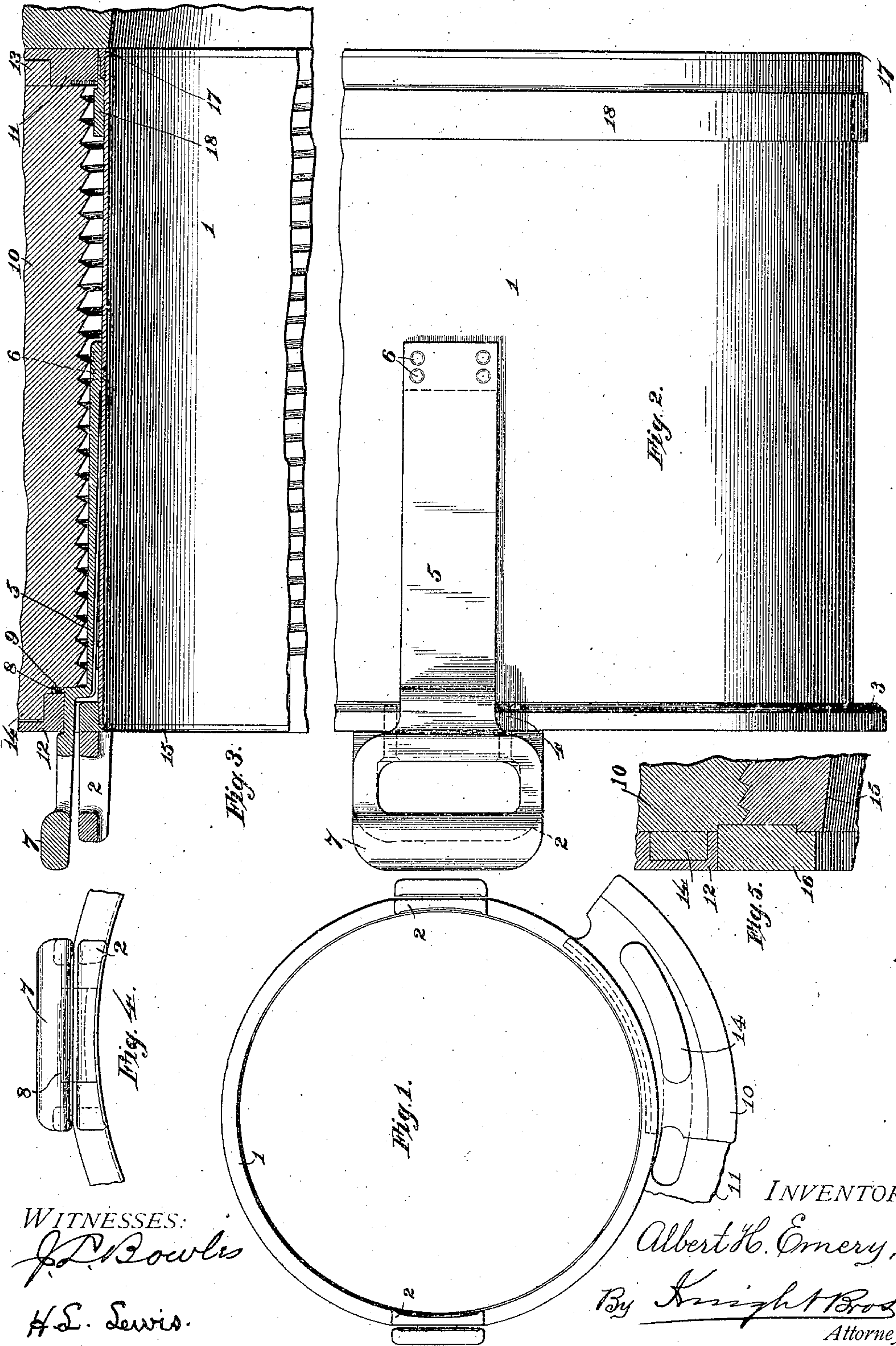


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PATENTED MAR. 28, 1905.

A. H. EMERY.
LOADING TRAY.
APPLICATION FILED JULY 9, 1902.



WITNESSES:

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LOADING-TRAY.

SPECIFICATION forming part of Letters Patent No. 786,252, dated March 28, 1905.

Original application filed March 2, 1901, Serial No. 49,625. Divided and this application filed July 9, 1902. Serial No. 114,931.

To all whom it may concern:

Be it known that I, ALBERT H. EMERY, a citizen of the United States, and a resident of Stamford, in the county of Fairfield, in the State of Connecticut, have invented certain new and useful Improvements in Loading-Trays, of which the following is a specification.

This invention relates to a loading-sleeve to protect the interior of the breech of a gun when the breech-block is withdrawn. It is illustrated by five figures of drawings, which show an embodiment especially designed for use with a gun provided with the particular form of breech-block described in my application filed March 2, 1901, Serial No. 49,625, of which this application is a division.

In said drawings, Figure 1 shows a rear elevation of this loading-sleeve with an adjoining segment of the nut forming part of the breech of the gun and a portion of the plate in which the front end of this segment is trunnioned. Fig. 2 is a side elevation of the same with the upper portion broken away. Fig. 3 is a detail view, in horizontal section, of a portion of the sleeve and of an adjoining portion of a gun which shows a part of the segment of the nut and of the rings in which it is trunnioned. Fig. 4 shows a rear elevation of a small portion of the loading-sleeve with one of the grip-handles and its adjoining locking-latch. Fig. 5 is a detail view showing a portion of the breech-block with one end of a segment of the nut with its trunnions projecting into one of the rings which carry the segment to and from engagement with the breech-block when it is rotated to the right or to the left.

In practice the loading-sleeve will be made principally from metal, and comprises a cylindrically-continuous body conveniently made of brass, to which are secured handles 2, secured to a ring 3 by rivets 4, each of which handles has in connection therewith a spring-latch 5, secured at its front end to the cylinder 1 by rivets 6. These latches 5 have handles 7 and carry small projections 8, which engage in a recess 9, Fig. 3, when the sleeve is in use.

Fig. 5 shows a portion of the rear end of one

of the segments 10 of the locking-nut, which is trunnioned at the front and rear in rings 11 and 12, respectively. Portions of these rings 11 and 12 are shown in Figs. 3 and 5. The segment 10 has trunnions 13 and 14, which have similar eccentric paths in both the rings 13 and 14, one of which is shown in Fig. 1. Fig. 5 shows a portion of the breech-block 15, to which is permanently secured a ring 16. The eccentric paths in rings 11 and 12 cause the segments 10 to close in on the block 15 to secure it when it is rotated to the right and move away from it to release it when rotated to the left. When the segments are closed to secure the block, the parts have the relation shown in Fig. 5, with their screw-threads closely meshed together; but when the segments are opened to release the block the parts have the relation shown in Fig. 3, where a small recess 9 is shown. This recess is not shown and does not exist when the parts are in the position shown in Fig. 5, but is made by the outward movement of the segments to the position shown in Fig. 3.

17 represents a packing of vulcanized rubber or other suitable material, which closes the joint between the body 1 of the loading-sleeve and the rear of the gun-chamber.

18 is a metal centering-ring, which is screwed on the front of the loading-sleeve and is used not only to center the sleeve, but to adjust the packing to work properly when the latches 8 are engaged in the recess 9.

The form and position of the handles 2 and the grip extension 7 on the spring-latches 5 are such that when these are seized by the hands the latches 8 are held toward the center of the sleeve sufficiently to allow of its insertion in the gun ready for loading, when upon releasing the pressure upon the grips the latches 8 enter the recess 9 and secure the loading-sleeve in the gun, with its packing 17 tightly pressed against the rear of the chamber to keep water and dirt out of the breech while swabbing and loading, thus not only keeping the threads on the securing-nut clean and dry, but protecting them from being jammed while loading. After loading, the sleeve is removed, to do which it is only necessary to seize hold of and withdraw it, as the

act of firmly seizing the handles releases the latches.

Any other convenient method of securing the loading-sleeve in the breech of the gun may be adopted; but in all cases it should be such that the packing at the inner end of the loading-sleeve will be held firmly against the rear end of the powder-chamber, forming a joint that will prevent leakage of dirt or water in swabbing and loading.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In combination with a gun having a removable breech-block threaded in its breech, a loading-sleeve comprising a continuous removable lining fitting within the breech fully covering and protecting the threads thereof, and having retaining-latches 5, engaging in a recess in the breech, to hold the sleeve in position while loading.

2. In combination with a gun having a securing-nut expanding in the breech and leaving a recess 9, when so expanded, a loading-sleeve fitting within the expanded nut, covering and protecting the threads thereof, and having retaining-latches engaging in the recess formed in the breech by the expanding of the nut to hold the sleeve in position while loading.

3. In combination with a gun having a removable breech-block threaded in its breech, a loading-sleeve fitting within the breech, covering and protecting the threads thereof, and having retaining-latches 5, engaging in a recess in the breech, to hold the sleeve in position while loading, said latches located on opposite sides of the loading-sleeve, with grips projecting beyond the rear thereof and said loading-sleeve having handles projecting from its rear, adjacent to the latch-grips so that in seizing the latch-grips and handles together, the latches are controlled in handling the loading-sleeve.

4. In combination with a gun having a re-

movable breech-block threaded in its breech, a loading-sleeve fitting within the breech, covering and protecting the threads thereof, and having retaining-latches 5, engaging in a recess in the breech, to hold the sleeve in position while loading; said loading-sleeve being provided with a packing at its inner end, to close the joint between the loading-sleeve and the rear end of the chamber.

5. In combination with a gun having a removable breech-block threaded in its breech, a loading-sleeve fitting within the breech, covering and protecting the threads thereof, and having retaining-latches 5, engaging in the recess in the breech, to hold the sleeve in position while loading, said loading-sleeve being provided with a packing at its inner end, to close the joint between the loading-sleeve, and the rear end of the chamber, and a retaining-ring 18, by which the loading-sleeve is centered at its front end, having a screw adjustment by which the packing is made to seat tightly when the latches engage in the recess of the gun.

6. In combination with a gun having a removable, threaded breech-block, a circumferentially-continuous loading-sleeve reaching from the breech of the gun to the powder-chamber, fitting within the breech and entirely covering and protecting the threads thereof while loading.

7. In combination with a gun having a removable, threaded breech-block, a circumferentially-continuous loading-sleeve reaching from the breech of the gun to the powder-chamber, fitting within the breech and entirely covering and protecting the threads thereof while loading, and having a packing at its front end abutting against the rear end of the powder-chamber, excluding water and dirt, when swabbing and loading the gun.

ALBERT H. EMERY.

In presence of—

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