What is claimed is:

1. A toy projectile launcher comprising:

a housing;

an air piston assembly, the air piston assembly including an air piston barrel, a plunger element, a first compression spring, and a front air nozzle;

a cocking slide coupled to the air piston barrel;

a launch barrel; and

a storage belt including a plurality of projectile holders, wherein each projectile holder is adapted to contain a projectile,

wherein, when the cocking slide is moved from a forward position to a backward position in a first priming step and, after the first priming step, from the backward position to the forward position in a second priming step:

an internal air chamber is formed between a front portion of the air piston barrel and the plunger element;

an advancement mechanism of the storage belt advances a next projectile holder into a firing position in front of the front air nozzle; and

the front air nozzle of the air piston assembly pushes forward on a rear portion of the next projectile holder, forming an airtight seal between the air piston barrel and the rear portion of the next projectile holder,

wherein an airtight seal is formed between a front portion of the next projectile holder and a rear portion of the launch barrel, and an airtight seal is formed between the air piston barrel and the rear portion of the launch barrel.

2. The toy projectile launcher of claim 1, wherein, when the cocking slide is moved from the forward position to the backward position, a front portion of the air piston barrel pushes the plunger element to compress the first compression spring against a rear wall of the housing, wherein the plunger element and compression spring are held in place by a latching assembly.

3. The toy projectile launcher of claim 2, wherein the latching assembly is coupled between the plunger element and a trigger assembly, wherein the trigger assembly is adapted to be pulled backward by a user of the toy projectile launcher.

4. The toy projectile launcher of claim 3, wherein, when the trigger assembly is pulled backward, the coupling of the latching assembly between the plunger element and trigger assembly is released, and the plunger element is pushed forward by the compression spring to expel air from the internal air chamber through the air nozzle disposed on the front portion of the air piston barrel behind the next projectile holder in the firing position.

5. The toy projectile launcher of claim 4, wherein the next projectile holder has a rear opening for accommodating the front air nozzle, wherein the rear opening has a diameter that is greater than a diameter of a central portion of the next projectile holder.

6. The toy projectile launcher of claim 1, wherein the plunger element incorporates a first resilient O-ring that forms an airtight seal between the plunger element and an internal surface of the air piston barrel.

7. The toy projectile launcher of claim 6, wherein a second resilient O-ring is disposed around an outer circumference of the rear portion of the launch barrel so as to form an airtight seal between the rear portion of the launch barrel and a front end of the next projectile holder.

8. The toy projectile launcher of claim 7, wherein a third resilient O-ring is incorporated around an outer circumference of the front air nozzle so as to form an airtight seal between the front air nozzle and the rear portion of the next projectile holder.

9. The toy projectile launcher of claim 5, further comprising:

a barrel interface collar fitted over the launch barrel; and

a second compression spring that biases the barrel interface collar in a rearward direction,

wherein, when the cocking slide is moved from the forward position to the backward position:

the front air nozzle is retracted from a rear portion of a first projectile holder of the plurality of projectile holders, wherein the first projectile holder is in the firing position in front of the front air nozzle;

the second compression spring pushes the barrel interface collar in the rearward direction and away from the launch barrel; and

the barrel interface collar pushes the first projectile holder away from the launch barrel, wherein the retraction of the front air nozzle provides a clearance for the advancement mechanism to advance the next projectile holder into the firing position; and

wherein, when the cocking slide is moved from the backward position to the forward position:

the next projectile holder pushes forward on the barrel interface collar, compressing the second compression spring,

wherein the front portion of the next projectile holder is fitted over the rear portion of the launch barrel.

10. The toy projectile launcher of claim 9, wherein the barrel interface collar pushes the first projectile holder at least 6 mm in the rearward direction relative to an adjacent projectile holder.

11. The toy projectile launcher of claim 9, wherein the front air nozzle pushes the next projectile holder forward at least 6 mm relative to an adjacent projectile holder.

12. The toy projectile launcher of claim 5,

wherein the front air nozzle has a spring-loaded hook element disposed thereon;

wherein, when the cocking slide is moved from the forward position to the backward position:

the spring-loaded hook element engages and pulls on a front ledge formed by a rear opening of the first projectile holder, pulling the first projectile holder in a rearward direction away from the launch barrel; and

when the first projectile holder is pulled a predetermined distance in the rearward direction, the spring-loaded hook element disengages from the front ledge of the rear opening of the first projectile holder;

wherein, when the cocking slide is moved from the backward position to the forward position:

the spring-loaded hook element engages a front ledge of the rear opening of the next projectile holder; and

a front end of the next projectile holder is fitted over a rear portion of the launch barrel.

13. The toy projectile launcher of claim 12, wherein the first projectile holder is pulled back at least 6 mm relative to an adjacent projectile holder.

14. The toy projectile launcher of claim 5, further comprising:

a reciprocating frame;

a resilient member coupled to the reciprocating frame

wherein the cocking slide coupled to the air piston barrel, the projectile holder advancement mechanism, and the resilient member; and

wherein, when the cocking slide is moved from the forward position to the backward position:

the resilient member engages and pushes the projectile holder advancement mechanism in a rearward direction;

the projectile holder advancement mechanism moves a first projectile holder in the rearward direction away from the launch barrel; and

when the rotatable projectile holder advancement mechanism is moved a predetermined distance, the resilient member disengages from the projectile holder advancement mechanism; and

the front air nozzle is retracted from a rear portion of a first projectile holder of the plurality of projectile holders,

wherein the retraction of the front air nozzle provides a clearance for the storage belt to advance a next projectile holder into the firing position; and

wherein, when the cocking slide is moved from the backward position to the forward position:

the resilient member engages and pushes the projectile holder advancement mechanism in a forward direction;

the projectile holder advancement mechanism moves the next projectile holder in the forward direction;

the front air nozzle pushes forward on a rear portion of the next projectile holder; and

a front end of the next projectile holder is fitted over a rear portion of the launch barrel.

15. The toy projectile launcher of claim 14, wherein, when the cocking slide is moved from the forward position to the backward position, the resilient member pushes the projectile holder advancement mechanism by at least 6 mm in the rearward direction.

16. The toy projectile launcher of claim 14, wherein, when the cocking slide is moved from the backward position to the forward position, the resilient member pushes the projectile holder advancement mechanism to move the next projectile holder by at least 6 mm in the forward direction.

17. The toy projectile launcher of claim 1, wherein the projectiles are foam darts.

18. A storage belt for use in a toy projectile launcher comprising:

a plurality of substantially cylindrical projectile holders each adapted to contain a projectile and having a projectile holder section and a rear opening section; and

a rear end ring between the holder section and the rear opening section adapted to retain the projectile within the projectile holder, the rear opening section having a larger diameter than the projectile holder section.

19. A storage belt for use in a toy projectile launcher, the storage belt comprising a plurality of projectile holders, wherein each projectile holder is adapted to move forward and rearward relative to the next adjacent projectile holder in the storage belt so as to form air-tight seals with a launch barrel and an air piston barrel of the toy projectile launcher.