CLAIMS

What is claimed is:

1. A locking assembly that locks a cargo net to a pallet, the locking assembly comprising:

an anchor that includes:

a base member having a neck with a first hole and a second hole, a body with a third hole, and two feet that slides into a channel formed in the pallet,

a bolt having a head and two parallel protrusions that extend outwardly from the head, that create a gap that receives the neck, and that have a fourth hole on each of the protrusion, and

a spring that is positioned in the first hole of the neck and that biases the bolt between a locked position in which the base member is prevented from sliding in the channel and an unlocked position in which the base member slides in the channel;

a retaining ring that locks to both the cargo net and the third hole in the body of the base member; and

a cable tie that locks the base member and the bolt together through the second hole in the base member and the fourth hole in the bolt and prevents the bolt from moving from the locked position to the unlocked position.

2. The locking assembly according to claim 1, wherein when the bolt is in the locked position, the fourth hole in the bolt aligns with the second hole in the base member.

3. The locking assembly according to claim 1, wherein the spring is in a compressed position when the bolt is in the unlocked position, and the spring is in an uncompressed position when the bolt is in the locked position.

4. The locking assembly according to claim 1, wherein the cable tie is self-locking and cannot be unlocked without destroying the cable tie.

5. The locking assembly according to claim 1, wherein the retaining ring is self-locking and cannot be unlocked without destroying the retaining ring.

6. The locking assembly according to claim 1, wherein the spring has a rectangle shape from a side view, the first hole in the base member has a rectangle shape from a side view, and the rectangle shape of the spring fits within the rectangle shape of the first hole.

7. The locking assembly according to claim 1, wherein the anchor further includes a pin that fits through a fifth hole on the bolt such that one end of the spring engages against a top end adjacent to the first hole and another end of the spring engages against the pin.

8. The locking assembly according to claim 7, wherein the bolt, the spring, and the base member connect together such that they are not separable or removable without destroying the anchor.

9. The locking assembly according to claim 1, wherein the bolt and the base member cannot be separated without destroying the cable tie after the cable tie is tied.

10. The locking assembly according to claim 1, wherein the two parallel protrusions include outer walls that protrude outwardly, the outer walls engage the pallet and prevent the anchor from moving in a channel of the pallet when the bolt is in the locked position, and the outer walls disengage the pallet to enable the anchor to slide in the channel when the bolt is in the unlocked position.

11. A locking assembly that locks a cargo net to a pallet, the locking assembly comprising:

an anchor that removably locks to the pallet and includes:

a base member having two feet that extend outwardly from two opposing side walls, a first hole, a second hole, and a third hole,

a bolt having two spaced apart protrusions that have a fourth hole on each of the protrusion, that form a gap therebetween, and that slidably receive the base member, and

a spring that is positioned in the first hole of the base member and that biases the bolt between a locked position in which the bolt engages the pallet and prevents the anchor from moving in a channel of the pallet and an unlocked position in which the bolt moves and disengages the pallet to enable the anchor to slide in the channel;

a self-locking retaining ring that locks around an opening in the cargo net and the third hole in the base member; and

a self-locking cable tie that locks the base member and the bolt together through the fourth hole in the bolt and the second hole in the base member when the bolt is in the locked position and prevents the bolt from moving from the locked position to the unlocked position.

12. The locking assembly according to claim 11, wherein when the bolt is in the locked position, the fourth hole in the bolt aligns with the second hole in the base member.

13. The locking assembly according to claim 11, wherein when the bolt is in the unlocked position, the spring in the first hole is in a compressed position; when the bolt is in the locked position, the spring in the first hole is in an uncompressed position.

14. The locking assembly according to claim 11, wherein the anchor further includes a pin that fits through a fifth hole on the bolt, such that one end of the spring engages against a top end of the first hole and another end of the spring engages against the pin.

15. The locking assembly according to claim 14, wherein the bolt, the spring and the base member are fitted together such that they are not separable or removable without destroying the anchor.

16. The locking assembly according to claim 11, wherein the bolt and the base member cannot be separated without destroying the cable tie after the cable tie is tied.

17. A method to lock a cargo net to a pallet, comprising:

providing a locking assembly comprising:

an anchor to engage with the pallet, that includes:

a base member having a neck with a first hole and a second hole, a body with a third hole, and two feet that slide into a channel formed in the pallet,

a bolt having a head and two parallel protrusions that extend outwardly from the head, that create a gap that receives the neck, and that have a fourth hole on each of the protrusions, and

a spring that is positioned in the first hole of the neck and that biases the bolt between a locked position in which the base member is prevented from sliding in the channel and an unlocked position in which the base member slides in the channel;

providing a retaining ring that locks to both the cargo net and the third hole in the body of the base member; and

providing a cable tie that locks the base member and the bolt together through the second hole in the base member and the fourth hole in the bolt and prevents the bolt from moving from the locked position to the unlocked position.

18. The method according to claim 17, wherein the anchor further includes a pin that fits through a fifth hole on the bolt, such that one end of the spring is put against a top end of the first hole and another end of the spring is put against the pin; a bottom end of the first hole has a recess to receive the pin when the bolt is in the locked position; the bolt, the spring and the base member are fitted together such that they are not separable or removable without destroying the anchor.

19. The method according to claim 17, wherein the bolt and the base member cannot be separated without destroying the cable tie after the cable tie is tied.

20. The method according to claim 17, wherein each of the two parallel protrusions have an outer wall protruding outwardly, such that when the bolt is in the locked position, each outer wall engages the pallet and prevents the anchor from moving in a channel of the pallet, and when the bolt is in the unlocked position each outer wall disengages the pallet to enable the anchor to slide in the channel.