WHAT IS CLAIMED IS:

1. An improved door assembly for a delinking feeder of a minigun, the door assembly comprising:

an access door mountable to a delinking feeder housing and movable between a closed position and an open position;

wherein the access door includes an enclosed recess for receiving a tongue having a first contact surface for contacting and securing a linked cartridge positioned in the delinking feeder when the access door is in the open position;

wherein the tongue is rotationally coupled to the access door and is movable between a retracted position, wherein a portion of the tongue is disposed in the enclosed recess, and a deployed position, wherein the portion of the tongue is deployed from the access door; and

wherein when the access door is in the open position, the tongue is in the deployed position and the tongue first contact surface can contact and secure a linked cartridge positioned in the delinking feeder.

2. The improved door assembly of claim 1 wherein the tongue includes a second contact surface for contacting and guiding a cartridge positioned in the delinking feeder when the access door is in the closed position; and

wherein when the access door is in the closed position, the tongue is in the retracted position and the tongue second contact surface can contact and guide a cartridge positioned in the delinking feeder.

3. The door assembly of claim 1 wherein the access door is configured for receiving a door hinge pin mounted to the delinking feeder housing and wherein the tongue includes an opening for receiving the door hinge pin.

4. The improved door assembly of claim 1 wherein the tongue includes a recess configured for holding a portion of a torsion spring and wherein the torsion spring is configured to cause the tongue to rotate from the retracted position to the deployed position as the door moves from the closed position to the open position.

5. The door assembly of claim 4 wherein the tongue includes an opening for receiving an access door hinge pin and the torsion spring includes a coiled portion configured for receiving the access door hinge pin.

6. The door assembly of claim 1 wherein the tongue includes a stop tab configured to limit the range of rotational travel of the tongue outwardly from the door recess.

7. The door assembly of claim 1 wherein the tongue includes a stop tab configured to limit the range of rotational travel of the door with respect to the delinking feeder housing.

8. An improved delinking feeder for receiving a belt of linked cartridges, separating the cartridges from the belt, and feeding the separated cartridges to a minigun for firing, the delinking feeder comprising:

a housing;

a rotatable shaft coupled to a motor and adapted to hold a stripper sleeve and a feeder sprocket having a body including plurality of slots, wherein each of the plurality of feeder sprocket slots includes an inner end for receiving a cartridge and extends outwardly from the inner end to an open end at an outer edge of the feeder sprocket body; and

an access door mounted to the housing and movable between a closed position and an open position;

wherein the access door includes an enclosed recess for receiving a tongue having a first contact surface for contacting and securing a linked cartridge positioned in the delinking feeder when the access door is in the open position.

9. The delinking feeder of claim 8 wherein the tongue is rotationally coupled to the access door and is movable between a retracted position wherein a portion of the tongue is disposed in the enclosed recess, and a deployed position wherein the portion of the tongue is deployed from the access door; and

wherein when the access door is in the open position, the tongue is in the deployed position and the tongue first contact surface can contact and secure a linked cartridge positioned in the delinking feeder.

10. The delinking feeder of claim 8 wherein the tongue includes a second contact surface for contacting and guiding a cartridge positioned in the delinking feeder when the access door is in the closed position; and

wherein when the access door is in the closed position, the tongue is in the retracted position and the tongue second contact surface can contact and guide a cartridge positioned in the delinking feeder.

11. The delinking feeder of claim 8 wherein the access door is receives a door hinge pin mounted to the delinking feeder housing and wherein the tongue includes an opening for receiving the door hinge pin.

12. The delinking feeder of claim 8 wherein the tongue includes a recess holding a portion of a torsion spring configured to cause the tongue to rotate from the retracted position to the deployed position as the door moves from the closed position to the open position.

13. The delinking feeder of claim 11 wherein the tongue includes an opening receiving an access door hinge pin and the torsion spring includes a coiled portion receiving the access door hinge pin.

14. The delinking feeder of claim 8 wherein the tongue includes a stop tab configured to limit the range of rotational travel of the tongue outwardly from the door recess.

15. The delinking feeder of claim 8 wherein the tongue includes a stop tab configured to limit the range of rotational travel of the access door with respect to the delinking feeder housing.

16. A Gatling-type minigun comprising:

a barrel assembly including a plurality of circumferentially mounted gun barrels;

a motor adapted to rotate the barrel assembly;

a delinking feeder for receiving a belt of linked cartridges, separating the linked cartridges from the belt, and feeding the separated cartridges to a firing mechanism, wherein the delinking feeder includes a rotatable shaft coupled to the motor and adapted to hold a stripper sleeve and a feeder sprocket; and

an access door mounted to the housing and movable between a closed position and an open position;

wherein the access door includes an enclosed recess for receiving a tongue having a first contact surface for contacting and securing a linked cartridge positioned in the delinking feeder when the access door is in the open position.

17. The minigun of claim 16 wherein the tongue is rotationally coupled to the access door and is movable between a retracted position, wherein a portion of the tongue is disposed in the enclosed recess, and a deployed position, wherein the portion of the tongue is deployed from the access door; and

wherein when the access door is in the open position, the tongue is in the deployed position and the tongue first contact surface can contact and secure a linked cartridge positioned in the delinking feeder.

18. The minigun of claim 16 wherein the tongue includes a second contact surface for contacting and guiding a cartridge positioned in the delinking feeder when the access door is in the closed position; and

wherein when the access door is in the closed position, the tongue is in the retracted position and the tongue second contact surface can contact and guide a cartridge positioned in the delinking feeder.

19. The minigun of claim 16 wherein the tongue includes a recess holding a portion of a torsion spring and wherein the torsion spring is configured to cause the tongue to rotate from the retracted position to the deployed position as the door moves from the closed position to the open position.

20. The minigun of claim 16 wherein the tongue includes an opening receiving an access door hinge pin and the torsion spring includes a coiled portion receiving the access door hinge pin.

CLAIMS

1. An improved door assembly for a delinking feeder of a minigun, the door assembly comprising:

an access door mountable to a delinking feeder housing and movable between a closed position and an open position;

wherein the access door includes an enclosed recess for receiving a tongue having a first contact surface for contacting and securing a linked cartridge positioned in the delinking feeder when the access door is in the open position;

wherein the tongue is rotationally coupled to the access door and is movable between a retracted position, wherein a portion of the tongue is disposed in the enclosed recess, and a deployed position, wherein the portion of the tongue is deployed from the access door; and

wherein when the access door is in the open position, the tongue is in the deployed position and the tongue first contact surface can contact and secure a linked cartridge positioned in the delinking feeder.

2. The improved door assembly of claim 1 wherein the tongue includes a second contact surface for contacting and guiding a cartridge positioned in the delinking feeder when the access door is in the closed position; and

wherein when the access door is in the closed position, the tongue is in the retracted position and the tongue second contact surface can contact and guide a cartridge positioned in the delinking feeder.

3. The door assembly of claim 1 wherein the access door is configured for receiving a door hinge pin mounted to the delinking feeder housing and wherein the tongue includes an opening for receiving the door hinge pin.

4. The improved door assembly of claim 1 wherein the tongue includes a recess configured for holding a portion of a torsion spring and wherein the torsion spring is configured to cause the tongue to rotate from the retracted position to the deployed position as the door moves from the closed position to the open position.

5. The door assembly of claim 4 wherein the tongue includes an opening for receiving an access door hinge pin and the torsion spring includes a coiled portion configured for receiving the access door hinge pin.

6. The door assembly of claim 1 wherein the tongue includes a stop tab configured to limit the range of rotational travel of the tongue outwardly from the door recess.

7. The door assembly of claim 1 wherein the tongue includes a stop tab configured to limit the range of rotational travel of the door with respect to the delinking feeder housing.

8. An improved delinking feeder for receiving a belt of linked cartridges, separating the cartridges from the belt, and feeding the separated cartridges to a minigun for firing, the delinking feeder comprising:

a housing;

a rotatable shaft coupled to a motor and adapted to hold a stripper sleeve and a feeder sprocket having a body including plurality of slots, wherein each of the plurality of feeder sprocket slots includes an inner end for receiving a cartridge and extends outwardly from the inner end to an open end at an outer edge of the feeder sprocket body; and

an access door mounted to the housing and movable between a closed position and an open position;

wherein the access door includes an enclosed recess for receiving a tongue having a first contact surface for contacting and securing a linked cartridge positioned in the delinking feeder when the access door is in the open position.

9. The delinking feeder of claim 8 wherein the tongue is rotationally coupled to the access door and is movable between a retracted position wherein a portion of the tongue is disposed in the enclosed recess, and a deployed position wherein the portion of the tongue is deployed from the access door; and

wherein when the access door is in the open position, the tongue is in the deployed position and the tongue first contact surface can contact and secure a linked cartridge positioned in the delinking feeder.

10. The delinking feeder of claim 8 wherein the tongue includes a second contact surface for contacting and guiding a cartridge positioned in the delinking feeder when the access door is in the closed position; and

wherein when the access door is in the closed position, the tongue is in the retracted position and the tongue second contact surface can contact and guide a cartridge positioned in the delinking feeder.

11. The delinking feeder of claim 8 wherein the access door is configured to receive a door hinge pin mounted to the delinking feeder housing and wherein the tongue includes an opening for receiving the door hinge pin.

12. The delinking feeder of claim 8 wherein the tongue includes a recess holding a portion of a torsion spring configured to cause the tongue to rotate from the retracted position to the deployed position as the door moves from the closed position to the open position.

13. The delinking feeder of claim 11 wherein the tongue includes an opening receiving an access door hinge pin and the torsion spring includes a coiled portion receiving the access door hinge pin.

14. The delinking feeder of claim 8 wherein the tongue includes a stop tab configured to limit the range of rotational travel of the tongue outwardly from the door recess.

15. The delinking feeder of claim 8 wherein the tongue includes a stop tab configured to limit the range of rotational travel of the access door with respect to the delinking feeder housing.

16. A Gatling-type minigun comprising:

a barrel assembly including a plurality of circumferentially mounted gun barrels;

a motor adapted to rotate the barrel assembly;

a delinking feeder for receiving a belt of linked cartridges, separating the linked cartridges from the belt, and feeding the separated cartridges to a firing mechanism, wherein the delinking feeder includes a rotatable shaft coupled to the motor and adapted to hold a stripper sleeve and a feeder sprocket; and

an access door mounted to the housing and movable between a closed position and an open position;

wherein the access door includes an enclosed recess for receiving a tongue having a first contact surface for contacting and securing a linked cartridge positioned in the delinking feeder when the access door is in the open position.

17. The minigun of claim 16 wherein the tongue is rotationally coupled to the access door and is movable between a retracted position, wherein a portion of the tongue is disposed in the enclosed recess, and a deployed position, wherein the portion of the tongue is deployed from the access door; and

wherein when the access door is in the open position, the tongue is in the deployed position and the tongue first contact surface can contact and secure a linked cartridge positioned in the delinking feeder.

18. The minigun of claim 16 wherein the tongue includes a second contact surface for contacting and guiding a cartridge positioned in the delinking feeder when the access door is in the closed position; and

wherein when the access door is in the closed position, the tongue is in the retracted position and the tongue second contact surface can contact and guide a cartridge positioned in the delinking feeder.

19. The minigun of claim 16 wherein the tongue includes a recess holding a portion of a torsion spring and wherein the torsion spring is configured to cause the tongue to rotate from the retracted position to the deployed position as the door moves from the closed position to the open position.

20. The minigun of claim 16 wherein the tongue includes an opening receiving an access door hinge pin and the torsion spring includes a coiled portion receiving the access door hinge pin.