

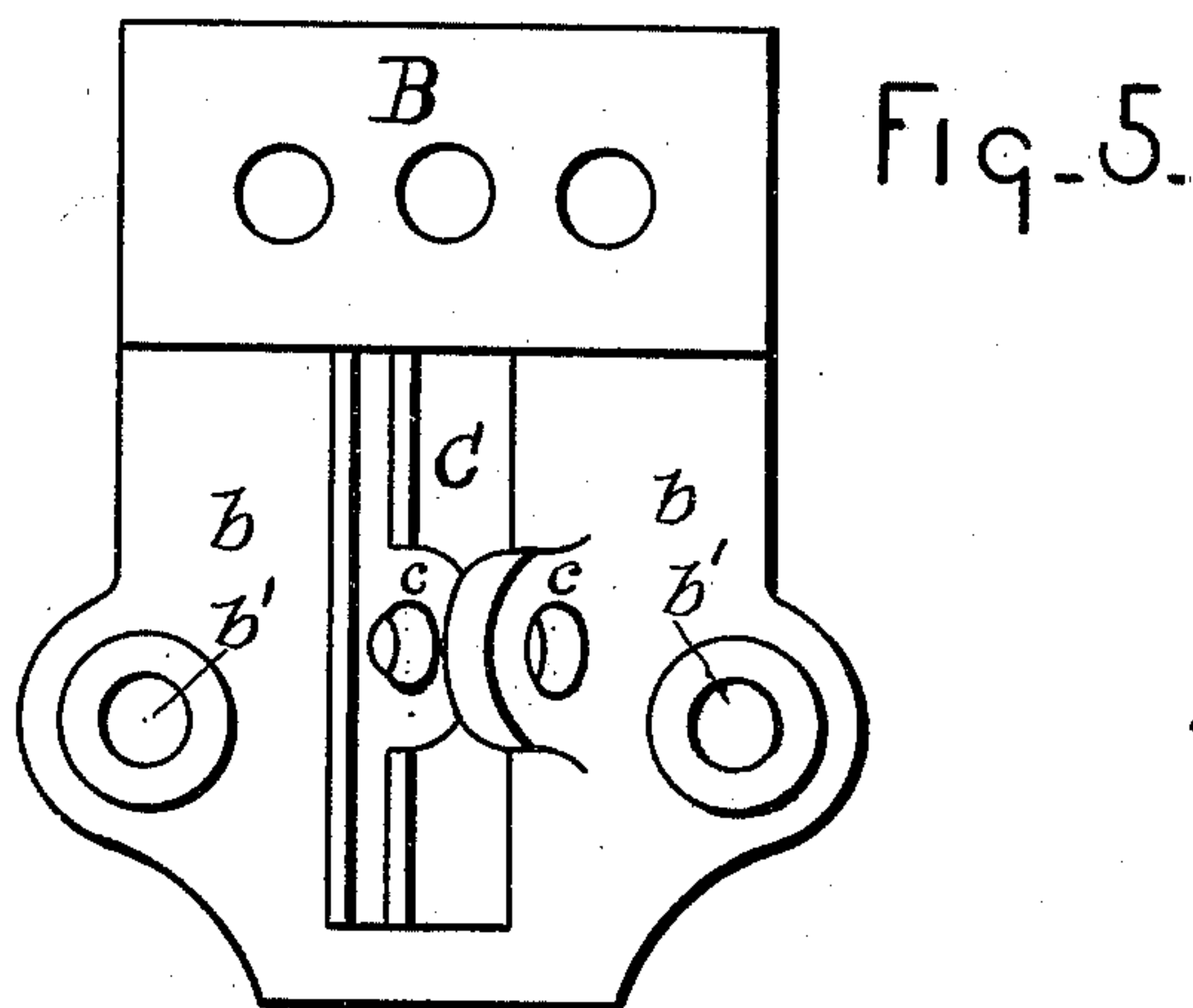
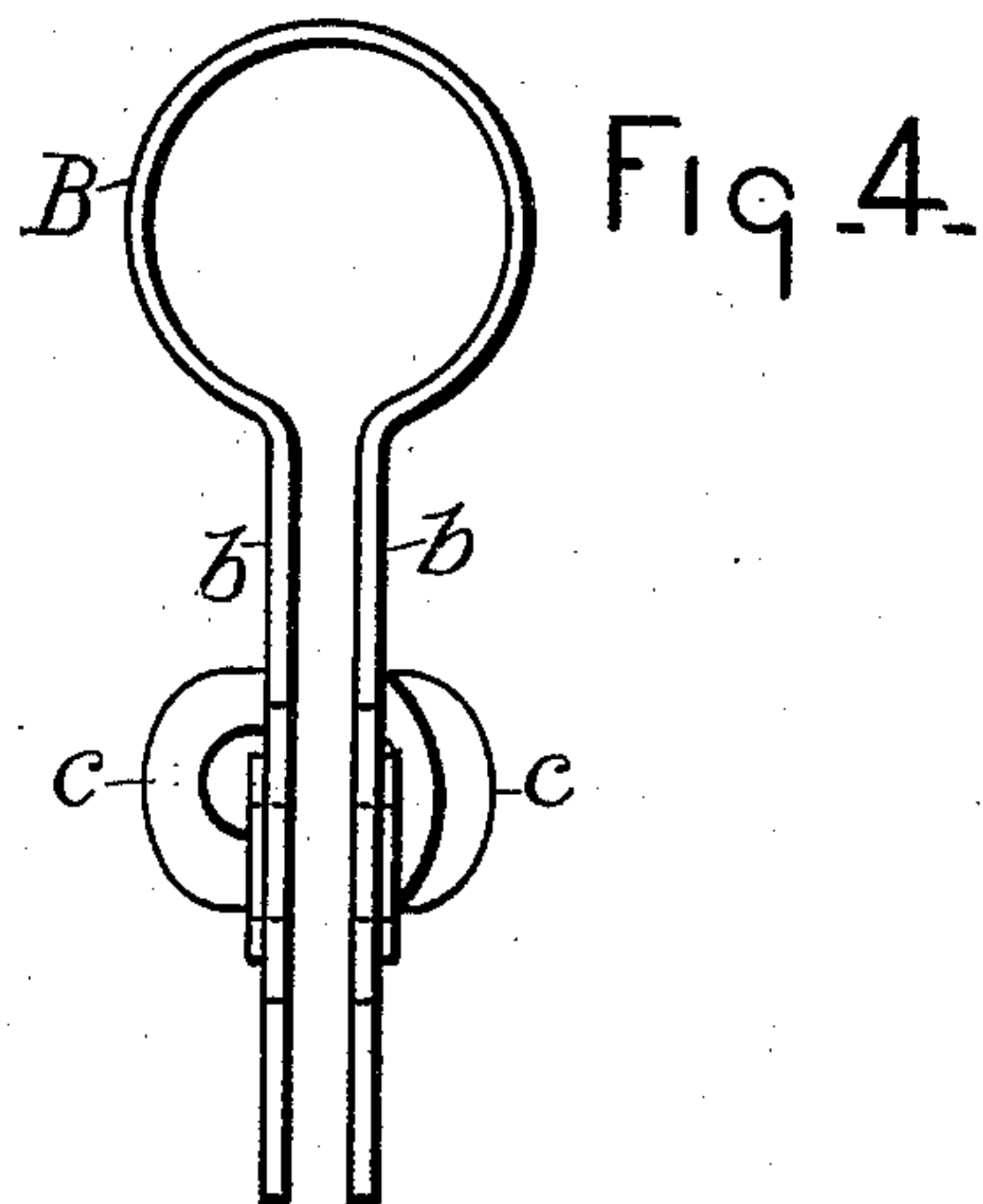
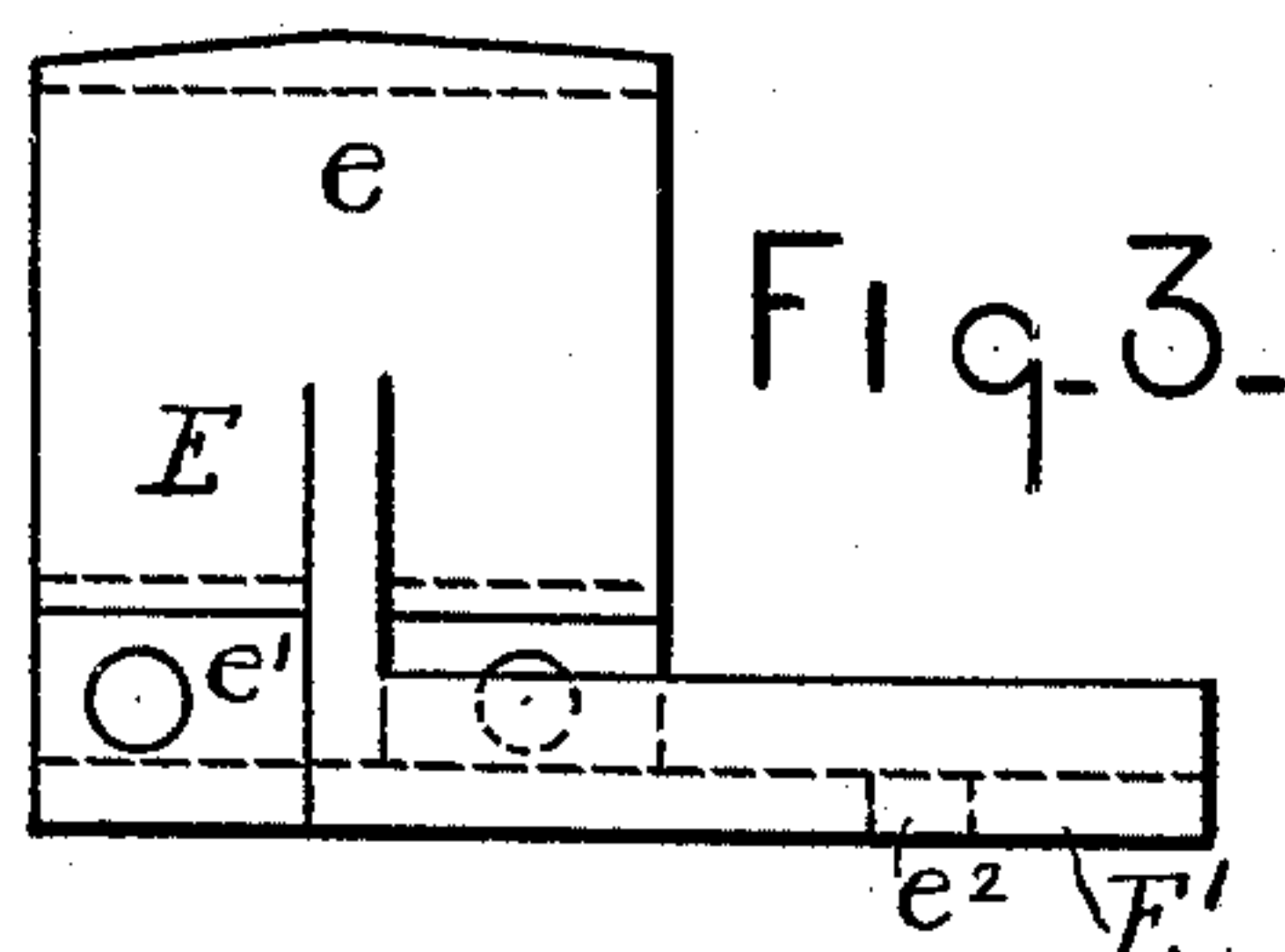
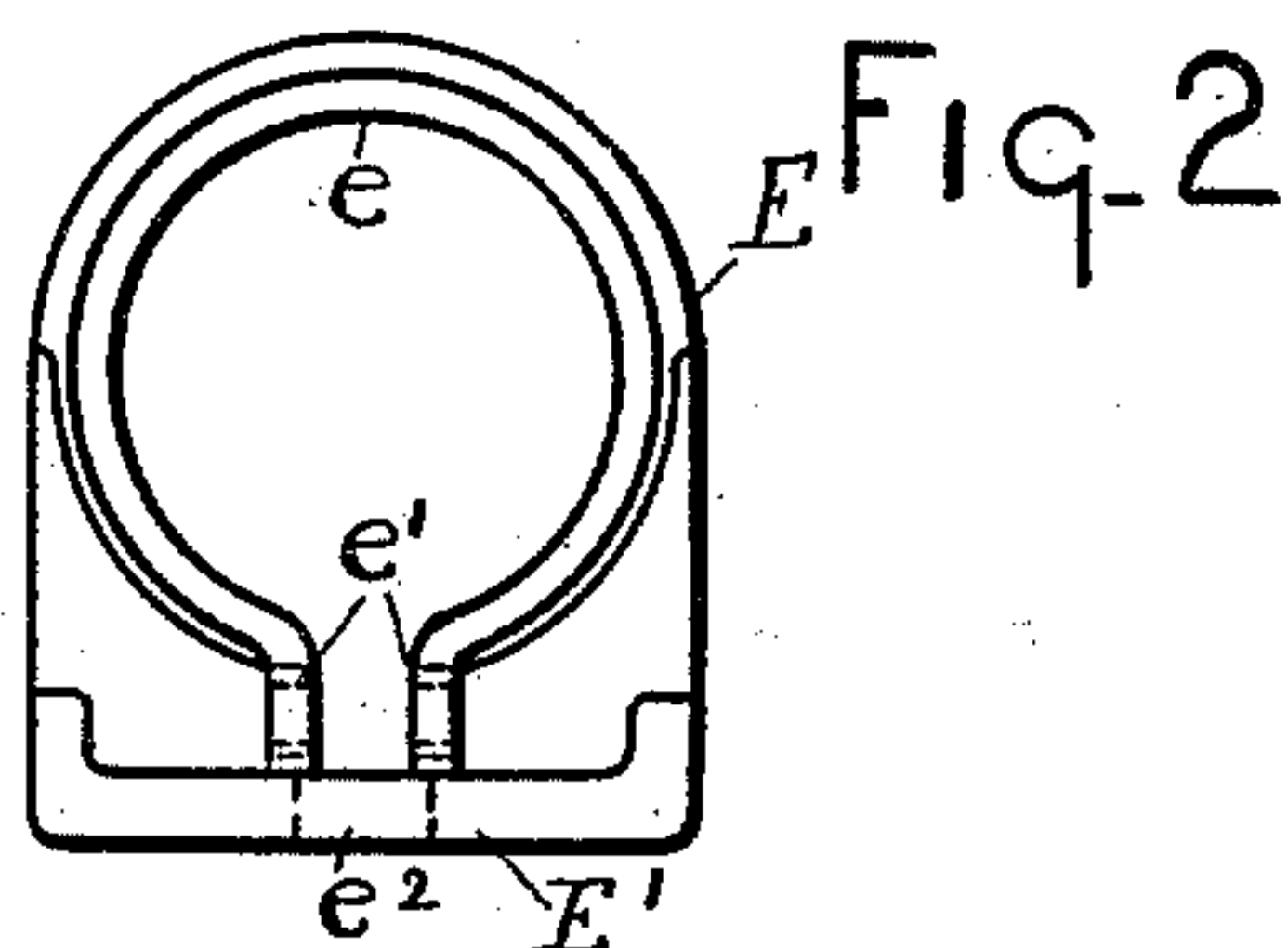
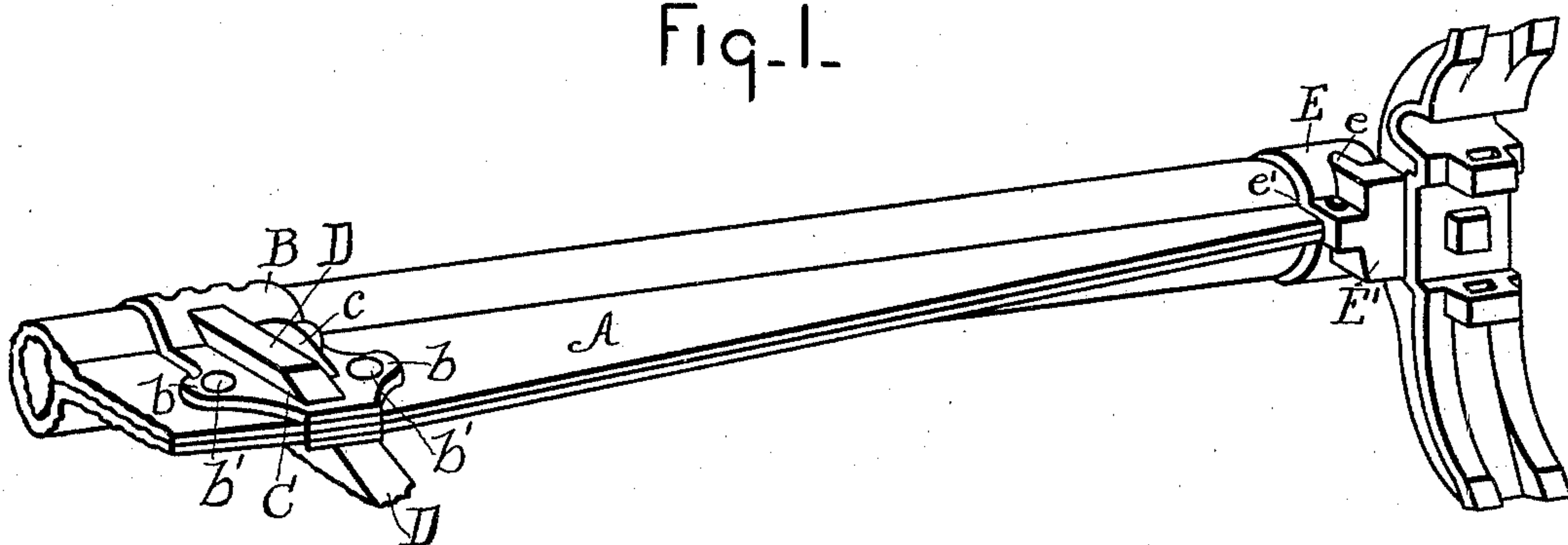
(No Model.)

W. A. PUNGS.  
METALLIC BRAKE BEAM.

No. 466,834.

Patented Jan. 12, 1892.

Fig. 1.



WITNESSES

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# UNITED STATES PATENT OFFICE.

WILLIAM A. PUNGS, OF DETROIT, MICHIGAN.

## METALLIC BRAKE-BEAM.

SPECIFICATION forming part of Letters Patent No. 466,834, dated January 12, 1892.

Application filed February 18, 1891. Serial No. 381,896. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. PUNGS, a citizen of the United States, residing at Detroit, county of Wayne, and State of Michigan, have invented a certain new and useful Improvement in Metallic Brake-Beams; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

It is the object of my invention to improve on a brake-beam heretofore patented by me, the several improvements being as follows: In my former beam the brake-lever was attached to the beam by a forked piece extending out from the middle of the beam; but the difficulty with that was that the weight of the lever being thrown so far from the center of the beam tilted the same and made it difficult to balance the beam properly.

One of the objects of the present invention is to throw the lever nearer back to the center of the beam, so that it will be more evenly balanced.

Another feature is to provide a fitting on the end of the beam, whereby the ordinary brake-heads, such as are now used on the wooden beams, may be applied to my metallic beam.

In the drawings, Figure 1 is a perspective view of my beam. Figs. 2, 3, 4, and 5 are details of the fitting at the middle of the beam and the fitting at the end of the beam, respectively.

In carrying out the invention, A represents the beam proper. This may be of any suitable form or construction; but I prefer to make it, as shown in my former patent, of a single piece of metal bent at its middle into a cylindrical form and having the meeting edges extended somewhat and lying face to face against each other, as illustrated in Fig. 1. At the middle of the beam I provide the fitting B. This is shaped so that it will surround and closely fit the circular portion of the beam, and has extended flanges *b*, which may be attached to the extended edges of the

beam proper, suitable orifices *b'* being provided for that purpose. Extending through these flanges *b* is what may be termed a "diagonal slot" C, through which the brake-lever D is passed, the fastening-bolt being engaged in lugs *c*. It will thus be seen that by providing this fitting at the middle of the beam the lever can be brought nearer to the center, while at the same time the fitting B compensates for any reduction in the strength caused by perforating the flanges of the beam to permit the brake-lever to be passed through.

E is the fitting on the end of the beam, made with a circular portion *e* to encircle the circular portion of the beam, and with extended flanges *e'* to embrace the flanges of the beam, and provided, also, with the laterally-extending portion E'. This portion E' is the size and shape of the end of the ordinary wood beam, and is provided with a bolt-orifice *e*<sup>2</sup>, so that the brake-head, such as is used on the wooden beam, can be readily bolted to this flange E', thus obviating the necessity of a separate and distinct style of brake-head for the metallic beam.

What I claim is—

1. A metallic brake-beam having the brake-lever passed through the beam at an oblique angle and secured by a bolt passed through lugs on the beam, substantially as described.

2. A metallic brake-beam having its ends provided with the fitting E, made with a portion for embracing the beam and a portion E' for receiving the ordinary brake-head, substantially as described.

3. A metallic brake-beam provided at its middle with a fitting through which the brake-lever is passed at an oblique angle with the beam, said lever secured by a bolt passed through the lever at substantially right angles and engaged in a lug on the fitting, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

WILLIAM A. PUNGS.

Witnesses:

MARION A. REEVE,  
FRANK P. HAINES.