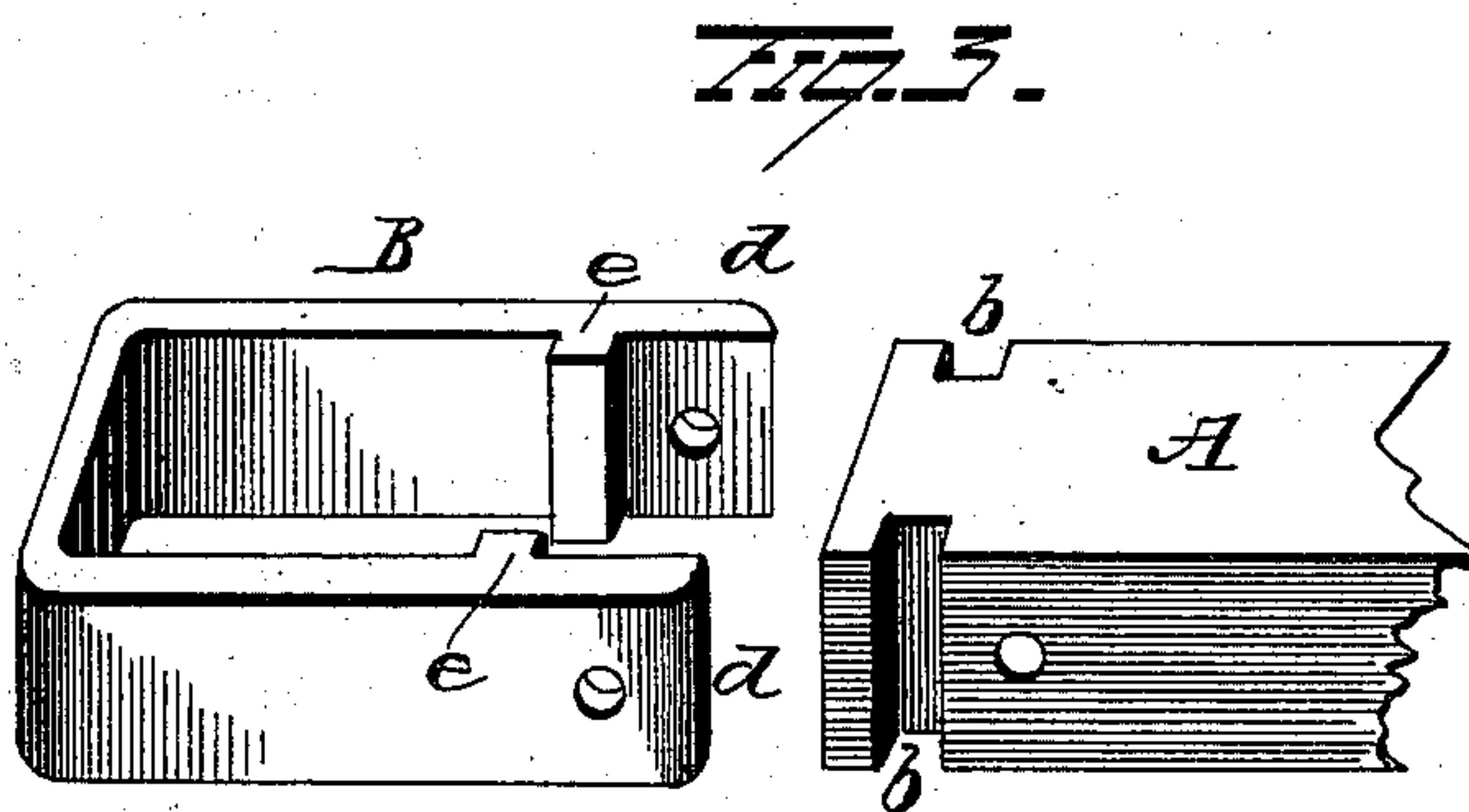
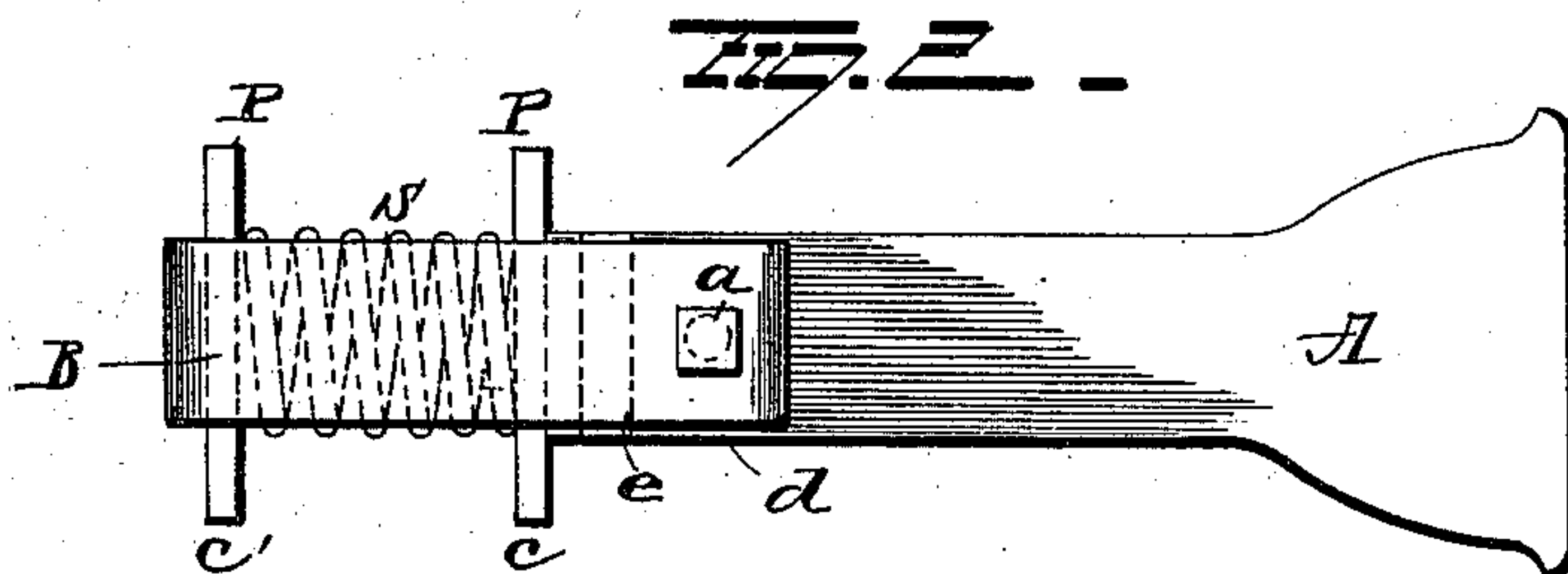
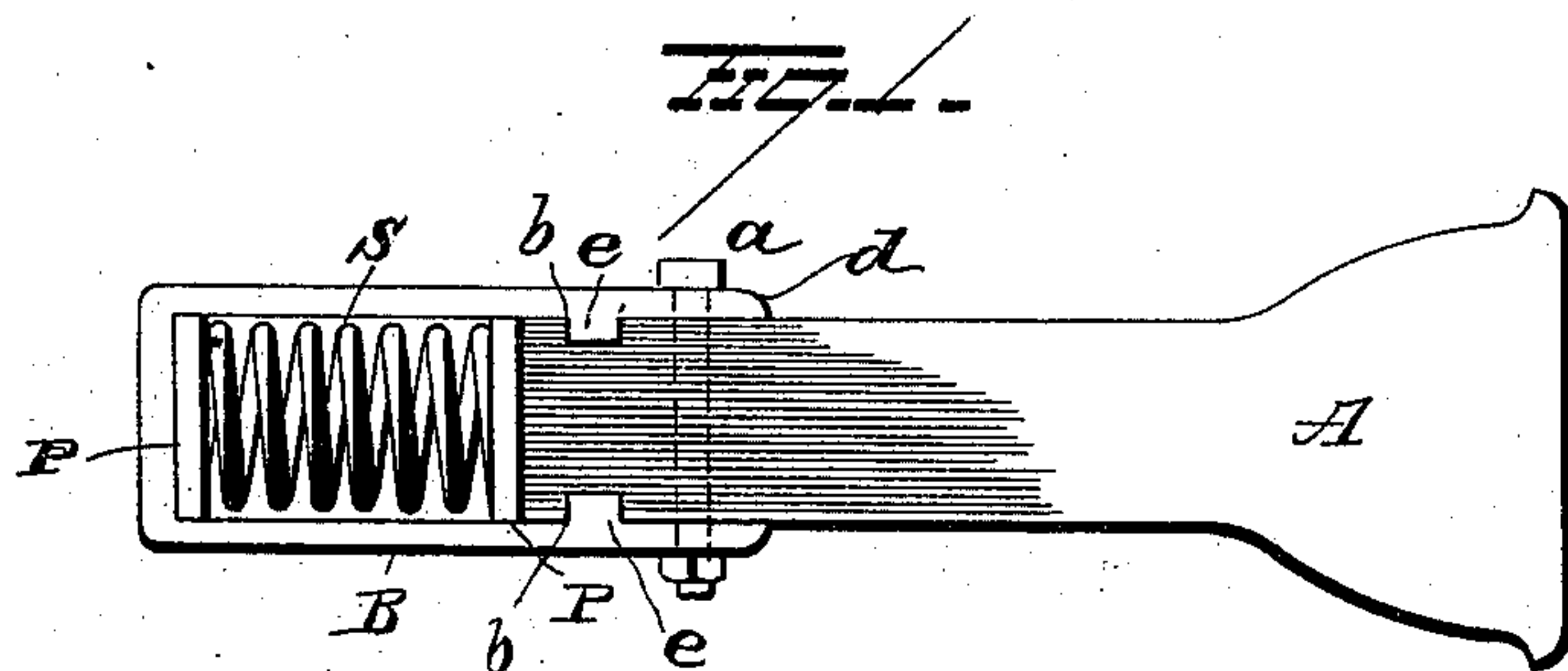


(No Model.)

R. MORRIS.
YOKE FOR DRAW HEADS.

No. 400,474.

Patented Apr. 2, 1889.



Witnesses

J. Nottingham
Albert Popham

Inventor,

Robert Morris

By *his* Attorney

H. A. Seymour

UNITED STATES PATENT OFFICE.

ROBERT MORRIS, OF LA CROSSE, WISCONSIN.

YOKE FOR DRAW-HEADS.

SPECIFICATION forming part of Letters Patent No. 400,474, dated April 2, 1889.

Application filed July 27, 1888. Serial No. 281,182. (No model.)

To all whom it may concern:

Be it known that I, ROBERT MORRIS, of La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and
5 useful Improvements in Yokes for Draw-Heads; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and
10 use the same.

My invention relates to an improvement in car-couplers, and more particularly to a type employing a buffer-spring which is located within a yoke that is secured to the inner end
15 of a draw-head.

As usually made, the car-couplers of the kind mentioned are defective. The draw-head, which is usually constructed of cast-iron, is secured to the ends of the stirrup or yoke by
20 bolts or rivets in a manner that renders such a connection of parts liable to disruption. As the strain of pulling and the percussive action of abutment of the cars are sustained by the car-coupler, it follows that provision
25 should be made to avoid contingency of breakage from such causes.

The object of my present invention is to provide a simple, cheap, and reliable means for the attachment of the yoke upon the draw-
30 head of a car-coupler, whereby such a connection of parts will be rendered secure against rupture from either draft-strain or percussive action incidental to ordinary service.

With these objects in view my invention
35 consists in the peculiar construction and combination of the yoke of a car-coupler with the draw-head, as will be hereinafter described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a side
40 elevation in section of a draw-head with an attached yoke, showing my improved method of connecting the ends of the stirrup or yoke with the inner end of the draw-head. Fig. 2 is a top plan view of the car-coupler complete.
45 Fig. 3 represents a side view of the yoke and draw-head detached from each other.

In Fig. 2 the coupler is shown adapted to be attached to a car. The yoke B, extending in the rear of the draw-head A a proper distance,
50 affords a seat or pocket, in which is located a

stout spiral spring, S; or a vulcanized gum buffer-cushion may be employed.

To render the spring effective to absorb the shock incidental to the bumping together of the draw-heads of opposite cars, said spring
55 is placed between two plates, P, which are provided with the lateral projections *c c'*, which latter are of such size and length as to permit them to enter elongated slots made for their reception in draft-timbers of the car
60 (not shown) in the usual manner, so that when the draw-head is forcibly struck it will transfer the impact of the end-thrust to the spring S, in an obvious manner. It is also apparent that the draft-strain sustained by the car-
65 coupler in regular service will be thrown on the rear spring-plate and from it transferred to the spring S.

As intimated, there is nothing new in this form of constructing car-couplers, and the
70 brief description given is introduced to render apparent the utility of my invention, which will now be described.

The draw-head A is preferably constructed of cast-iron or the cheap form of low-grade
75 cast-steel, consisting of the usual elongated hollow rectangular box provided at its front end with a flaring mouth that is adapted to receive a coupling-link. Near the rear or inner end, considered when the draw-head is in posi-
80 tion on a car, there are two grooves, *b*, of equal size formed in the top and bottom walls of the draw-head A, transversely of the same and at right angles to the parallel sides. The yoke B is made of wrought-iron or Bessemer
85 steel, and is bent to form a loop, the free ends *d* of which are such a distance apart as to tightly embrace the top and bottom walls of the draw-head when placed on the same. At
90 a proper distance from the extremities *d* two integral tongues or projecting ribs, *e*, are formed on the inner opposite faces of the loop or yoke B, said tongues being adapted to fit neatly within the notches or grooves *b* of the draw-head A. Between the tongues *e* and
95 the extremities *d* such a sufficient space should be allowed as will permit opposite bolt-holes to be made in the yoke, which, when in place with the mating grooves and tongues interlocked, will register with a simi-
100

lar hole made through the draw-head A, so that a bolt, *a*, may be inserted and properly secured in place by a nut or other means which will firmly hold the yoke and draw-head together.

It is evident that by the provision of the interlocking transverse integral tongues *e* and grooves *b* the draw-head and yoke will be held in alignment with each other, and that the disruptive action of percussion or draft-strains will be transferred to this interlocked attachment of the two parts. The bolt *a*, being totally relieved from any direct strain, only serves to hold the yoke properly engaged with the draw-head, and in case of accident, which may break off the tongues or fracture the draw-head, the yoke can readily be removed for renewal or repair by the displacement of the single bolt *a*.

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

1. The combination, with a draw-head having grooves on its opposite sides, of a yoke having tongues at or near its free ends to enter said grooves, and a bolt passing through the draw-head and both members of the yoke, substantially as set forth.

2. In a car-coupler, the combination, with a draw-head having two transverse grooves formed near its inner end, of a yoke having tongues integrally formed on it to mate the grooves and interlock therewith, and a bolt located between this interlocking connection of the yoke with the draw-head and the extremities of the yoke which project beyond its integral tongues, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ROBERT MORRIS.

Witnesses:

WM. S. BURROUGHS,

WILLIAM H. PARKER.