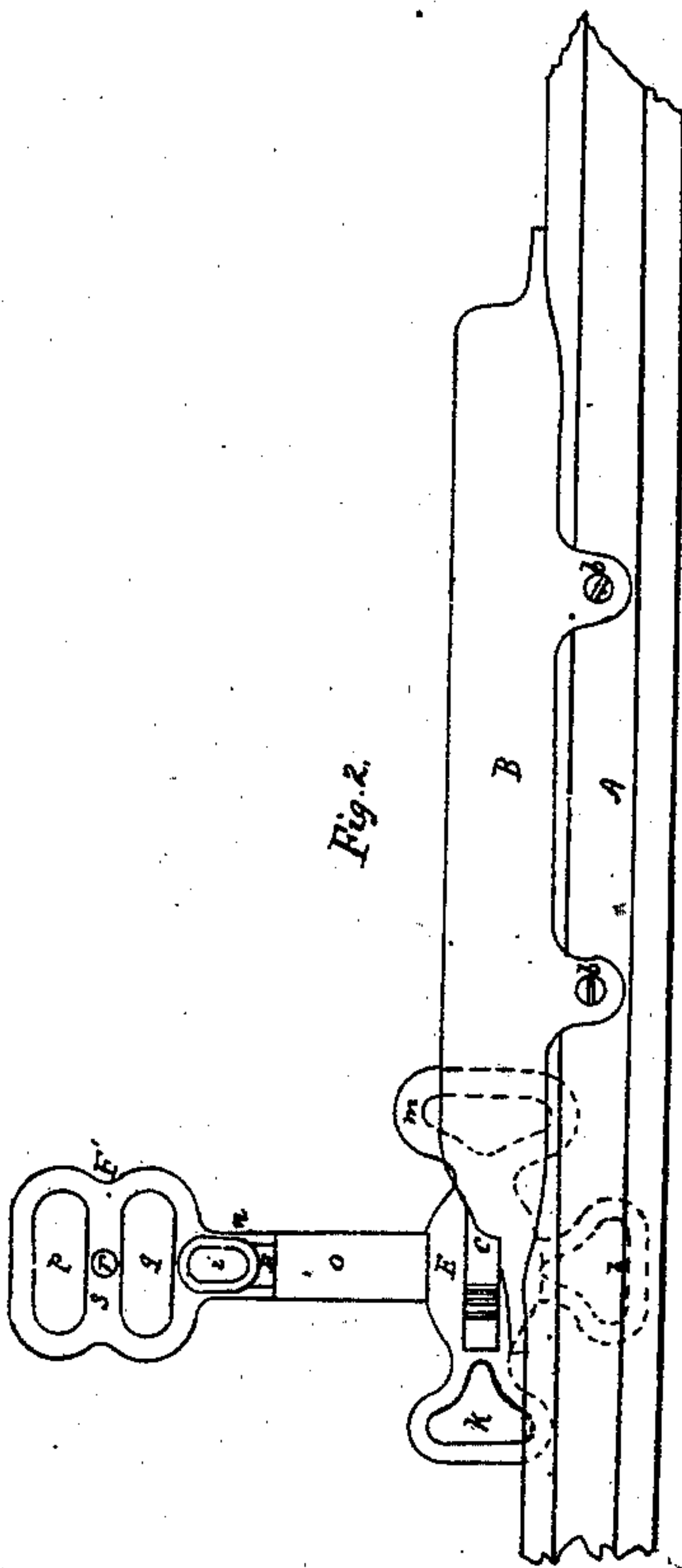
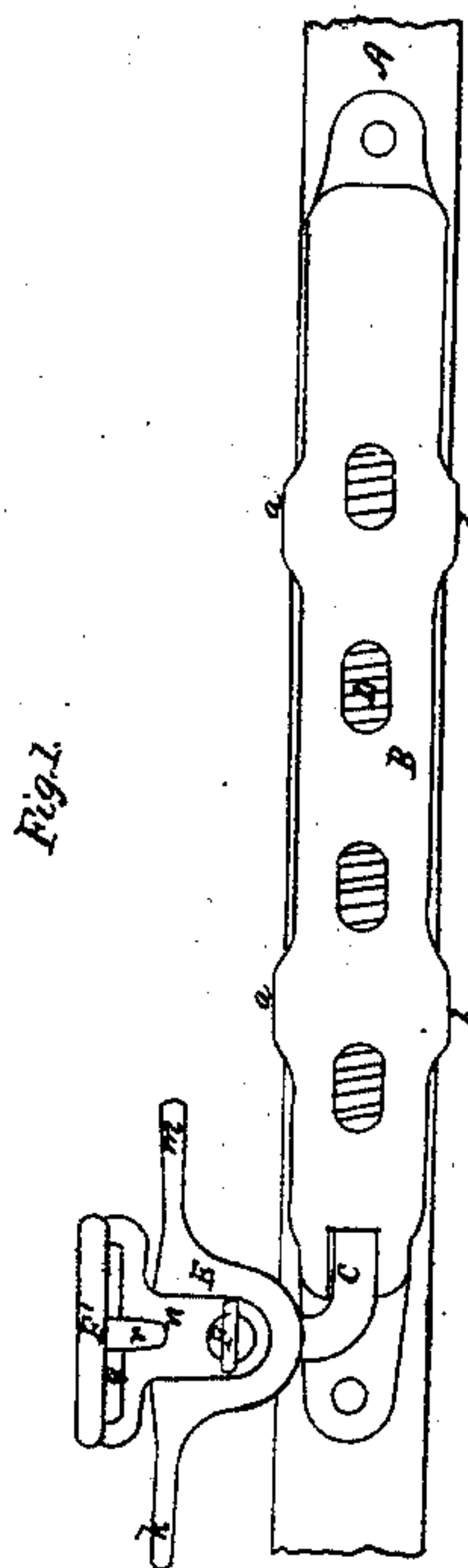
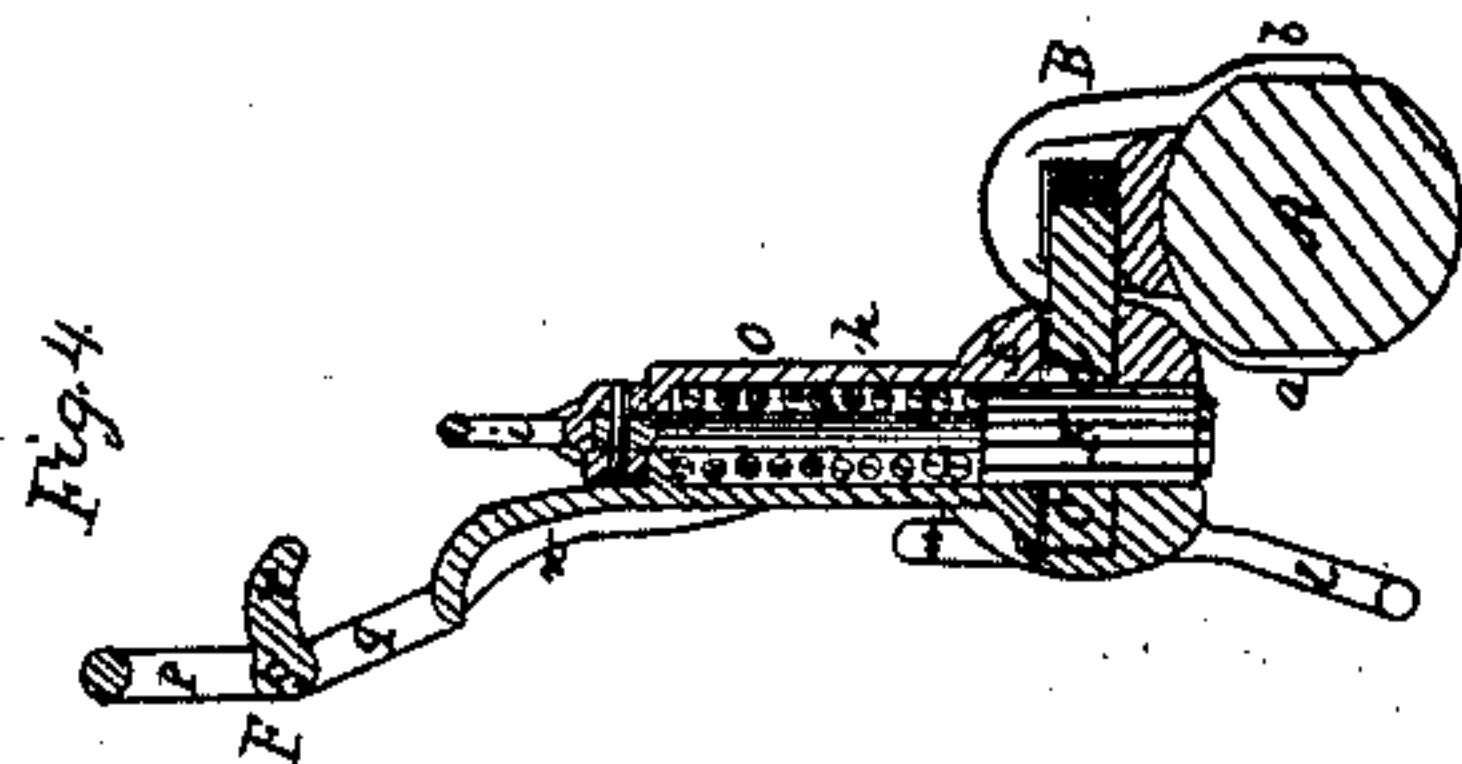
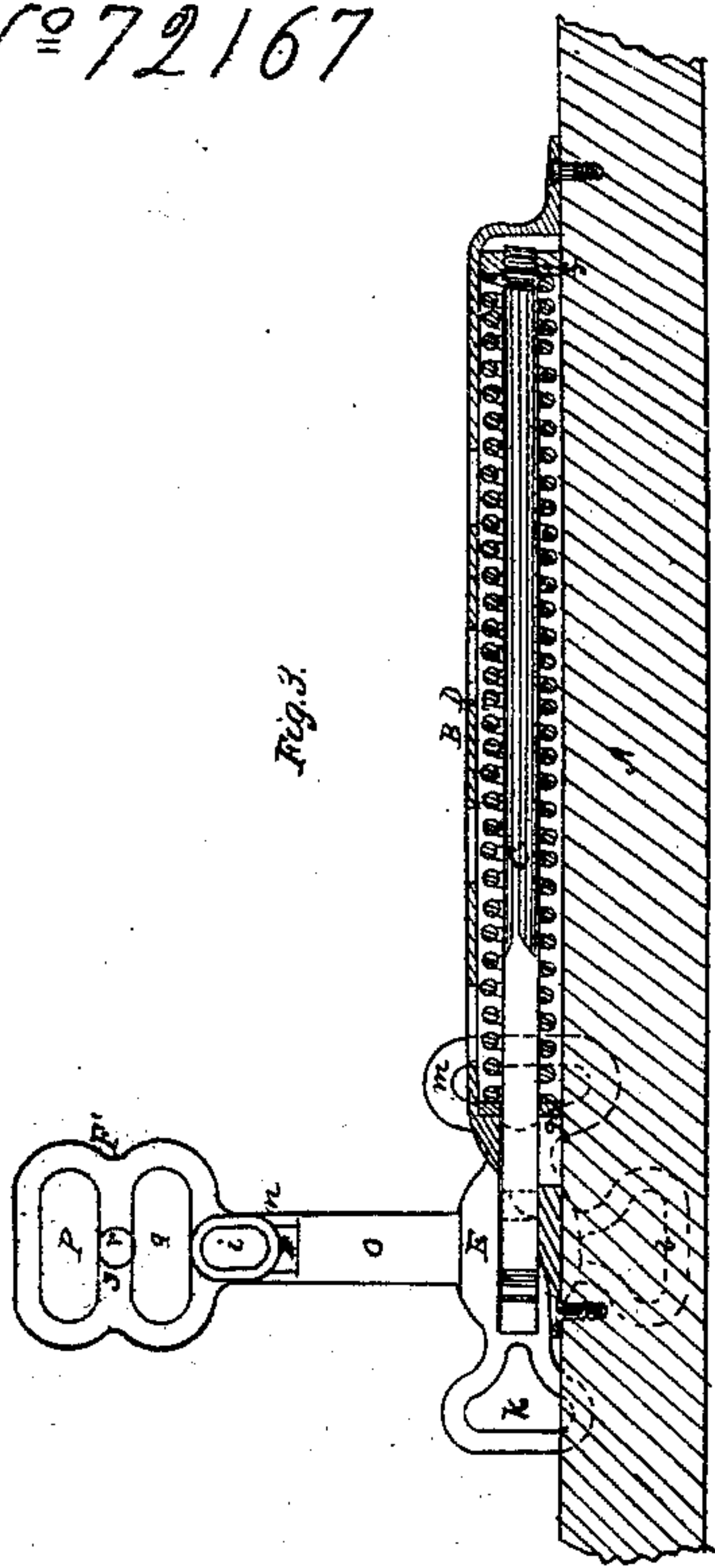


Colburn & Stanley.

Connecting a Horse with a Carriage.

N^o 72167

Patented Dec. 17, 1867.



Witnesses

S. N. Piper

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Inventor.

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by their attorney.

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United States Patent Office.

ALVIN COLBURN, OF LYNN, AND ELBRIDGE G. STANLEY, OF FITCHBURG, ASSIGNORS TO
ALVIN COLBURN AND JOHN RADDIN, OF LYNN, MASSACHUSETTS.

Letters Patent No. 72,167, dated December 17, 1867.

IMPROVED MECHANISM FOR CONNECTING A HORSE WITH A CARRIAGE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that we, ALVIN COLBURN, of Lynn, of the county of Essex, and ELBRIDGE G. STANLEY, of Fitchburg, of the county of Worcester, and State of Massachusetts, have invented an Improved Mechanism for Connecting a Horse with a Carriage, and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view,

Figure 2 a front elevation,

Figure 3 a longitudinal section, and

Figure 4 a transverse section of it.

On the 18th day of March, A. D. 1862, Letters Patent, numbered 34,671, were granted to one of us, viz, the said ALVIN COLBURN, for an improved means of attaching a horse to a vehicle and detaching him therefrom.

The present invention is an improvement with reference to that so patented, and is intended to accomplish like results, as well as others not incident to such patented invention, the construction of which, as represented in the patent, rendered it applicable only to the end of a carriage-shaft. This limited its use, as it required the shaft to be formed or reduced, so as to receive and hold the ferrule of the attachment.

Our present improvement enables the case or ferrule, as it may be termed, to be applied to the side instead of being slipped on and around the end part of the shaft, it being fixed to the shaft either by screws going through it, and being screwed into the shaft, or by a clamp to go around the shaft.

The drawings show the mechanism in part, as applied to the upper surface or side of a shaft, a portion of which is shown at A.

In such drawings, B denotes a hollow case, made to straddle and rest on the shaft, and provided with perforated ears or projections *a a b b*, to receive fastening-screws to go into the shaft. A bar, C, slides into the forward end of the case B, and at its front is bent at right angles, and provided with a round head, *c*, through which a hole or eye, *d*, is made. A helical spring, D, encircles that part of the bar which is within the case, and at its rear end bears against a nut or head, *f*, fixed on the bar. At its front end the spring abuts against a partition, *g*, extending across the case. The head *c* of the bar C is intended to enter a socketed piece, E, provided with a spring-bolt, F. This bolt is arranged to play vertically through the socket *h* of the said socket-piece, and to go through the eye *d*, when in the socket. The head of the bolt is open, or formed with an eye, as shown at *i*, by which a line or chain may be attached to the bolt. The said socket-piece has three connection-eyes, *k l m*, extending from it in manner and formed as shown in the drawings. It also has an arm, *n*, projecting upward from its bolt-case O, and terminating in an eye-piece, F', provided with two slots or openings, *p q*, and a tooth or tongue, *r*, such tongue being extended from the part *s*, by which the two slots *p q* are separated from each other. The double eye-piece F', with its tooth, *r*, and two slots, constitutes a device by which the bolt-case and socket-piece may be connected with a strap extending down from the saddle of the harness of a horse. For this purpose the strap may be passed through the upper slot, and next down through the lower slot, so as to cause the tooth or tongue to enter a hole in the strap, as the tongue of a buckle enters its strap-hole. The girt, and breast and back-straps of the harness are to be buckled to the connection-eyes *k l m*, and thus the socket-piece, with its spring-bolt, will be connected with the harness or the horse by means of the latter. The line leading from the bolt is to pass upward to the saddle, and may be led through one of the rein-guides thereof, and thence to the dasher of the vehicle. It is intended for each shaft to have applied to it a separate apparatus of the kind described.

In order to detach the horse from the carriage, it will only be necessary to pull on the bolt-lines, so as to draw the bolts out of the heads of the bars B. When the animal is in engagement with the shafts, and drawing the carriage along, his power of draught will be exerted against the springs on the bars C, and these will serve to relieve him and the carriage from the unpleasant effects which sudden forward movements of the horse would otherwise produce. We have contemplated the employment of the tug with the bar C, its spring and case, when applied to the side of the shaft, in which case we hook the tug on the bar, made so as to enable the tug to be drawn off it by the horse, and we have a pin or bolt to go through the part which receives the tug, such pin

being to hold the tug in such part that it may be necessary to relieve the horse. By pulling out the pin or bolt, the tug can be drawn off the bar by the horse.

We do not herein claim the mechanism described in the patent hereinbefore referred to, but

What we do claim as our improvement is as follows:

We claim the arrangement of the connection-bar case B with its bar C, and spring against the side instead of on the end of the shaft, the same rendering no reduction of the shaft necessary in the application of the invention thereto.

We also claim the combination and arrangement of the spring-bolt with the socket-piece and the bar C, its case and spring, arranged with the shaft as set forth.

We also claim the combination of the double eye-piece F', having a tooth, as described, with the spring-bolt, its case and socket-piece, to be used with the slide-bar C, made and applied, or to be applied to a shaft, substantially as described.

ALVIN COLBURN,
E. G. STANLEY.

Witnesses:

A. NOREN, Jr.,

H. A. HATCH.