

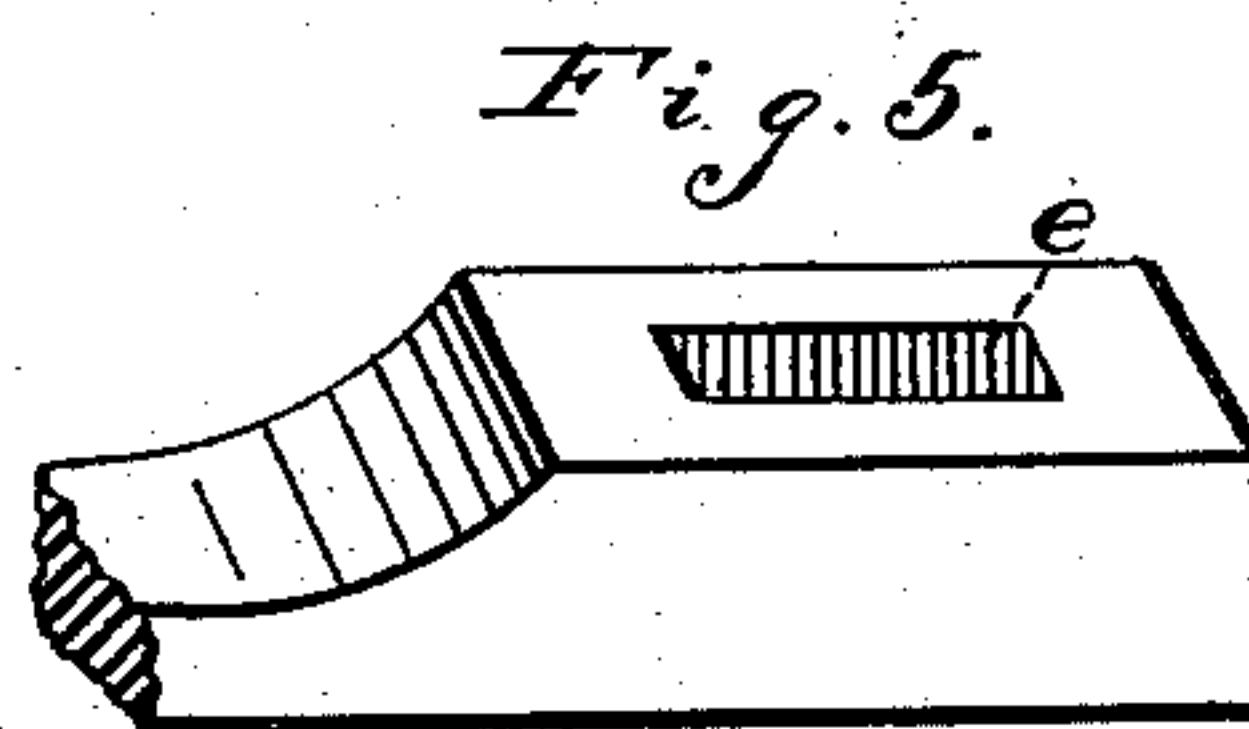
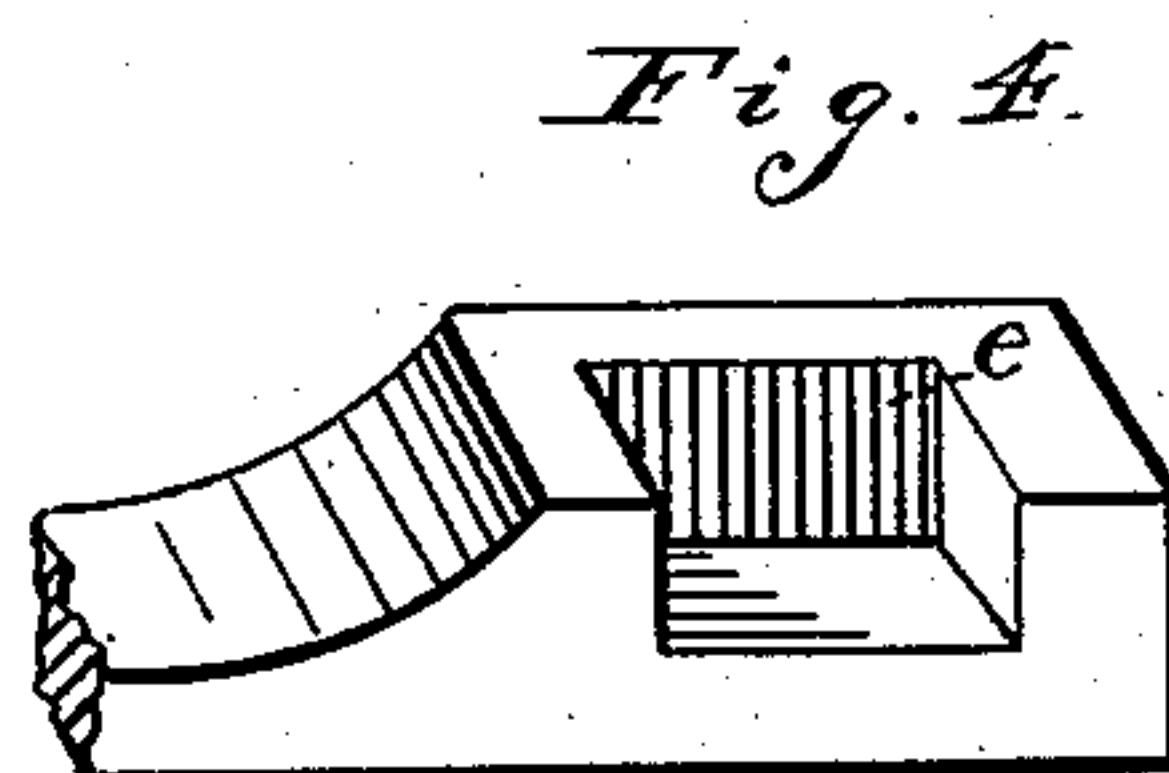
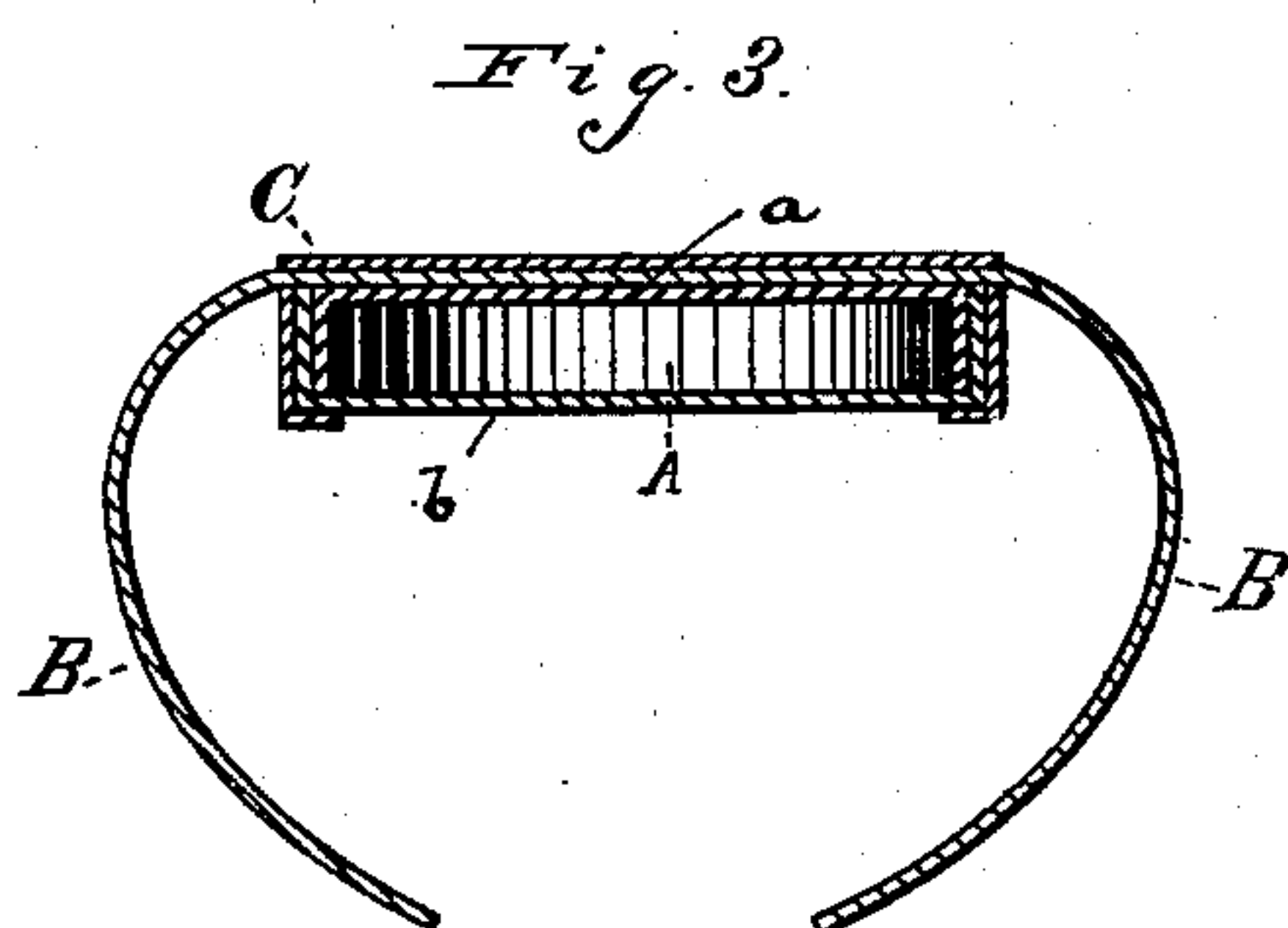
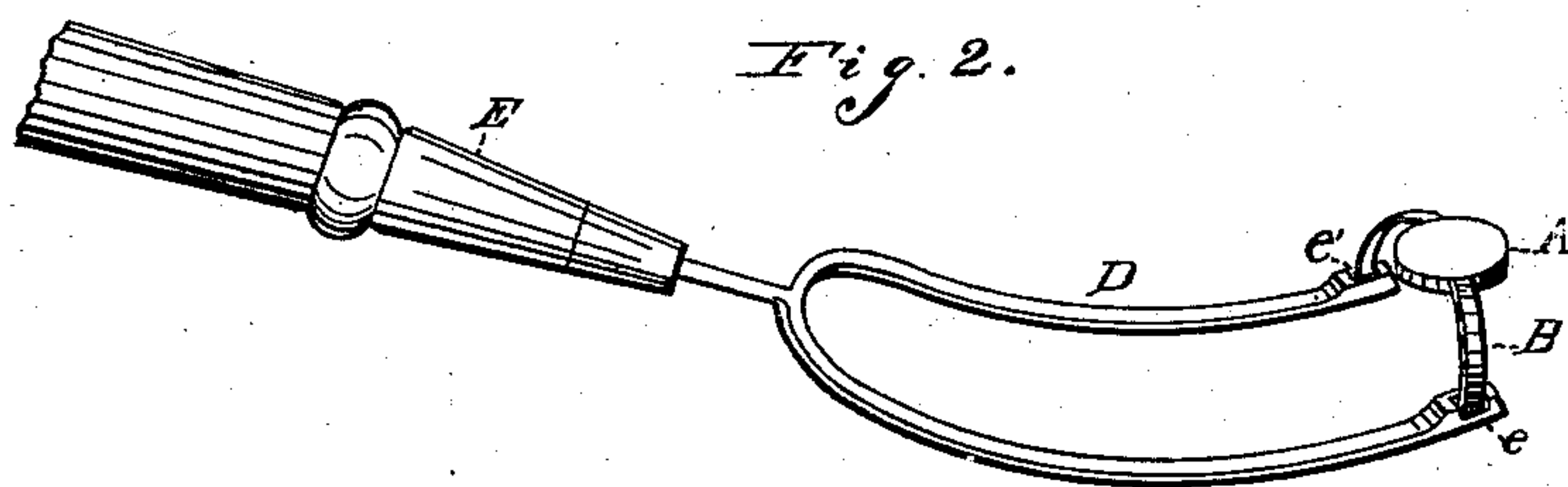
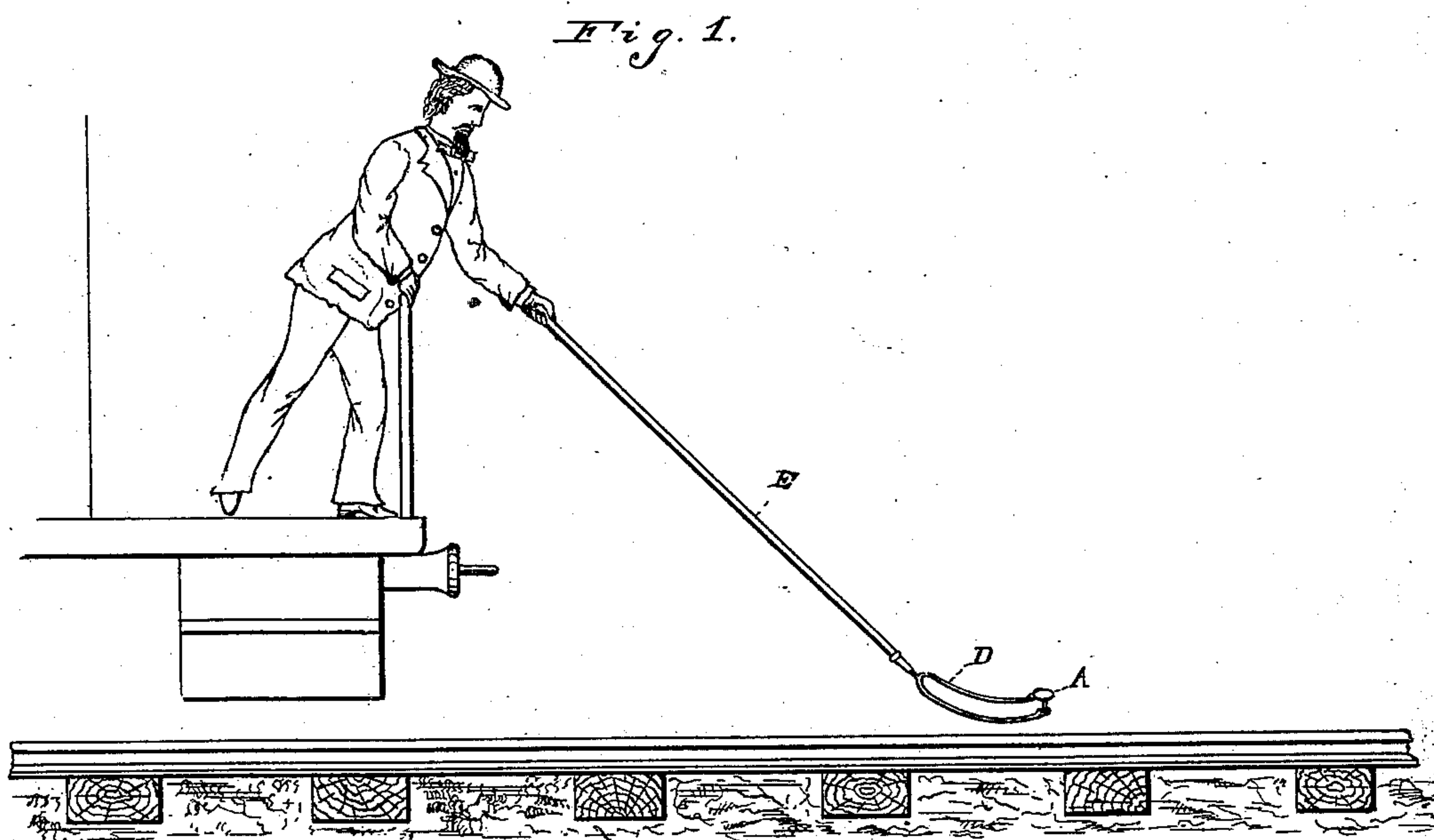
(No Model.)

J. H. BEVINGTON.

RAILWAY TORPEDO.

No. 273,441.

Patented Mar. 6, 1883.



WITNESSES

C. H. Worer.
W. E. Connelly

James H. Bevington INVENTOR

By Leggett & Leggett ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES H. BEVINGTON, OF CLEVELAND, OHIO.

RAILWAY-TORPEDO.

SPECIFICATION forming part of Letters Patent No. 273,441, dated March 6, 1883.

Application filed June 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. BEVINGTON, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Railway-Torpedoes; 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 pertains to make and use the same.

My invention relates to an improvement in railway-torpedoes and mechanism for securing the same to a rail. In the present mode of constructing torpedoes for railway purposes it is necessary to fasten them to the rails by means of ductile-metal straps. This must be done by the operator without the use of any mechanical device, and cannot be done from a moving train, as is often desired. My improvement obviates this difficulty, as will be more fully hereinafter shown and described.

In the drawings, Figure 1 represents a view of the manner in which my device is used in securing a torpedo to the rail. Fig. 2 represents an enlarged view of the fork with the handle broken off and the torpedo attached to the end of the fork. Fig. 3 is a longitudinal vertical sectional view of the torpedo, showing the manner of connecting the spring to the same. Fig. 4 represents a perspective view of a portion of the fork, showing the cavity for the reception of one end of the spring. Fig. 5 is a similar view, showing a grooved recess which is adapted to receive the other end of the spring.

A represents a pellet or case, formed by the two parts *a* and *b*, that contains the explosive fulminate. This case may be made in any desirable form, but must be made of such material or metal that a steel spring may be secured to it. In the drawings is shown one manner of attaching the spring B to the case, which consists in laying the spring over the top of the case A and covering it with a piece of metal, C, having openings at its sides for the passage of the spring. This covering is secured to the case by turning its edge around and partially under the bottom of the case A.

Another manner of securing the spring by means of strips of metal *c* and *d* is shown in

Fig. 6. The spring is in its normal position, as represented in Fig. 3, and when it is desirable to use the torpedo the spring is expanded and the ends are placed in the openings *e e'* in the ends of the fork D. This fork is preferably made of steel, and is detachably attached to the rod or handle E.

Having thus described the several parts of my invention, the operation of it is as follows: On a great many of our railways the train sections follow very close upon one another, and it is very often desirable to warn the rear section from approaching too fast or to stop entirely. This is particularly the case in a mountainous country, where the railways have to pass around short curves. If the engineer sees any danger and has to slack up very suddenly, he can readily notify the rear section to do the same by causing a torpedo to be placed on the track by means of the mechanism above described, and is done in the following manner: The torpedo is placed between the ends of the fork by expanding the spring B and placing the ends of the said spring in the cavities *e* and *e'*. The operator then reaches out from the rear platform of the caboose or passenger-car and strikes the rail with the torpedo, the force of which disengages the torpedo from the fork, and the spring secures itself around the rail. The approaching train in passing over this causes it to explode and give the alarm. Different signals may be given the engineer in this manner—one torpedo to check the train and two to stop it.

Having thus described my invention, what I claim is—

The combination, with a fork provided with the recesses *e e'*, of a torpedo provided with the spring B, the ends of which are adapted to be secured in the recesses of the fork, substantially as set forth.

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

JAMES H. BEVINGTON.

Witnesses:

ALBERT E. LYNCH,
JNO. CROWELL, Jr.