CLAIMS

What is claimed is:

1. A device for attachment to a muzzle of a projectile launcher, comprising:

a hollow main housing comprising:

a proximal end portion;

a distal end portion;

a plurality of arms extending from the proximal end portion to the distal end portion;

a plurality of plates configured to extend between the plurality of arms of the main housing, the plurality of plates and the plurality of arms being separate components, each of the plates comprising:

one or more first openings that extend through a thickness of the plate;

one or more second openings that extend across a width of the plate, each of the one or more second openings being in communication with a corresponding one of the one or more first openings;

one or more rollers each disposed within a respective one of the one or more first openings, each roller comprising a center opening; and

one or more pins each disposed within a respective one of the one or more second openings and inserted through the center opening of the roller within a corresponding one of the one of more first openings that is in communication with the respective one of the one or more second openings.

2. The device of claim 1, wherein the one or more rollers and the one or more pins are separate components that are inserted into the one or more first openings and the one or more second openings, respectively.

3. The device of claim 1, further comprising a cap disposed at the distal end portion of the main housing.

4. The device of claim 1, wherein the plurality of arms and the plurality of plates together form an inner bore of the device.

5. The device of claim 1, wherein the plurality of rollers are oriented at angles relative to a longitudinal axis of the device.

6. The device of claim 1, wherein the proximal end portion of the main housing is configured for placement over the muzzle of the projectile launcher.

7. The device of claim 1, wherein each roller comprises a raised edge around a circumference of the roller.

8. The device of claim 4, wherein the one or more rollers extend into the inner bore.

9. A device for attachment to a muzzle of a projectile launcher, comprising:

a hollow main body comprising:

a proximal end portion;

a distal end portion;

a plurality of sections extending from the proximal end portion to the distal end portion, each of the sections comprising:

one or more through-holes that extend through a thickness of the section;

one or more recessed grooves that extend across a width of the section, each of the one or more recessed grooves being in communication with a corresponding one of the one or more through-holes;

one or more rollers each disposed within a respective one of the one or more through-holes, each roller comprising a center opening; and

one or more pins each disposed within a respective one of the one or more recessed grooves and inserted through the center opening of the roller within a corresponding one of the one of more through-holes that is in communication with the respective one of the one or more recessed grooves;

a plurality of cover plates each disposed over a corresponding one of the plurality of sections, the cover plates holding the one or more pins in place while allowing the one or more rollers to freely spin.

10. The device of claim 9, wherein the main body and the plurality of cover plates are separate components.

11. The device of claim 10, wherein each of the plurality of cover plates comprises a peg that is configured for insertion into a corresponding opening in a corresponding one of the plurality of sections.

12. The device of claim 9, wherein the one or more rollers and the one or more pins are separate components that are inserted into the one or more through-holes and the one or more recessed grooves, respectively.

13. The device of claim 9, wherein the main body forms an inner bore of the device.

14. The device of claim 9, wherein the plurality of rollers are oriented at angles relative to a longitudinal axis of the device.

15. The device of claim 9, wherein the proximal end portion of the main body is configured for placement over the muzzle of the projectile launcher.

16. The device of claim 9, wherein each roller comprises a raised edge around a circumference of the roller.

17. The device of claim 13, wherein the one or more rollers extend into the inner bore.

18. A device for attachment to a muzzle of a projectile launcher, comprising:

a hollow main body comprising:

a proximal end portion;

a distal end portion;

a plurality of sections extending from the proximal end portion to the distal end portion, each of the sections comprising:

one or more through-holes that extend through a thickness of the section;

one or more recessed grooves that extend across a width of the section, each of the one or more recessed grooves being in communication with a corresponding one of the one or more through-holes;

one or more rollers each disposed within a respective one of the one or more through-holes, each roller comprising a center opening; and

one or more pins each disposed within a respective one of the one or more recessed grooves and inserted through the center opening of the roller within a corresponding one of the one of more through-holes that is in communication with the respective one of the one or more recessed grooves;

a housing disposed over the main body and configured to hold the one or more pins in place while allowing the one or more rollers to freely spin.

19. The device of claim 18, wherein the main body and the housing are separate components.

20. The device of claim 18, wherein the housing comprises pairs of radial walls that extend towards a longitudinal axis of the housing.

21. The device of claim 20, wherein each pair of radial walls is configured to hold down ends of the one or more pins within a corresponding one of the plurality of sections.

22. The device of claim 20, wherein the one or more rollers and the one or more pins are separate components that are inserted into the one or more through-holes and the one or more recessed grooves, respectively.

23. The device of claim 18, wherein the main body forms an inner bore of the device.

24. The device of claim 18, wherein the plurality of rollers are oriented at angles relative to a longitudinal axis of the device.

25. The device of claim 18, wherein the proximal end portion of the main body is configured for placement over the muzzle of the projectile launcher.

26. The device of claim 18, wherein each roller comprises a raised edge around a circumference of the roller.

27. The device of claim 23, wherein the one or more rollers extend into the inner bore.