

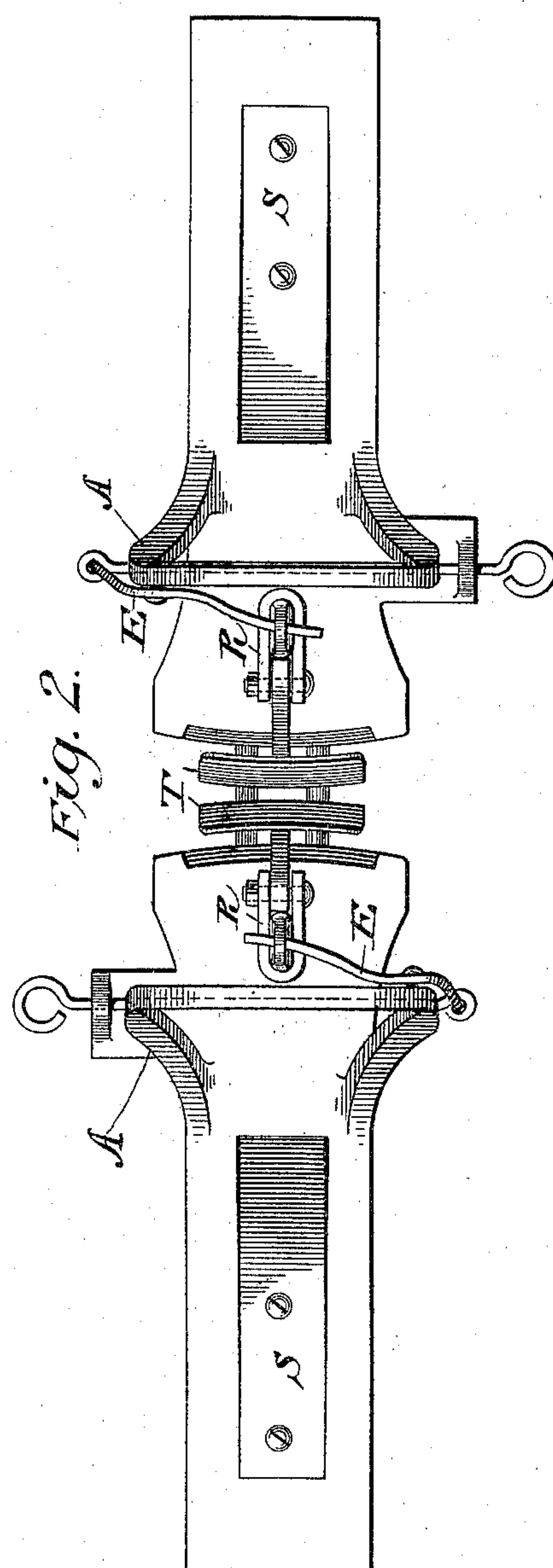
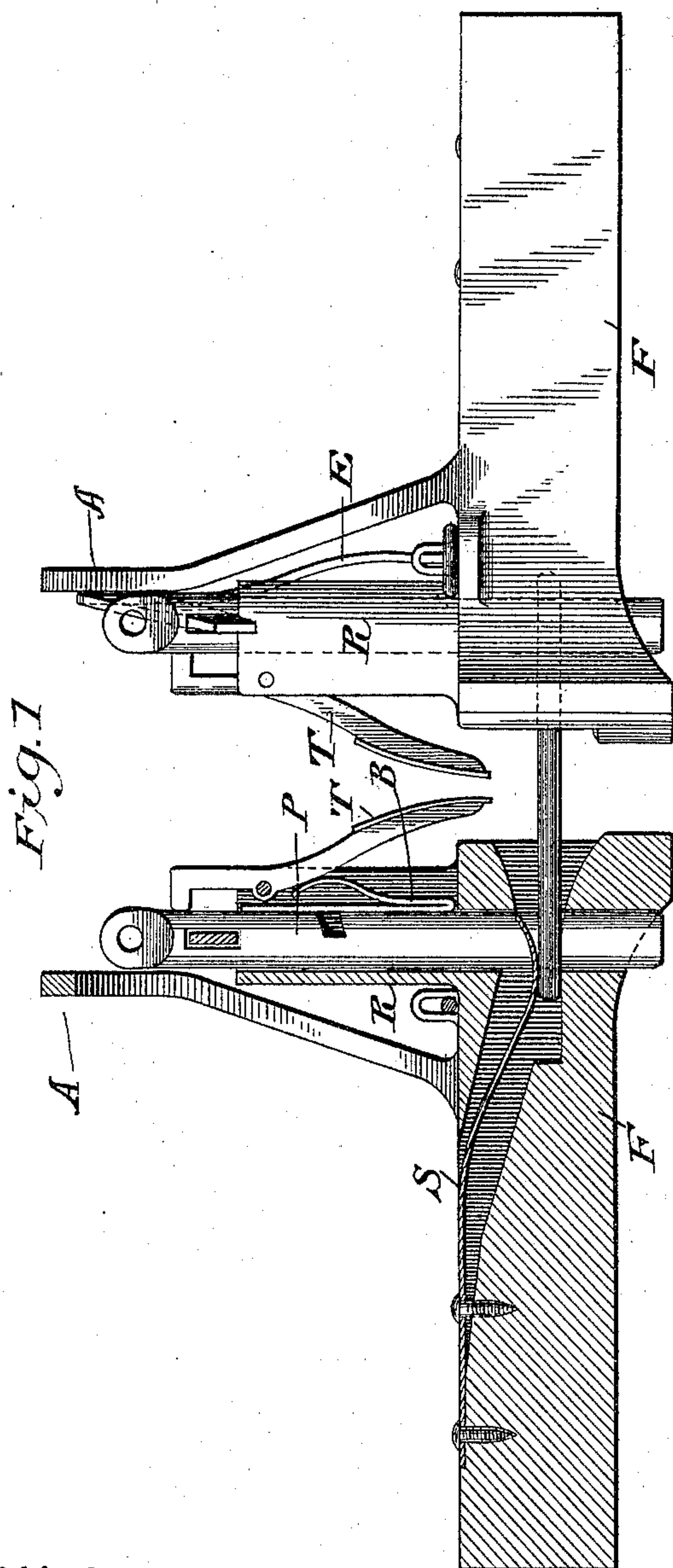
No. 611,656.

Patented Oct. 4, 1898.

J. SWIHART.
CAR COUPLING.

(Application filed July 2, 1897.)

(No Model.)



Witnesses.

J. W. King
Harry L. King

Inventor.

James Swihart

UNITED STATES PATENT OFFICE.

JAMES SWIHART, OF RIOTA, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 611,656, dated October 4, 1898.

Application filed July 2, 1897. Serial No. 643,307. (No model.)

To all whom it may concern:

Be it known that I, JAMES SWIHART, a citizen of the United States, residing at Riota, in the county of Preble and State of Ohio, have invented a new and useful Car-Coupler, of which the following is a specification.

My invention relates to improvements in car-coupling devices and attachments in which the coupling-link always in one car is held in position to enter the coupling-block in the other car and by its entering drops the coupling-pin into the link, and by a rod the coupling-pin can be removed and cars separated without entering between the cars; and the objects of my improvement are, first, to provide a self-acting coupler for cars, so as not to require men to remain between cars to couple same with so much danger to life and limb; second, to afford facilities for the proper separating of cars without necessity of entering between the cars to do so; third, to provide the improvement or device at a small cost and yet lasting and durable; fourth, to furnish the means by which so many men may be saved the constant danger to themselves and almost daily occurrence of injury to life and limb of the employees of our railroad companies. I attain these objects by the mechanism and combined parts fully shown in the drawings accompanying this specification.

Figure 1 is a longitudinal side view, partly in section, of my improved coupler in its operative position; and Fig. 2 is a longitudinal plan view of the same.

Letter T is the trip for dropping the coupling-pin into the link by the pressure of the similar trip on the other car to which the car is to be coupled. Back of T is a spring B, which throws the hook at the upper end of T into the notch in P, which will be explained farther on. The trip T should be of malleable iron. B is called the "trip-spring" and rests back of P and presses T out toward the approaching car and fastens the hook above named in the notch in P. P is an oval pin one and one-quarter inches by two inches, which is the coupling-pin. This drops down through the coupling-link and makes the fastening secure. P drops down through R, which is explained farther on.

In the front edge of the coupling-pin P is a

notch, above referred to; also, in the upper end of P is a hole in which is to be fastened a rod reaching to top of car to enable brakeman to couple cars while he is on top of car. Just below the hole in top of coupler is a slot in which elbow works to raise the coupling-pin from side of car.

R is the stand holding the pin P and made with oval space inside to fit the oval pin and allow it to pass up and down through it and yet holding it permanently in place. Inside of R and in front of the pin and back of the trip is the trip-spring B.

F is the draw-bar.

A is an arch used only in the drawings and which may be dispensed with in the improvement when applied to a car, and F, R, and A will all be in one piece, molded together, the rest for the elbow and trip being cast with F and R, and the arch A may be dispensed with.

E is the elbow, which is used when coupling from the side of the car. The angle of the elbow is fastened by a bolt through the casting A. The upper end of E rests in the slot in P, and to the lower end of E is fastened the rod which reaches out to side of car. By pulling rod which reaches out to side of car the lower end of elbow is pulled outward, thus raising the upper end of elbow, which presses upward in slot in coupling-pin and raises the pin and allows the cars to become uncoupled or prepares the coupler for the reception of the link when cars are being coupled.

S is a spring on top of the draw-bar, fastened to draw-bar F, passing under the stand R and over the end of link in the draw-bar. This spring presses down on end of link and holds it straight out on a level in position to enter draw-bar on other car to which coupling is being made. By tightening screw in S the pressure of spring can be increased as may be necessary to hold the link in position.

I am aware that prior to my invention draw-bars and links have been used for the purpose of coupling cars. I do not therefore claim anything on these parts.

What I do claim as my invention, and desire to secure by Letters Patent, is—

In a car-coupler, the combination with the draw-heads having vertical casings rising therefrom, pins journaled in said casings,

trips pivotally connected to the casings and
having lugs adapted to register with recesses
in the pins to hold said pins out of operative
position, an elbow-lever passing through the
5 eye of the pins and having a bent rod for op-
erating the same from the side of the car,
springs to normally hold the link in horizon-
tal or operative position, means for adjusting

the tension of said springs, and foot-pieces
on the trips for automatically operating the 10
same to uncouple the cars when brought in
contact with each other.

JAMES SWIHART.

Witnesses:

EDMOND S. DYE,

MARY S. CAMPBELL.