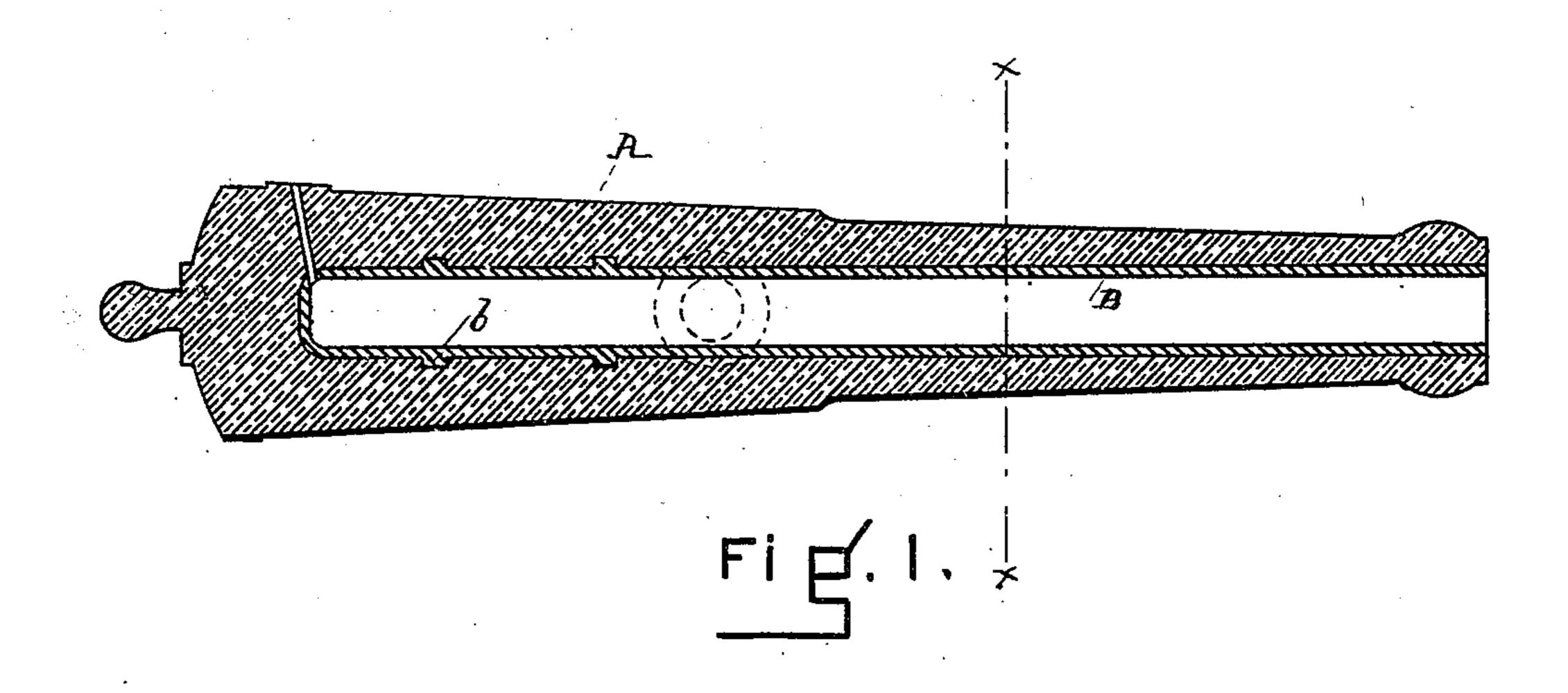
(No Model.)

## W. B. BENSON. COMPRESSED PULP GUN.

No. 514,407.

Patented Feb. 6, 1894.



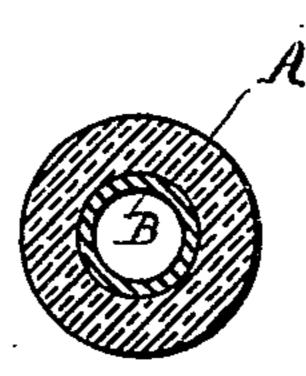


Fig. 2

WITNESSES James a. Nowle. Henry B. Leach Meliam B. Benson

## United States Patent Office.

WILLIAM B. BENSON, OF BOSTON, MASSACHUSETTS.

## COMPRESSED-PULP GUN.

SFECIFICATION forming part of Letters Patent No. 514,407, dated February 6,1894.

Application filed March 14, 1891. Serial No. 384,991. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. BENSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Guns, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to provide a gun made of fibrous pulp compressed into the required form. I attain this object by the mechanism shown in the accompanying drawings, in which—

Figure 1 is a longitudinal section of the gun. Fig. 2 is a cross-section on line x-x.

My improved gun is made of compressed fibrous pulp, said pulp being of sufficient tenacity to sustain the shock of the explosion of powder or any known explosive. This gun can be made of any desired form,—muzzle or breech-loading,—and can be used for the heaviest ordnance, also for the barrels of rifles and small arms. By the use of this compressed fibrous pulp, I have the required strength with less weight than the ordinary metal guns.

Another object of my invention is to provide a metallic bushing to be used in combination with the compressed fibrous pulp, said bushing can be rifled or used with a smooth

30 bore.

Referring to the drawings, A, Fig. 1, shows the main body of the gun.

B, Fig. 1, shows the metallic bushing with projections b.

Fig. 2, shows the cross-section on line x-x. 35
The bushing B, Figs. 1 and 2, can be made with projections b, shown in Fig. 1, said projections serving to keep the bushing in place. The bushing can be used without the projections if desired.

I claim—

1. A gun comprising a main or body portion of compressed fibrous pulp, having a metallic bushing, substantially as and for the purpose described.

2. A gun comprising the main or body portion A of compressed fibrous pulp, and the metallic bushing B having projections b, substantially as and for the purpose set forth.

In testimony whereof I have signed my 50 name to this specification, in the presence of two subscribing witnesses, on this 2d day of February, A. D. 1891.

WILLIAM B. BENSON.

Witnesses:

JAMES A. TOWLE,

HENRY B. LEACH.