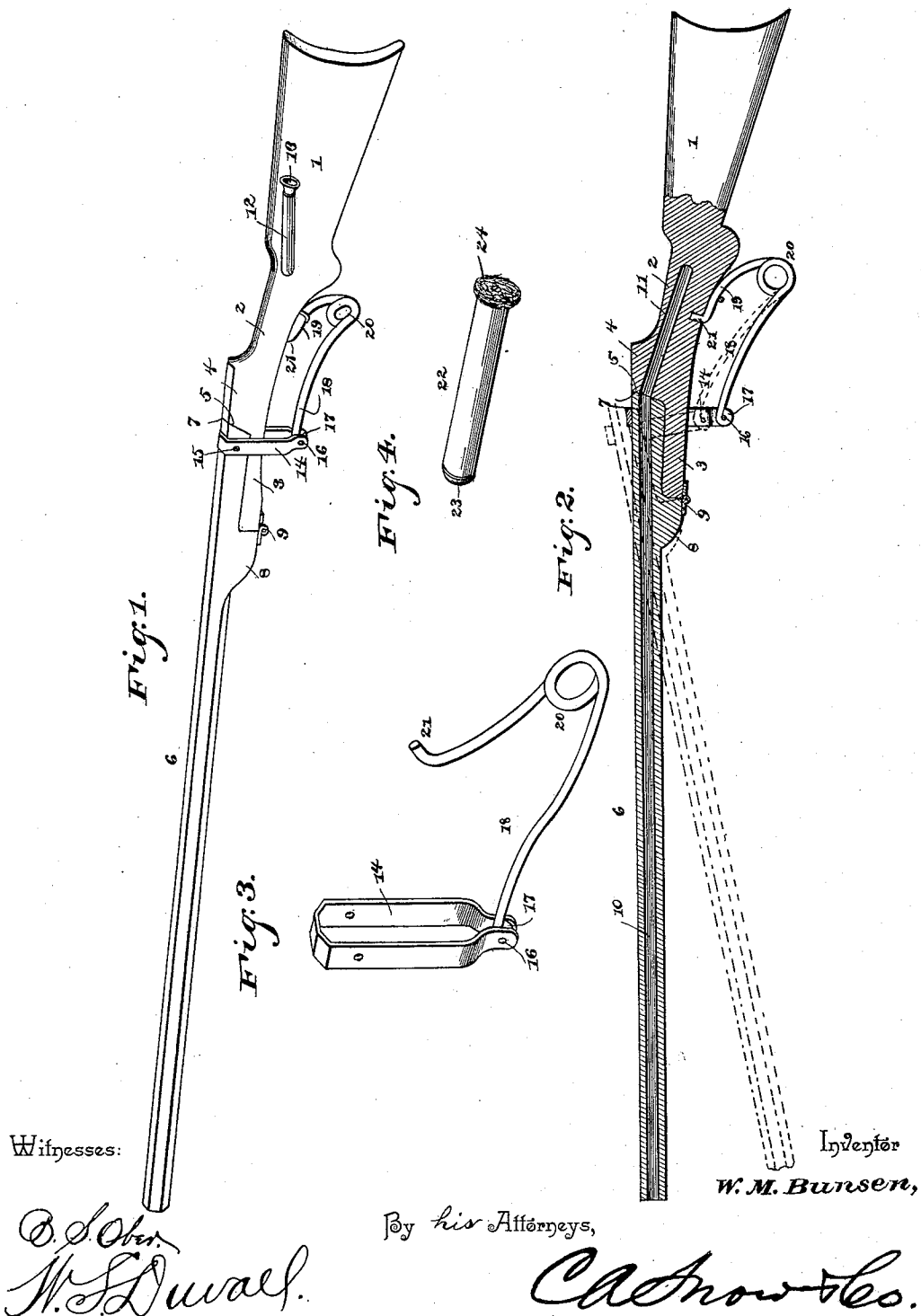


(No Model.)

W. M. BUNSEN.
BLOW GUN.

No. 477,322.

Patented June 21, 1892.



UNITED STATES PATENT OFFICE.

WILLIAM MITCHELMORE BUNSEN, OF GALESVILLE, ASSIGNOR OF ONE-HALF
TO JOSEPH W. SKINNER, OF LA CROSSE, WISCONSIN.

BLOW-GUN.

SPECIFICATION forming part of Letters Patent No. 477,322, dated June 21, 1892.

Application filed July 30, 1891. Serial No. 401,202. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MITCHELMORE BUNSEN, a citizen of the United States, residing at Galesville, in the county of Trempealeau and State of Wisconsin, have invented a new and useful Blow-Gun, of which the following is a specification.

This invention relates to improvements in toy air-guns, and to that particular kind in which the missile is ejected by means of compressed air forced through a tube communicating with the mouth of the operator.

The objects of my invention are to provide a gun of the above class and of an extremely economic and simple construction, that is easy to load, and when loaded is automatically returned to a position ready for firing.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a gun constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section. Fig. 3 is a detail in perspective of the barrel-locking yoke and spring. Fig. 4 is a detail of the dart or missile.

Like numerals of reference indicate like parts in all the figures of the drawings.

The stock of the gun comprises the usual butt 1, which at its front end is merged into the reduced grip 2, and beyond the same into the fore-arm 3, which latter has its upper front portion cut away to form the block 4, which is provided at its front edge with an inclined face 5.

6 denotes the barrel, which fits upon the cut-away portion of the fore-arm, and at its rear end is inclined at 7 to correspond with the inclined face 5 of the block, said rear end or breech of the barrel being adapted to fit snugly against said block. Upon its under side the barrel is provided with a continuation 8 of the fore-arm, the same being located in front of said fore-arm and connected at their meeting edges by means of a simple hinge 9, whereby the barrel may be thrown into and out of alignment with the remainder of the gun for the purpose of exposing its breech above the block 4.

The barrel is provided with the usual bore

10, which is continued by an air-passage 11, formed in the grip 2 and block 4, and laterally branched at the rear end of the grip, and has connected thereto a flexible rubber tube 12, which extends from the grip a sufficient distance rearwardly so as to reach the mouth of the user when the gun is at the shoulder and is there provided with a suitable mouthpiece 13.

The rear end of the barrel is embraced by an oblong yoke or bail 14, which is pivoted to the barrel at diametrically-opposite sides, as at 15, and its terminals extend below the barrel, embracing the fore-arm 3 loosely, and by a pin 16 is pivotally connected with an eye 17, formed at the front end of a spring-wire 18. The wire 18 is rearwardly curved substantially parallel with the grip to form a grip portion 19 and in rear of the same is coiled, as at 20, and inwardly disposed, terminating at a point 21, driven into the grip 2 of the stock.

The dart or missile employed in connection with the gun, as illustrated in Fig. 4 of the drawings, comprises a cylindrical body portion 22 of wood, provided at its front end with a point or suitable head 23, and at its rear end has secured thereto by a tack, glue, or other means a small disk 24 of cloth, against which the compressed air may impact.

In operation the user grasps the grip portion of the stock and passes his fingers under the wire, pressing the same toward the grip portion, and thus serves to press the barrel upwardly or swing its breech away from and out of alignment with the air-passage in the grip and block. The dart is now inserted in the breech and the spring released, the same serving to return the barrel to a closed position, in which the bore of the same and the air-passage 11 align and communicate. The gun is now ready for firing, and in accomplishing the same it is brought to the shoulder in the usual manner, the head lowered so as to permit the eye to sight along the barrel, and when in such position the mouth of the user will be directly opposite the mouthpiece 13. It now simply remains to give a strong blow into the mouthpiece and the air compressed in the air-passage 11 in rear of the dart serves to eject the dart with considerable force.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that a toy gun thus constructed will afford great amusement as well as instruction, is safe in use and cannot be discharged by accident, is easy to operate, its mechanism being readily understood, and may be extremely cheaply manufactured and not liable to get out of order.

10 Having described my invention, what I claim is—

1. In a toy gun of the class described, the combination, with the stock comprising the grip, the fore-arm, and the block having an inclined front face formed at the rear end of the fore-arm, the barrel hinged at its under side to the fore-arm and at its rear end adapted to close snugly against the block, the block and grip being provided with an air-passage communicating with the barrel, and a tube connected at the rear end of the air-passage and terminating in a mouthpiece, of a spring-wire loosely connected to the barrel, rearwardly extended under the grip, and terminating in a coil, and at its end forwardly disposed and secured to the grip of the gun, substantially as specified.

2. In a toy gun of the class described, the combination, with the stock comprising the grip, the fore-arm, and the block having an inclined front face formed at the rear end of the fore-arm, the barrel hinged at its under side to the fore-arm and at its rear end adapted to close snugly against the block, the block and grip being provided with an air-passage communicating with the barrel, and a tube connected at the rear end of the air-passage and terminating in a mouthpiece, of a yoke loosely embracing and pivoted to the rear end of the barrel, a spring-wire loosely connected to the extended end of the yoke, rearwardly extended and terminating in a coil, and in-

wardly disposed and secured to the grip of the gun, substantially as specified.

3. In a toy gun of the class described, the combination, with the stock comprising the butt, grip, fore-arm, and at its rear end the block 4, having a front inclined face, said block and stock being bored, as at 11, and at its rear end provided with a flexible tube 12, terminating in a mouthpiece 13, of the barrel inclined at its rear end to fit the face of the block and having its bore communicating with that of the block and grip and provided upon its under side with an extension of the fore-arm, the hinge connecting the extension with the fore-arm, the elongated yoke 14, embracing the barrel and fore-arm and pivoted at 15 to diametrically-opposite sides of the barrel, and the spring-wire bent to form the grip extending parallel with the grip of the gun, having its front end terminating in an eye pivoted to the yoke and at its rear end coiled to form spring-coils and beyond the same terminating in a point driven in the under side of the grip of the gun, substantially as specified.

4. In a toy gun, the combination, with the stock comprising the fore-arm and the block, of a barrel hinged to the fore-arm and adapted to close against the block, a pneumatic tube leading to the barrel, a yoke embracing the barrel and depending below the fore-arm, and a bowed spring having one end connected to the stock and the other to the yoke, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM MITCHELMORE BUNSEN.

Witnesses:

H. W. CHAMBERLIN,
G. R. FREEMAN.