A vehicle rack system including a stabilized cargo box attached to a pair of crossbars. In some embodiments, the stabilized cargo box includes a container defining a long axis and having a bottom portion hinged to a lid portion to form an enclosure to hold cargo. A plurality of clamp devices may mount the container to the pair of crossbars attached to a roof of a vehicle. The bottom portion may include a housing member defining a groove and also may include a stiffening tube disposed in the groove and providing first and second tubular regions that are laterally spaced from each other and that each extend at least generally parallel to the long axis. The first and second tubular regions may be connected to each other by a third tubular region of the stiffening tube that extends at least part way across a nose of the container.

Fig. 1
1. A stabilized cargo box for a vehicle, comprising:
   a container defining a long axis and including a bottom portion hinged to a lid
   portion to form an enclosure to hold cargo;
   a front pair of clamp devices and a rear pair of clamp devices attached to the
   bottom portion and configured to mount the container to a pair of crossbars attached
   to a roof of a vehicle,
   wherein the bottom portion includes a housing member defining a groove and
   also includes at least one stiffening tube attached to the bottom portion separately
   from the clamp devices disposed in the groove and providing first and second tubular
   regions laterally spaced from each other and each extending at least generally
   parallel to the long axis and connected to each other by a third tubular region that
   extends at least part way across a nose of the container.

2. The stabilized cargo box of claim 1, wherein the housing member
   includes a bottom wall, side walls, and end walls, and wherein the stiffening tube is
   disposed adjacent the bottom wall.

3. The stabilized cargo box of claim 1, wherein the stiffening tube is
   disposed outside the container.

4. The stabilized cargo box of claim 1, wherein the front pair and the rear
   pair of clamp devices collectively provide a left pair and a right pair of clamp devices,
   wherein a central vertical plane conceptually divides the container into a left half and
   a right half, and wherein the first tubular region is disposed between the central
   vertical plane and the left pair of clamp devices and the second tubular region is
   disposed between the central vertical plane and the right pair of clamp devices.

5. The stabilized cargo box of claim 1, wherein the housing member is
   formed of plastic and the stiffening tube is formed of metal.
6. The stabilized cargo box of claim 1, wherein the first and second tubular regions extend forward from positions near the rear clamp devices, and do not intersect each other in the tail.

7. The stabilized cargo box of claim 6, wherein the first and second tubular regions extend from a tail to a nose of the container.

8. (Cancelled)

9. (Cancelled)

10. The rack system of claim 1, wherein the stiffening tube extends along a U-shaped path.

11. (Cancelled)

12. (Cancelled)

13. A stabilized cargo box for a vehicle, comprising:
   a container including a bottom portion hinged to a lid portion to form an enclosure to hold cargo;
   one or more front clamp devices and one or more rear clamp devices attached to the bottom portion and configured to mount the container to a pair of crossbars attached to a roof of a vehicle,
   wherein the bottom portion includes a pair of tubular stiffening regions attached to the bottom portion separate from the clamp devices, and each extending from a rear region to a nose of the container, to strengthen the bottom portion against deformation.

14. The stabilized cargo box of claim 13, wherein the tubular stiffening regions meet each other in or on the nose.
15. The stabilized cargo box of claim 14, wherein the tubular stiffening regions collectively extend along a path that is U-shaped.

16. The stabilized cargo box of claim 13, wherein the tubular stiffening regions extend from a tail to a nose of the container.

17. The stabilized cargo box of claim 13, where the bottom portion includes a housing member that forms the enclosure with the lid portion, and wherein the tubular stiffening regions are formed by one or more tubes that are discrete from the housing member.

18. The stabilized cargo box of claim 17, wherein the tubular stiffening regions are formed by the same tube.

19. The stabilized cargo box of claim 17, wherein the housing member is formed of plastic and the one or more tubes are formed of metal.

20. The stabilized cargo box of claim 13, wherein the tubular stiffening regions do not intersect each other in the rear region of the container.

21. The stabilized cargo box of claim 13, wherein the bottom portion includes a housing member, and wherein at least a portion of the tubular stiffening regions are formed integrally with the housing member.

22. The cargo box of claim 1, wherein each clamp device is moveable along a track in the bottom portion to adjust the longitudinal position of the clamp relative to the bottom portion.

23. The cargo box of claim 1, wherein the groove receives the majority of the length of the stiffening tube.

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24. The cargo box of claim 1, wherein the groove receives substantially all of the length of the stiffening tube.

25. The cargo box of claim 1, wherein the cargo box has a front region and a back region, the stiffening tube extending continuously from the front region to the back region of the cargo box.