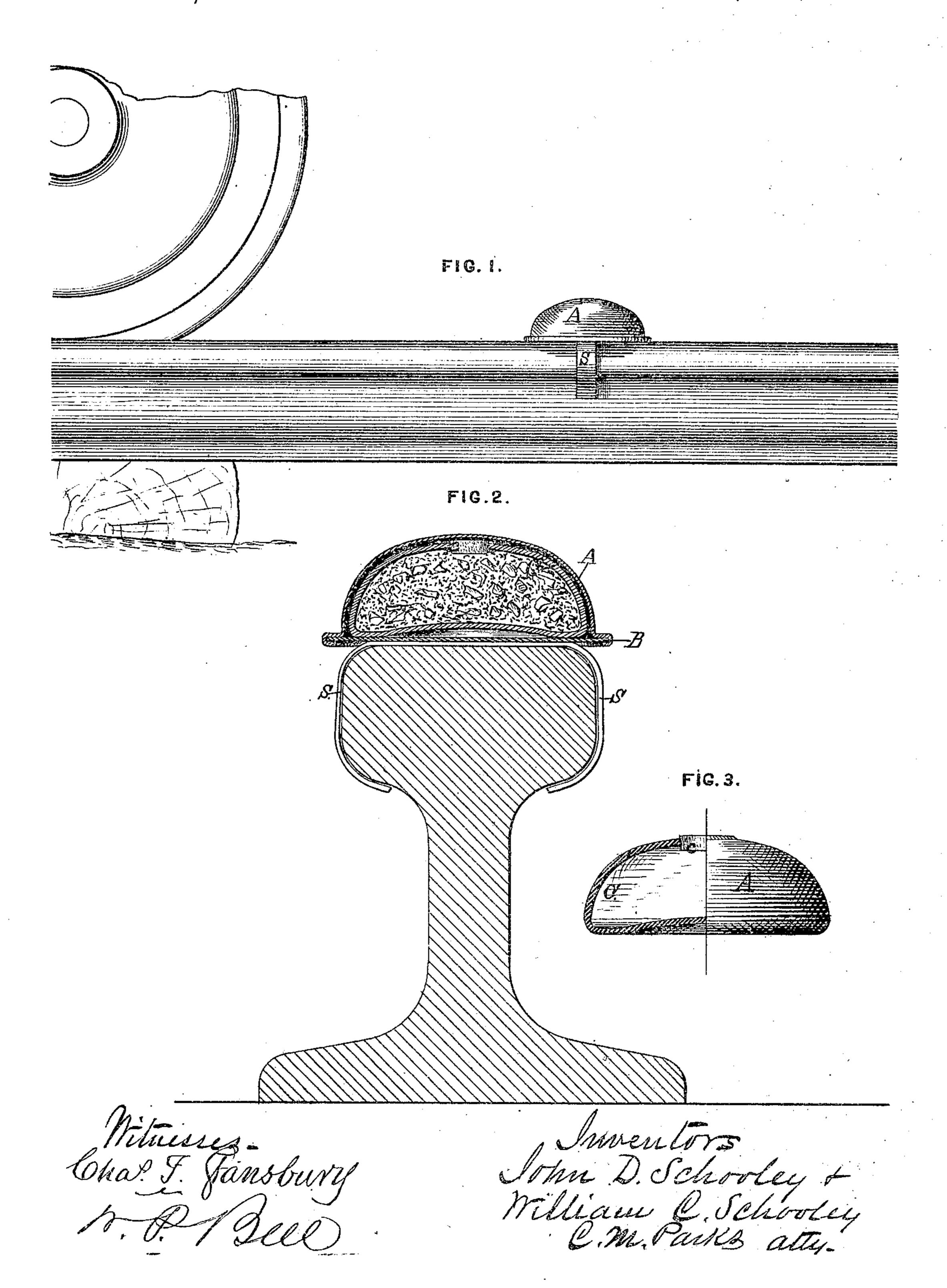
## J. D. & W. C. SCHOOLEY. Detonating Railroad Signals.

No.155,547.

Patented Sept. 29, 1874.



## UNITED STATES PATENT OFFICE.

JOHN D. SCHOOLEY AND WILLIAM C. SCHOOLEY, OF BRADDOCK'S FIELD, PENNSYLVANIA.

## IMPROVEMENT IN DETONATING RAILROAD-SIGNALS.

Specification forming part of Letters Patent No. 155,547, dated September 29, 1874; application filed July 22, 1874.

To all whom it may concern:

Be it known that we, John D. Schooley and William C. Schooley, of Braddock's Field, Allegheny county, Pennsylvania, have invented an Improved Detonating Compound and Torpedo for Railroads; and we do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents our railroad-torpedo as secured to the track; Fig. 2, a cross-section of the same; and Fig. 3, a view of our lining,

partly in section.

Our invention relates more particularly to that class of torpedoes used on railroads for signals or alarms, though the ingredients and lining used may be employed in all kinds of fulminating torpedoes. Our invention consists in using a glass lining in connection with an outer cap of our railroad-torpedo to contain the powder, making it water-proof, and less liable to explode accidentally by handling or otherwise, while, at the same time, it greatly increases its explosive violence.

In the drawings, A is the outer case or cap, and B the base. The cap A is struck up from sheet metal, in the usual manner, leaving a flange, a, to be turned over the base B. Within this cap or case is placed the glass vessel or lining C, having an orifice at c, her-

metically sealed with wax and a cork. Into this glass vessel is placed the detonating material. Upon the base B is secured a lead strap, S, for the purpose of adjusting the torpedo upon the track, as shown in Fig 1.

The advantages arising from our invention are: The glass lining protects the explosive compound entirely from moisture, and almost entirely from accidental ignition, until it is broken, when it adds to the violence of the explosion.

Having fully described our invention, what we claim, and desire to secure by Letters Pat-

ent, is—

1. In combination with the case of a torpedo, the hermetically-sealed glass lining, sub-

stantially as described.

2. The railfoad-torpedo herein described, consisting of the detonating compound set forth, inclosed within a hermetically-sealed glass vessel and the outer metallic case, substantially as set forth.

The above specification of our said invention signed and witnessed at Braddock's Field

this 17th day of July, A. D. 1874.

JOHN D. SCHOOLEY. WILLIAM C. SCHOOLEY.

Witnesses:

WM. SNYDER, T. W. SHARP.