(Model.)

# A. H. WITMAN. POWDER KEG DISCHARGE TUBE. No. 315,874. Patented Apr. 14, 1885.

Lig: 3.

Lig. 2.

WITNESSES: Chras Mida 10. Sedquirck

INVENTOR: A A Witman BY Munn VC ATTORNEYS.

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

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## UNITED STATES PATENT OFFICE.

### AUGUSTUS H. WITMAN, OF MINERSVILLE, PENNSYLVANIA.

#### POWDER-KEG DISCHARGE-TUBE.

### SPECIFICATION forming part of Letters Patent No. 315,874, dated April 14, 1885.

Application filed February 19, 1885. (Model.)

To all whom it may concern:

Be it known that I, AUGUSTUS H. WITMAN, of Minersville, in the county of Schuylkill and State of Pennsylvania, have invented a new 5 and useful Improvement in Powder-Keg Dis-

charge-Tubes, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar latters of reference indicate

10 in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a powder-keg to which my improvement has been applied, the cap being removed. Fig. 2 is a side eleva-

- 15 tion of the same, partly in section, through the broken line  $x \ x \ x$ , Fig. 1, and showing the cap raised from the tube. Fig. 3 is a side elevation of one of my improved dischargetubes and its cap.
- 20 The object of this invention is to promote security in the attachment of discharge-tubes to powder-kegs, to prevent the loss of powder in discharging the same from kegs, and to promote convenience in the attachment and re-25 moval of said discharge-tubes.
- The invention consists in the combination, with a tube having a flange around its lower end and provided with a slot in its side, of an inner tube having a shoulder around its lower
- 30 end and provided with a side pin engaging with the slot in the outer tube, whereby the discharge-tube can be snugly secured to the head of a powder-keg, and can be readily detached, as will be hereinafter fully described.
- 35 A represents an ordinary powder keg, which is provided with the usual opening, B, in one end. To the head of the keg A, at the opposite sides of the opening B, are attached strips C, to receive the edges of the plate or 40 flange D, soldered or otherwise secured to the
- <sup>40</sup> flange D, soldered or otherwise secured to the lower end of the tube E, so that the said tube can be attached to the said keg by slipping the edges of the flange D beneath the edges of the strips C, as shown in Figs. 1 and 2.
- 45 Within the tube E is fitted a tube, F, the lower end of which is made of such a size as to fit into the opening B of the keg A. The tube F is provided with a shoulder, G, near its lower end, to rest upon the head of the keg
- 50 A around the opening B, as shown in Fig. 2. In the side of the tube E is formed a slot, H, the upper part of which is vertical, and its lower part is inclined, as shown in Fig. 3.

Through the slot H passes a pin, I, which is attached to the inner tube, F, as shown in 55 Fig. 2.

The discharge-tube is closed by a cap, J, placed upon the upper end of the inner tube, F.

When the discharge tube is to be applied to a powder-keg, the tube F is turned and 60 drawn outward to bring the pin I to the upper end of the slot H, which brings the lower end of the inner tube, F, flush with or a little above the lower surface of the flange D. The flange D is then placed upon the head of the 70 powder-keg, and is slipped into place with the tubes E F over the opening B, and the edges of the flange D beneath the inner edges of the strips C. The tube F is then forced downward, bringing its lower end into the 70 discharge-opening B in the head of the keg A, and bringing the pin I to the lower end of the upper vertical part of the slot H. The tube F is then turned, causing the pin I to move down the inclined lower part of the slot 75 H, and forcing the shoulder G of the keg A, so that no powder can escape around the outside of the tube F and beneath the flange D.

The discharge-tube is detached by turning for the tube F and drawing it outward, which brings the pin I to the upper end of the slot H and raises the lower end of the said tube F above the head of the keg A, so that the flange D can be slipped out from beneath the 85 edges of the strips C.

The flange D is made wider in one direction than the other, so the same dischargetube can be applied to kegs with the holdingstrips C at different distances apart.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a powder-keg discharge-tube, the combination, with the tube E, having flanges D around its lower end and provided with the 95 slot H, of the inner tube, F, having shoulders G around its lower end and provided with a pin, I, substantially as herein shown and described, whereby the discharge-tube can be snugly secured to the head of a powder-keg, 110 and can be readily detached, as set forth.

#### AUG. H. WITMAN.

Witnesses: WM. G. REAR, WM. E. LAURENCE. JO .