

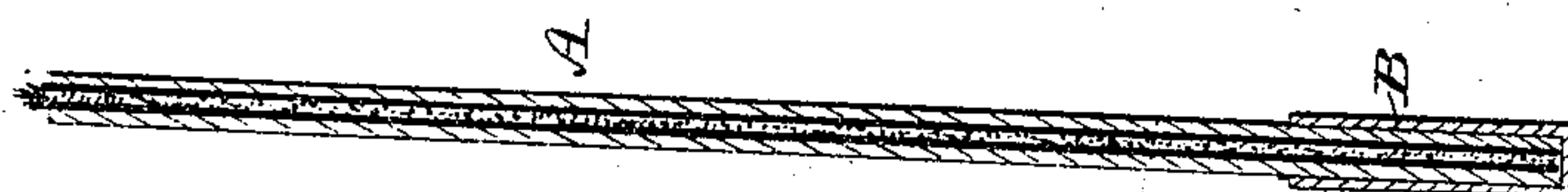
T. P. SHAFFNER.

Blasting Fuse.

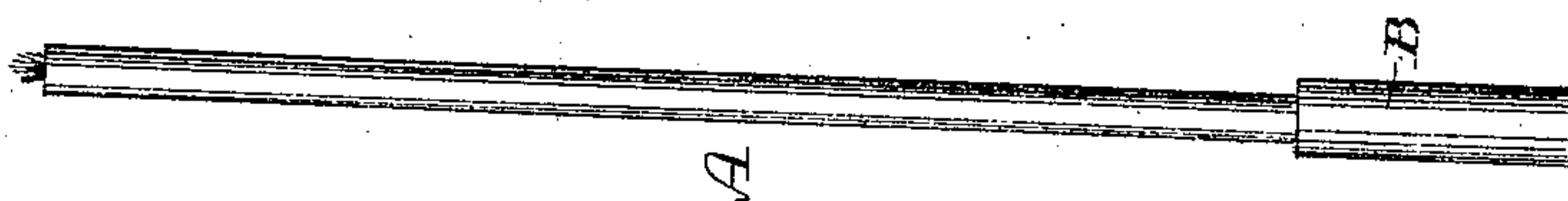
No. 93,755.

Patented Aug. 17, 1869.

*Fig: 2.*



*Fig: 1.*



*Witnesses*  
*W. M. Shaffner*  
*Edw. L. Brown*

*Inventor*  
*T. P. Shaffner*

*The drawing in this patent  
is not in print.*

# United States Patent Office.

TALIAFERRO P. SHAFFNER, OF LOUISVILLE, KENTUCKY.

*Letters Patent No. 93,755, dated August 17, 1869.*

## IMPROVEMENT IN BLASTING-FUSE.

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

*To all whom it may concern:*

Be it known that I, TALIAFERRO P. SHAFFNER, of Louisville, Jefferson county, and State of Kentucky, have invented a new and improved Mode of Preparing Fuses for Blasting-Purposes; and I do declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of my invention consists in applying to the ordinary blasting-fuse a jacket or covering, made of some rapid explosive substance, for the purpose of spreading the fire throughout the charge of powder in a blast, or in other conditions where powder is desired to be exploded rapidly, in greater or less quantities.

To enable others skilled in the art to make and use my invention, I will proceed to describe the invention employed by me.

My process consists in using, for example, an ordinary blasting-fuse, and covering the end that lay in the powder with gun-cotton or other rapidly-exploding substance. This covering may be in the form of a woven jacket or bag, or the yarn or thread may be wound around or tied upon the fuse.

Figures 1 and 2 represent a fuse prepared for a blast.

Fig. 1 shows the fuse complete, and fig. 2, a sectional view of fig. 1.

A is the fuse, and

B, the jacket made of cloth, prepared as gun-cotton.

When the fire reaches the end of the fuse, it ignites the gun-cotton, which is more rapid in spreading fire than gunpowder, especially blasting-powder, and the moment it becomes ignited, it spreads the fire through the whole charge of powder, and by suddenly igniting the whole of the charge, a greater amount of rock will be disrupted.

The same principle can be applied to cannon, or for other purposes where sudden explosions may be desired.

Having fully described my invention,

What I desire to secure by Letters Patent is as follows, viz:

I claim the placing, upon a blasting or other fuse, gun-cotton, or other substance of more rapid combustion than gunpowder, for the purpose of spreading the fire throughout the charge of a blast, cannon, torpedo, bomb, or shell, substantially as hereinbefore described.

TAL. P. SHAFFNER.

Witnesses:

EDM. F. BROWN,

W. M. SHAFFNER.