(No Model.)

H. STRIDE.

MINER'S SQUIB CARRIER.

No. 328,358.

Patented Oct. 13, 1885.

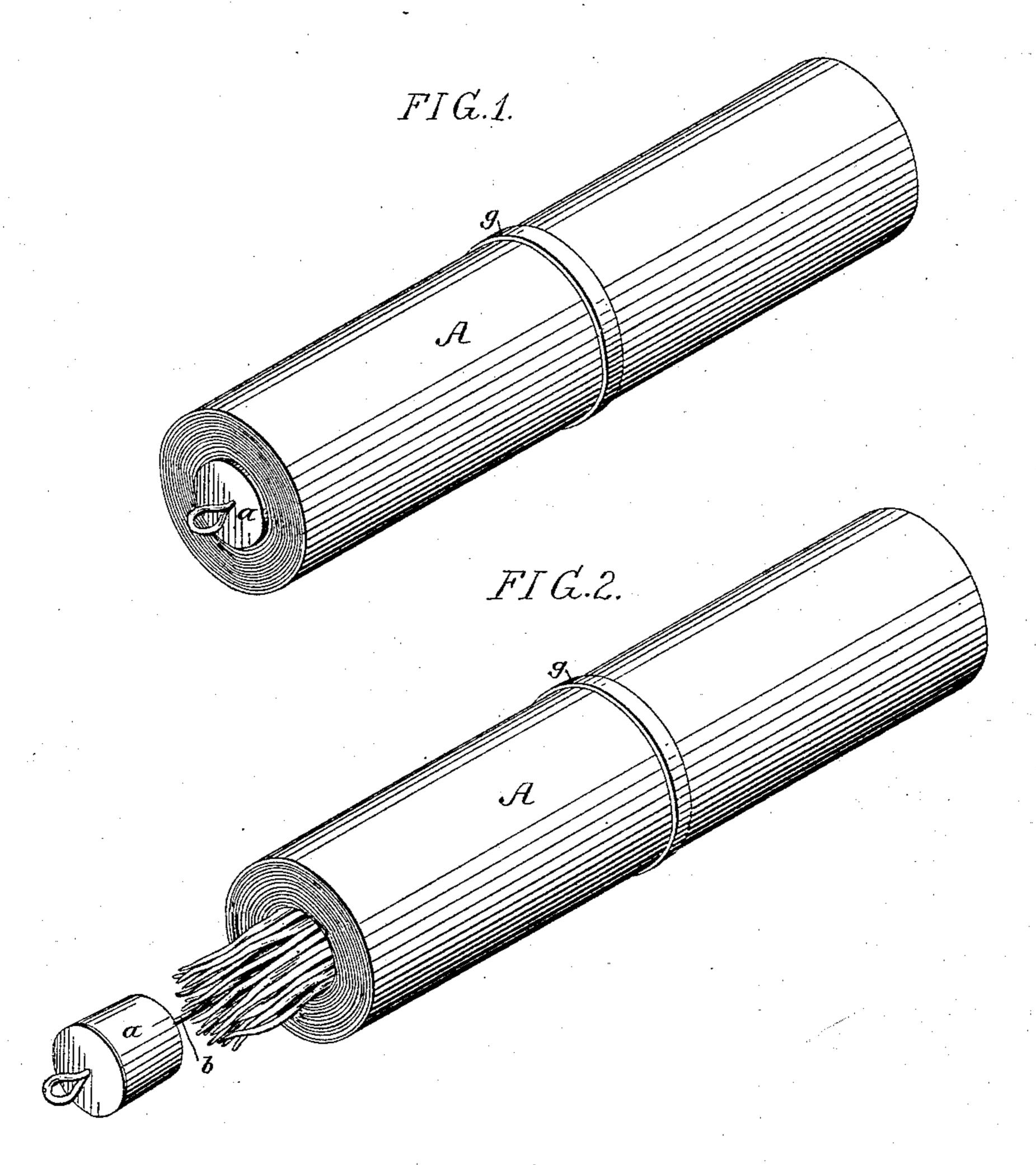
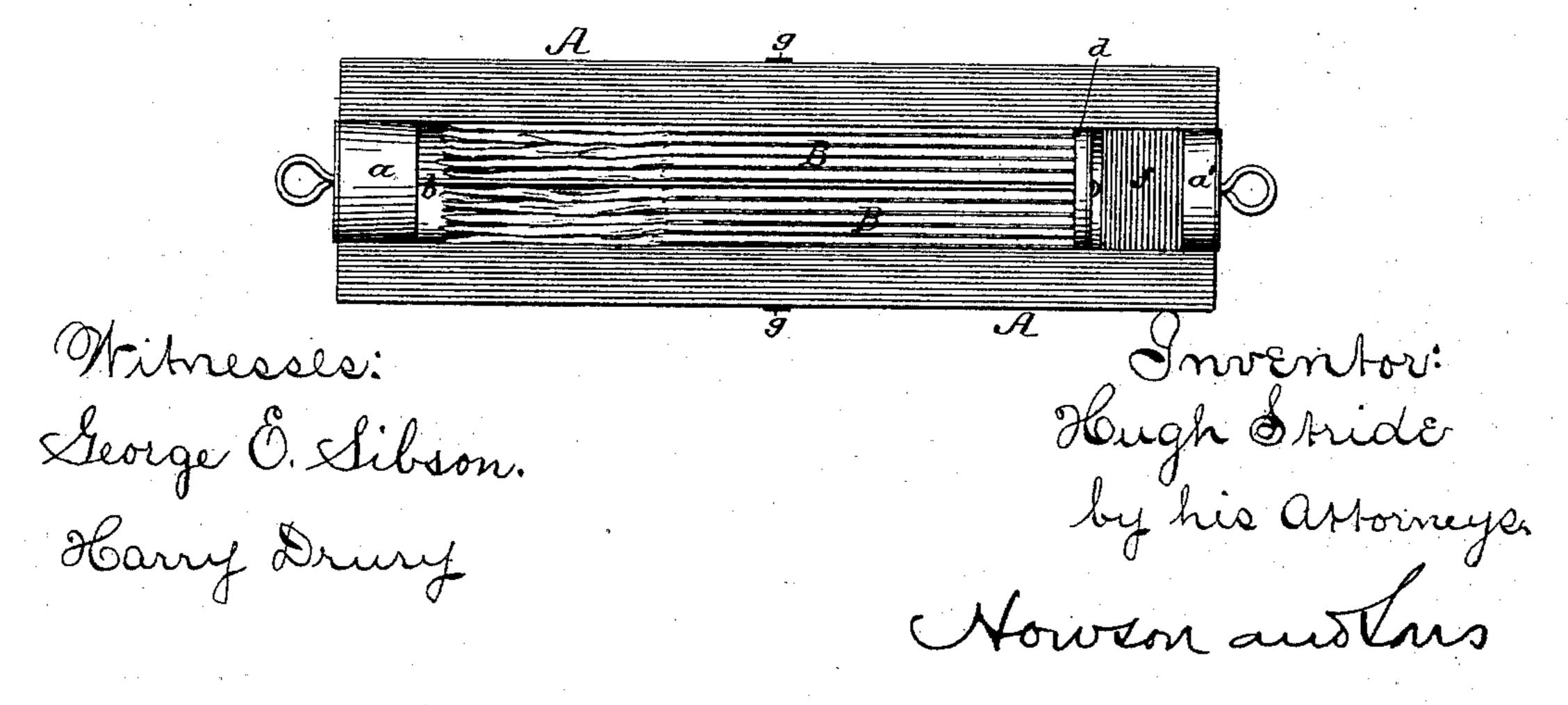


FIG.3.



N. PETERS, Photo-Lithographer, Washington, D. C.

United States Patent Office.

HUGH STRIDE, OF MAHANOY CITY, PENNSYLVANIA.

MINER'S SQUIB-CARRIER.

SPECIFICATION forming part of Letters Patent No. 328,358, dated October 13, 1885.

Application filed August 18, 1885. Serial No. 174,766. (No model.)

To all whom it may concern:

Be it known that I, HUGH STRIDE, a citizen of the United States, residing in Mahanoy City, Schuylkill county, Pennsylvania, 5 have invented certain Improvements in Miners' Squib-Carriers, of which the following is a specification.

The objects of my invention are to enable miners to carry cartridge-paper and squibs 10 in more compact and convenient shape than usual, and to prevent risk of the squibs becoming inoperative or the paper rendered

useless by exposure to dampness.

This object I attain by the use of a roll of 15 cartridge-paper, which forms the receptacle for the squibs, this receptacle being closed at opposite ends.

In the accompanying drawings, Figure 1 is a perspective view of my combined cartridge-20 paper roll and squib-carrier; Fig. 2, a similar view, showing the squibs partly withdrawn from the carrier, and Fig. 3 a longi-

tudinal section. 25 squibs and a number of sheets of paper, from which pieces are torn and formed into cases for the reception of the charge of powder, the torn strip being usually rolled over a miner's cartridge-pin, and having the overlapping 30 edges secured by soap or other adhesive material. The squibs are usually carried in the box in which they are sold, and the paper is in the form of sheets, of comparatively large size, which are objectionable on this account, 35 the usual plan being also open to the objection that it necessitates looking after two bundles or packages, and because the squibs and the loose sheets of paper are likely to become deteriorated or rendered useless by

In order to overcome these objections, I prepare a roll, A, of paper, the strip of which the roll is composed being of any desired length and of sufficient width to form a car-45 tridge-case of the usual diameter. This roll is wound upon a mandrel, so that when removed therefrom it will have a central opening, which I utilize for the reception of the squibs B, the opening being closed at its op-

40 dampness.

50 posite ends by plugs a and a', so that the central chamber in which the squibs are contained will be damp-proof, and the squibs thereby preserved from deterioration, the paper being also protected, as only a very small 55 surface is exposed.

The plug a is detachable; and in order to insure the withdrawal of the squibs from the central chamber of the roll when the plug a is detached I connect said plug by means of a wire, b, to a disk, d, which, when the plug 60 a is withdrawn, bears upon the inner ends of the squibs and forces the same outward.

In some mines what are called "touchsquibs" are used, these squibs being lit by a small piece of touch-paper; and in order to 65 provide for the carrying of these pieces of touch-paper with the squibs, and for protecting them from the effects of dampness, I place them in the central chamber of the roll A between the disk d and the plug a', as shown at 70f, Fig. 3, said plug a' in this case also being detachable.

It will be observed that the combined paper-roll and squib-carrier is in very compact shape, and can be conveniently carried in the 75. pocket, so that the paper and squibs will always be at hand when needed.

The paper may be prevented from unwind-Part of a miner's equipment is a box of | ing by means of an elastic band, g, as shown; or, after tearing a piece of paper from the 80 strip, the end of the latter may be secured by soap or other adhesive material used in making the cartridges.

I claim as my invention—

1. The within-described miner's squib-car- 85 rier, the same consisting of a strip of paper secured in the form of a roll, and having a central chamber closed at the opposite ends, as set forth.

2. A miner's squib-carrier, consisting of a 90 strip of paper secured in the form of a roll, and having a central chamber with closingplug a and disk d connected thereto, as specified.

3. The combination of a strip of paper se- 95 cured in the form of a roll with central chamber, the opposite closing-plugs a a' and the disk d, connected to the plug a, and occupying a position some distance from the plug a', as specified.

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

 $HUGH \times STRIDE$.

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Witnesses: T. H. B. LYON, JOHN STEIPF.