a car-seat, but may be used for other purposes, that will be comfortable, and at the same time less liable to absorb the filth, vermin, and contagious diseases that some of our public conveyances have the reputation of containing in their upholstered seats.

My method of accomplishing this object is to form the seat of rattan, or some article not likely to retain the dirt, and have the chair rest upon both a spiral and rubber spring.

The mode of construction is as follows:

The seat of the chair is placed upon the metallic cross represented by fig. 2. In the socket of the cross is inserted the hollow post C, which plays up and down in the hollow metallic base B.

The end of the post C rests upon the spiral spring D.

Inside the spiral spring, but not coming up so high, is the rubber spring E, which is intended to receive the weight of seat when any heavy weight is placed upon it, so as not to compress the spiral spring sufficient to destroy its elasticity.

To the bottom of the base B is attached the rod F, which passes through the rubber spring E, the spiral spring D, and the post C, having a nut at the end, in a recess near the top of the post C. This rod is to regulate the tension of the springs.

The post C can be made so as to revolve in its base plate, or have a flange confining it to an up-and-down motion.

Having thus described my invention,

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

The combination of the seat S, the base B, post C, spiral spring D, rubber spring E, and rod F, constructed and arranged substantially as and for the purpose described.

THOMAS J. GIFFORD.

Witnesses:

JOS. S. FOSTER,

WM. P. BUFFUM.