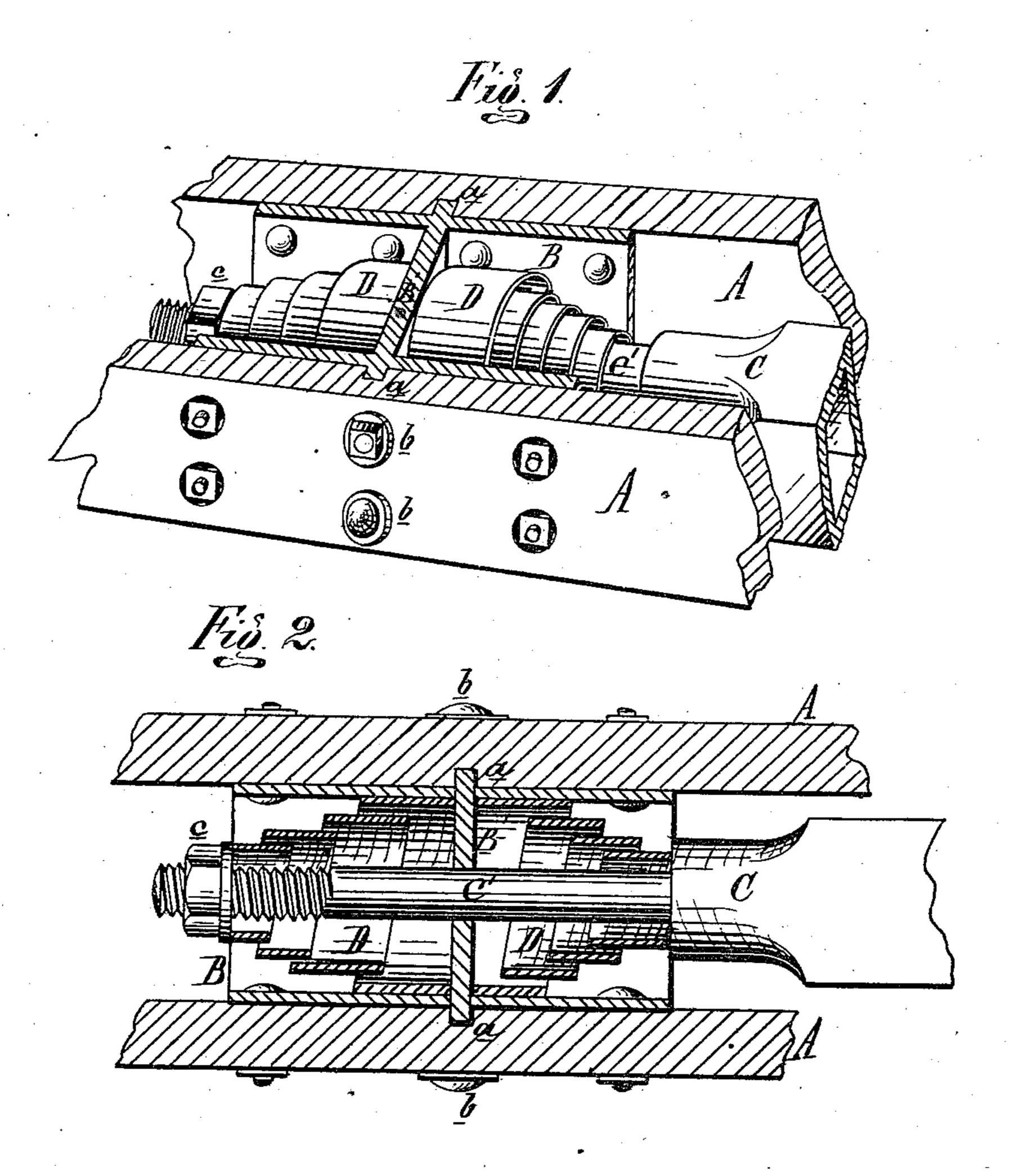
## J. TURNER.

## Spring-Case for Draw-Bars.

No. 161,301.

Patented March 23, 1875.



Elest: Elest: Electrical Electrical

John Turner per attorney
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## UNITED STATES PATENT OFFICE

JOHN TURNER, OF GROSSE ISLE, MICHIGAN.

## IMPROVEMENT IN SPRING-CASES FOR DRAW-BARS.

Specification forming part of Letters Patent No. 161,301, dated March 23, 1875; application filed October 1, 1874.

To all whom it may concern:

Be it known that I, John Turner, of Grosse Isle, in the county of Wayne and State of Michigan, have invented an Improved Spring-Case for Railway Draw-Bars, of which

the following is a specification:

The object of my invention is to provide a cast-iron box or case for the bumper and drawsprings of railway draw-bars, by means of which the draw-bar will be compelled to act or move in a direct line, keeping it always in place, and dispensing with the followers, which heretofore would dig into and catch against the inner sides of the bumper-sills. The invention consists in a rectangular box, open at each end, with a transverse diaphragm in the middle, through which the shank of the drawbar passes, a volute spring being mounted on said shank at each side of the diaphragm, which serves as an abutment. The box is bolted between the bumper-sills, and a rib at each side is let into the adjacent sill, to firmly secure it in place, as more fully hereinafter set forth.

Figure 1 is a perspective view of the spring-case secured between the bumper-sills, portions of which and of the draw-bar are shown, the top of the case being in part broken away to show the springs. Fig. 2 is a horizontal section.

In the drawing, A A represent portions of the bumper-sills of a railway-car. B is a castiron box, open at each end, fitted closely between the sills A, and secured by transverse bolts b thereto; also, by a vertical rib, a, at each side, which is gained into the inner face of the contiguous sill. The box is cast with a heavy transverse partition or diaphragm, B', about the middle of its length, having a hole through its center, through which passes the shank C' of the draw-bar C. A volute spring, D, is loosely sleeved on said shank at each side of said diaphragm, against which the bases of the springs abut. The rear spring is kept in place, and is also compressed under tensile strain or draft, by a nut, c, on the inner end of the shank.

What I claim as my invention, and desire to

secure by Letters Patent, is—

The combination, with the sills A A, drawbar C, and volute spring D, of the cast-iron spring-case B B', having ribs a a, and secured to said sills by the transverse bolts b, as and for the purpose set forth.

JOHN TURNER.

Witnesses:

CHAS. E. HUESTIS, CHAS. THURMAN.