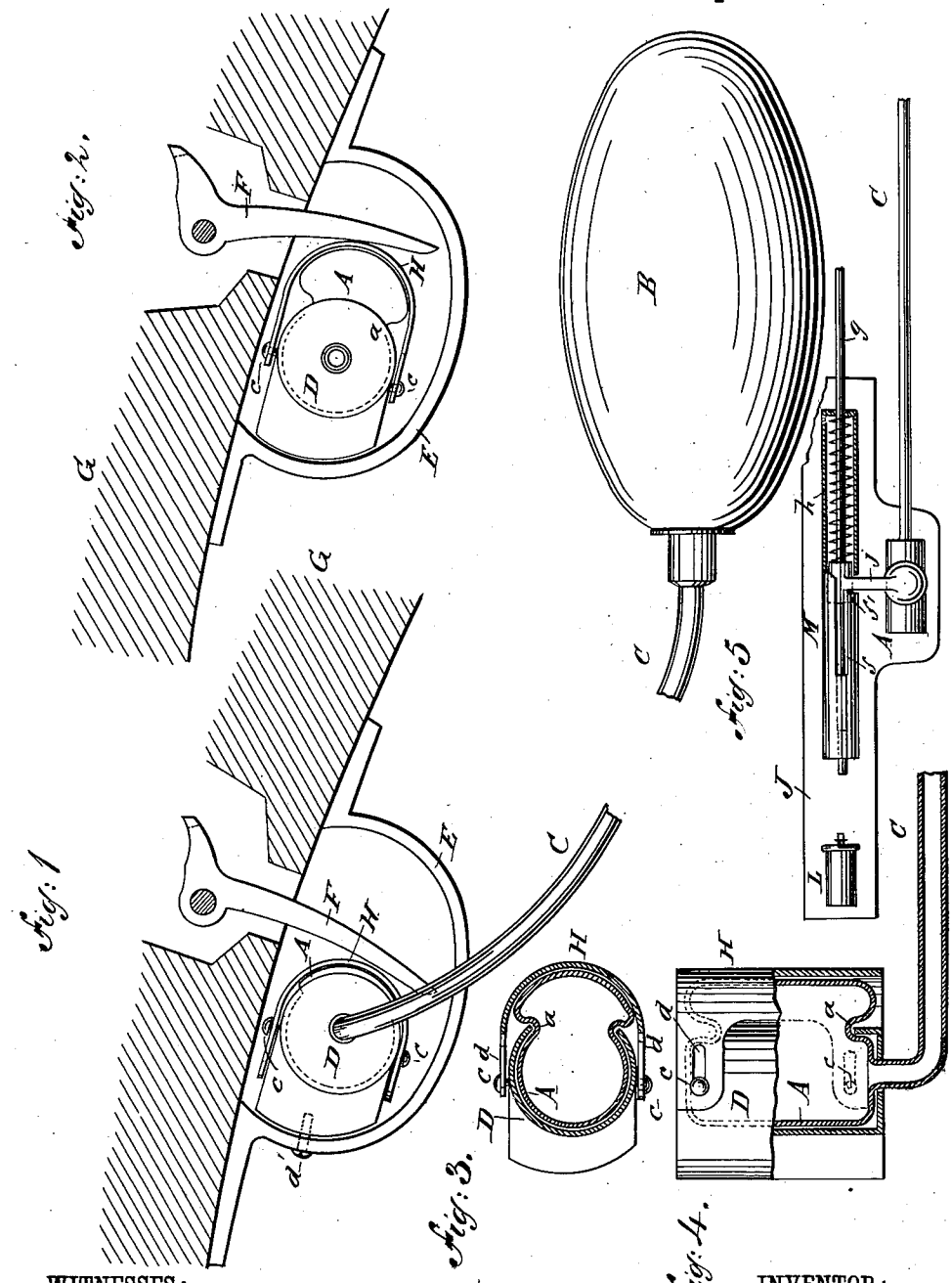
(No Model.)

O. STRAUBE.

PNEUMATIC DEVICE FOR DISCHARGING FIRE ARMS, &c.

No. 348,868. Patented Sept. 7, 1886.



WITNESSES:

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OTTO STRAUBE, OF SPANDAU, GERMANY.

PNEUMATIC DEVICE FOR DISCHARGING FIRE-ARMS, &c.

SPECIFICATION forming part of Letters Patent No. 348,868, dated September 7, 1886.

Application filed April 23, 1886. Serial No. 199,892. (No model.)

To all whom it may concern:

Be it known that I, OTTO STRAUBE, a citizen of Spandau, Empire of Germany, have invented a new and Improved Pneumatic Device for Discharging Fire-Arms, &c., of which the following is a full, clear, and exact description.

My invention relates to the application of compressed air for exploding detonating substances, particularly in fire-arms and cartridges; and the invention consists, principally, of an elastic or collapsible receiver or chamber adapted to be expanded by compressed air, combined with an air-forcing device and devices for striking the fulminate or cartridge.

The invention also consists of means for attaching the elastic receiver to a fire-arm to act upon the trigger or other part of the lock for operating the same; and the invention also consists of the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figures 1 and 2 show my invention applied for operating the trigger of a fire-arm, the receiver being shown expanded in Fig. 2. Fig. 3 is a sectional elevation of the elastic reservoir or receiver, the casing containing the same, and a sliding shield arranged to be moved by the expansion of the elastic receiver. Fig. 4 is a sectional plan view of the same, parts being broken away; and Fig. 5 shows my invention applied to a device for exploding cartridges.

A represents an expansible reservoir or receiver, made, by preference, of rubber, and to which the air-forcing device or bulb B is connected by the tube C. The receiver A is held in a casing, D, which is open at one side, as at *a*, to permit a portion of the receiver to be forced or to protrude therefrom, and in this instance the casing D is of suitable size and shape to be placed in the trigger-guard E in front of the trigger F of the fire-arm G. The casing A may be held in the guard E by the screw *d'*, or by other suitable means, or it may be made to fit so snugly that no fastening will be required. Over the opening *a* in the casing D, and over the protruding portion of the receiver A, is placed the shield H, which is connected to the casing D by the studs *c* passing through slots *d*, which latter permit the shield H to move to and from the casing D a distance equal to the length of the said slots, so that when air is forced into the receiver A and the same expanded it will act to force the shield H outward from the position shown in Fig. 1 to that shown in Fig. 2, which movement of the shield is sufficient to operate the trigger F and discharge the fire-arm.

The device shown in Fig. 5 is for firing cartridges; and it consists of a suitable base, J, on which the cartridge L and shell M are secured. The shell M is slotted, as shown at *f*, and at one side of said slot is formed an offset or shoulder, *f'*. In the shell are placed the striking-spindle *g*, and coiled spring *h*, placed upon the spindle, and in front of the spring is secured upon the spindle the arm or knob *j*, so that the coiled spring acts between the collar of the arm *j* and the end of the casing. By drawing back upon the knob or arm *j* the spindle *g* may be moved backward and the spring compressed, and by turning the arm back of the offset *f'* the spindle and spring may be retained ready for delivering a blow upon the cartridge L. The expansible air-receiver A is placed upon the base J, beneath the arm or knob *j*, so that when air is forced into the receiver its expansion will lift the knob or arm *j* into line with the slot *f*, whereupon the spring *h* will force the spindle and knob or arm forward and strike the cartridge L and cause its explosion.

While my invention may be applied for discharging fire-arms generally, it is especially applicable for testing fire-arms where for safety they must be exploded from a distance; and my invention is also applicable in firing dynamite cartridges or explosive compounds used in blasting, &c.

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

1. The combination, with the trigger or releasing device of the firing mechanism or apparatus for discharging explosive compounds in fire-arms or cartridges, of an expansible pneumatic receiver to trip said trigger or releasing device as the receiver is expanded, substantially as and for the purpose set forth.

2. The combination, with a casing applied

to the trigger-guard of a fire-arm and open on one side, and a shield having a sliding connection with said casing and held over said opening, of an elastic receiver, and means for expanding said receiver, substantially as set forth.

3. The combination, with the trigger F and trigger-guard of a fire arm and receiver A, of the air-forcing balb B, and tube C, connecting the bulb with the receiver, substantially as and for the purposes set forth.

4. The combination, with the trigger and trigger-guard of a fire-arm, of casing D, open at one side and containing the receiver A, and the sliding plate or shield H, arranged to be moved by the expansion of the receiver, substantially as and for the purposes described.

5. The combination, with the trigger and trigger-guard of a fire-arm, of the receiver A, held in the casing D, adapted to be held in the guard E, the tube C, air-forcing device B, and sliding shield H, arranged to be moved by the expansion of the receiver A, substantially as and for the purposes set forth.

OTTO STRAUBE.

Witnesses:
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