(No Model.)

J. H. BEVINGTON.

RAILWAY TORPEDO.

No. 298,935. Patented May 20, 1884.

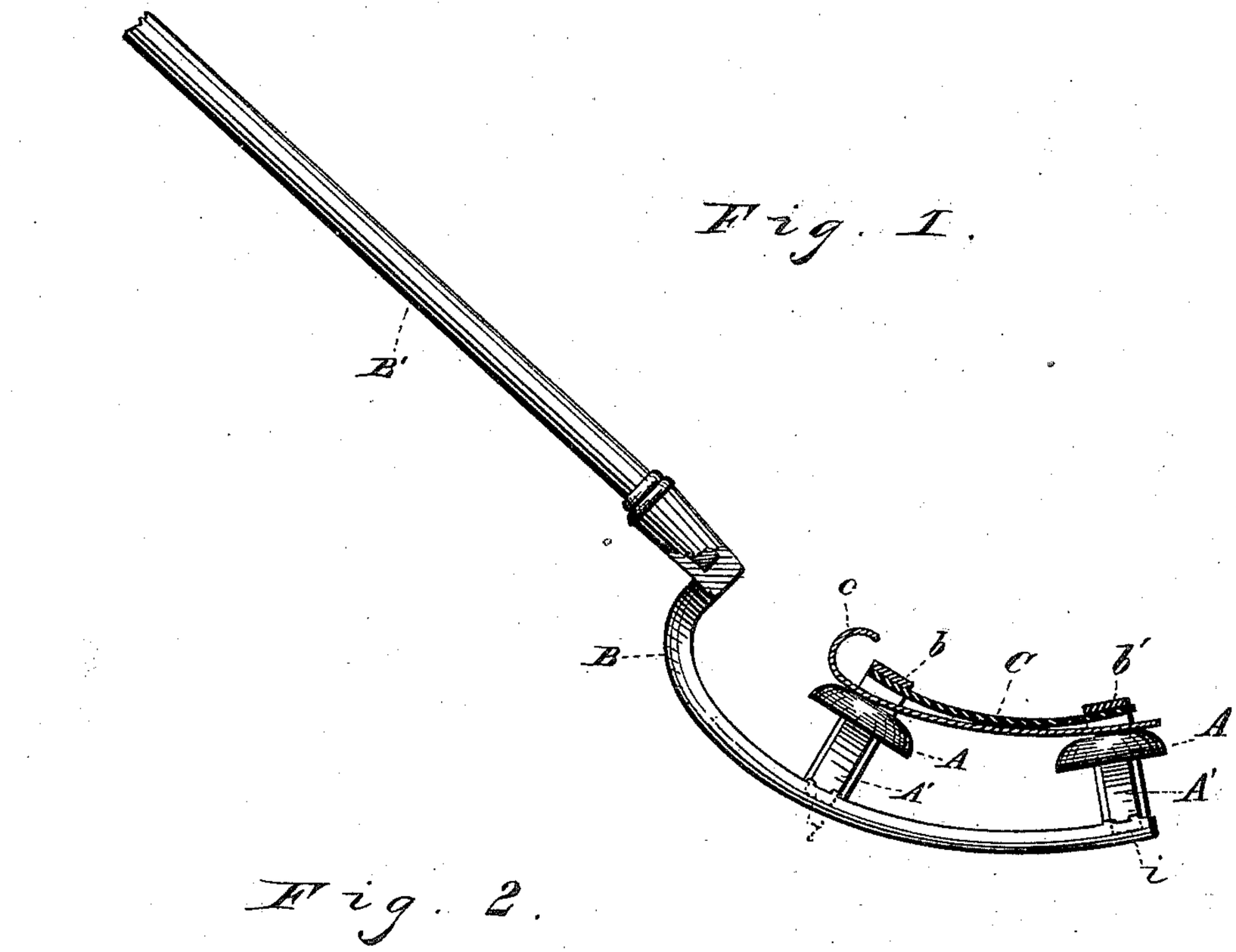


Fig. 1.

Fig. 2.

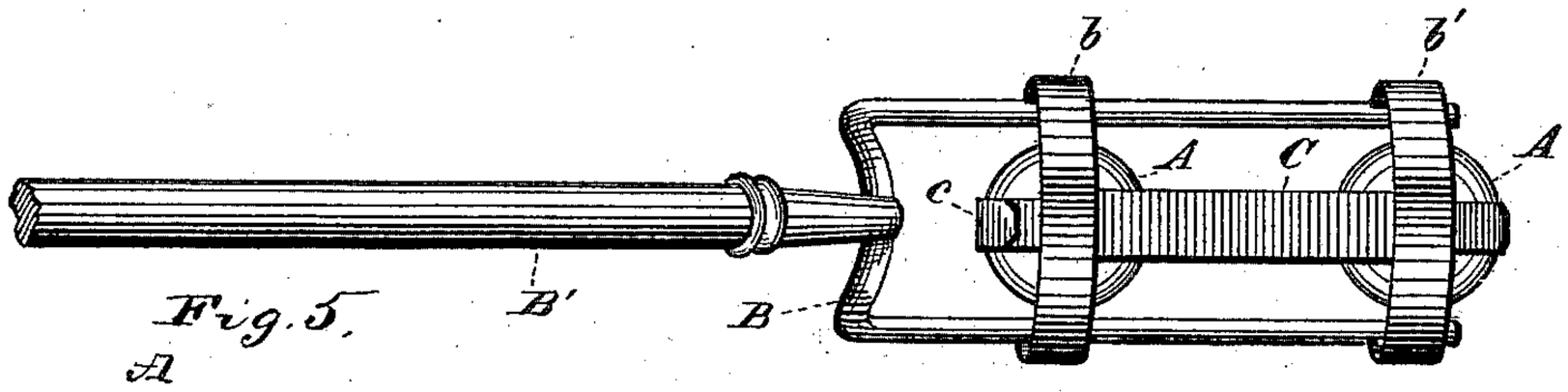


Fig. 5.

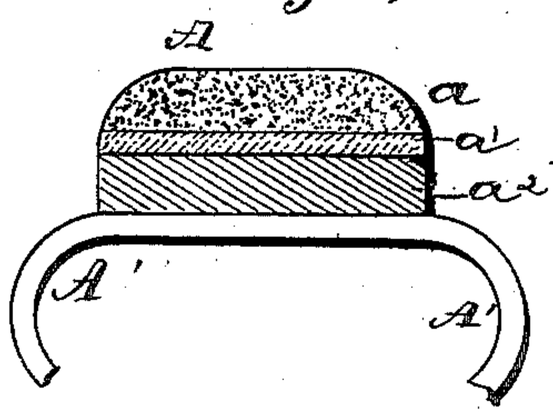
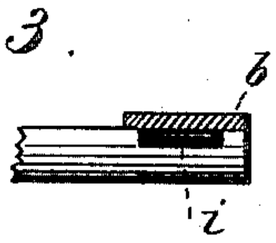


Fig. 3.



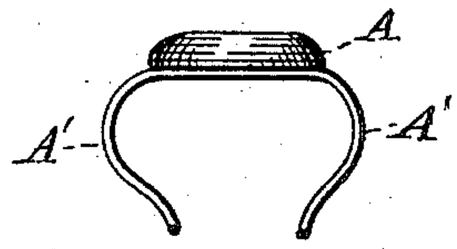


Fig. 4.

WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES H. BEVINGTON, OF CLEVELAND, OHIO.

RAILWAY-TORPEDO.

SPECIFICATION forming part of Letters Patent No. 298,935, dated May 20, 1884.

Application filed September 24, 1883. (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 improvements in railway-torpedoes with torches attached, and mechanism for securing the same to a rail and for lighting the track; and it consists in certain features of construction and in combination of parts hereinafter described, and pointed out in the claims.

The object of this invention is to improve certain devices on which I have already obtained Letters Patent No. 273,441, dated March 6, 1883, and to which reference is had in this specification.

In the drawings, Figure 1 is a side elevation, partly in section, embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a plan view in detail. Fig. 4 is a side elevation of a torpedo with springs attached. Fig. 5 is a sectional view of one form of combined torch and torpedo.

A represents the body of a torpedo, consisting of a shell or case containing the explosive fulminate, and is provided with the springs A′, for attaching it to the rail.

B is a fork provided with the handle B′, and to the prongs of which are attached the bands *b* and *b′*, as shown. These bands are attached on the outside of the said prongs, and at each end of each band is a small recess, *i*, in the respective prongs, for engaging the ends of springs A′, and shown in dotted lines in Fig. 1, and also in Fig. 3. These bands are connected above by the spring C, that in turn is secured in the central part to the spring *c*. In setting the torpedoes in the fork, preparatory to attaching them to the rail, the springs A′ are distended from their normal condition, (shown in Fig. 3,) so as to engage the recess *i*. In this position, as shown in Fig. 1, the tops of the torpedoes are in contact with the spring *c*. As the operator strikes the rail with the torpedo, the torpedo presses up against the springs *c* far enough to disengage the ends of the springs A′ from the recess *i*, and the recoil of the spring A′ secures the torpedo to the rail; and as the fork is drawn away the spring *c* is drawn with some pressure across the top of the torpedo. It is desirable in my case to have a torch attached to these torpedoes, that will give a signal-light for a short time. For this purpose some substance or compound that is easily ignited by friction is secured to the top of the torpedoes, and where it will come in contact with the spring *c*, and will be ignited by the friction of the spring as it is disengaged from the torpedo, as aforesaid. The compounds used on ordinary matches would be suitable for this purpose, and might have embodied various chemicals to give different colored lights, when so required; or the compound might be such as to give only a phosphorescent light, if so desired.

In Fig. 5, I have shown one form of combined torch and torpedo, the slow-burning compound *a*, forming the torch, being separated from the explosive charge a^2 by the interposed non-conducting material *a′*. I would have it understood, however, that I do not confine myself to any particular construction of torch and torpedo, but consider myself at liberty to employ any and all forms that fall within the spirit and scope of my invention.

If the handle E is raised to a suitable inclination, the torpedo at the end of the fork may be first attached to the rail, after which, by lowering the handle to a less inclination, the other torpedo may, in like manner, be placed.

The lighting of the track not only gives a signal to the coming train, but also shows the operator that the torpedo is properly placed.

What I claim is—

1. The combination of a railway-torpedo provided with a signal-torch and an attaching device provided with means for igniting or lighting the torch.

2. A railway-torpedo provided with a phosphorescent or other easily-ignitible compound, and means carried by the attaching device for igniting or rendering luminous the said compound, substantially as set forth.

3. The bands *b* and *b′*, provided with suitable springs adapted to press upon the tor-

pedoes and ignite or light a torch on the torpedoes, substantially as described, and for the purpose specified.

4. The combination, with the fork B, of the bands *b* and *b'* and the springs C and *c*, substantially as shown and described.

In testimony whereof I sign this specification, in the presence of two witnesses, this 3d day of September, 1883.

JAMES H. BEVINGTON.

Witnesses:
ALBERT E. LYNCH,
CHAS. H. DORER.