

CLAIMS

What is claimed is

1. A shipyard, the shipyard comprising:
a yard, the yard defining a yard level;
a shiplift platform positioned adjacent the yard;
a lifting system coupled with the yard, the lifting system comprising:
a hoist coupled with a hoist frame, wherein the hoist is capable of coupling with the shiplift platform and raising and lowering the shiplift platform relative to the yard level; and
a jack, the jack comprising an actuator coupled with a jack frame and engaged with the hoist frame, wherein the actuator is actuable to raise the hoist above the yard level and is actuable to raise the shiplift platform above the yard level.
2. The shipyard of claim 1, wherein the actuator is actuable into at least two positions including a first position and a second position, wherein in the first position the hoist frame and the jack frame are spaced apart by a first distance, wherein in the second position the hoist frame and the jack frame are spaced apart by a second distance, and wherein the second distance is greater than the first distance.
3. The shipyard of claim 2, wherein the actuator is a linear actuator, wherein the first position is a retracted position of the linear actuator and the second position is an extended position of the linear actuator.
4. The shipyard of claim 3, wherein the linear actuator is a hydraulically actuated jack, pneumatically actuated jack, or electrically actuated jack, the jack comprising a rod movably engaged within a cylinder, wherein one of the rod or the cylinder is coupled with the hoist frame, and wherein the other of the rod and the cylinder is coupled with the jack frame.
5. The shipyard of claim 1, wherein the jack comprises a jacking column capable of being coupled with the yard; wherein, with the jacking column coupled with the yard, the hoist frame is capable of being coupled with the jacking column to maintain a position of the hoist frame relative to the jacking column; and wherein, with the jacking column coupled with the yard, the jack frame is capable of being coupled with the jacking column to maintain a position of the jack frame relative to the jacking column.
6. The shipyard of claim 5, further comprising jacking beams capable of coupling the hoist frame with the jacking column to maintain the position of the hoist relative to the

jacking column and capable of coupling the jack frame with the jacking column to maintain the position of the jack frame relative to the jacking column.

7. The shipyard of claim 1, wherein the lifting system comprises a rotary chain jack, the rotary chain jack comprising a chainwheel, a chain coupled with the chainwheel, wherein the chain is capable of being coupled with the shiplift platform.

8. The shipyard of claim 1, wherein the hoist comprises a winch.

9. The shipyard of claim 8, wherein the jack is a separate structure from the winch.

10. A shiplift, the shiplift comprising:

a shiplift platform;

a lifting system comprising:

a hoist coupled with a hoist frame, wherein the hoist is capable of coupling with the shiplift platform and raising and lowering the shiplift platform;

a jack, the jack comprising an actuator coupled with a jack frame and engaged with the hoist frame, wherein the actuator is actuatable to raise the hoist and is actuatable to raise the shiplift platform.

11. The shiplift of claim 10, wherein the actuator is actuatable into at least two positions including a first position and a second position, wherein in the first position the hoist frame and the jack frame are spaced apart by a first distance, wherein in the second position the hoist frame and the jack frame are spaced apart by a second distance, and wherein the second distance is greater than the first distance.

12. The shiplift of claim 11, wherein the actuator is a linear actuator, wherein the first position is a retracted position of the linear actuator and the second position is an extended position of the linear actuator.

13. The shiplift of claim 12, wherein the linear actuator is a hydraulically actuated jack, pneumatically actuated jack, or electrically actuated jack, the jack comprising a rod movably engaged within a cylinder, wherein one of the rod or the cylinder is coupled with the hoist frame, and wherein the other of the rod and the cylinder is coupled with the jack frame.

14. The shiplift of claim 10, wherein the jack comprises a jacking column, wherein the hoist frame is capable of being coupled with the jacking column to maintain a position of the hoist frame relative to the jacking column, and wherein the jack frame is capable of being coupled with the jacking column to maintain a position of the jack frame relative to the jacking column.

15. The shiplift of claim 14, further comprising jacking beams capable of coupling the hoist frame with the jacking column to maintain the position of the hoist relative to the

jacking column and capable of coupling the jack frame with the jacking column to maintain the position of the jack frame relative to the jacking column.

16. The shiplift of claim 10, wherein the lifting system comprises a rotary chain jack, the rotary chain jack comprising a chainwheel, a chain coupled with the chainwheel, wherein the chain is capable of being coupled with the shiplift platform.

17. The shiplift of claim 10, wherein the hoist comprises a winch.

18. The shiplift of claim 17, wherein the jack is a separate structure from the winch.

19. A shiplift jack, the jack comprising:

a hoist coupled with a hoist frame;

a jack, the jack comprising an actuator coupled with a jack frame and engaged with the hoist frame.

20. The jack of claim 19, wherein the actuator is actuatable into at least two positions including a first position and a second position, wherein in the first position the hoist frame and the jack frame are spaced apart by a first distance, wherein in the second position the hoist frame and the jack frame are spaced apart by a second distance, and wherein the second distance is greater than the first distance.

21. The jack of claim 19, wherein the actuator is a linear actuator, wherein the first position is a retracted position of the linear actuator and the second position is an extended position of the linear actuator.

22. The jack of claim 21, wherein the linear actuator is a hydraulically actuated, pneumatically actuated, or electrically actuated jack comprising a rod movably engaged within a cylinder, wherein one of the rod or the cylinder is coupled with the hoist frame, and wherein the other of the rod and the cylinder is coupled with the jack frame.

23. The jack of claim 19, wherein the jack comprises a jacking, wherein the hoist frame is capable of being coupled with the jacking column to maintain a position of the hoist frame relative to the jacking column, and wherein the jack frame is capable of being coupled with the jacking column to maintain a position of the jack frame relative to the jacking column.

24. The jack of claim 23, further comprising jacking beams capable of coupling the hoist frame with the jacking column to maintain the position of the hoist relative to the jacking column and capable of coupling the jack frame with the jacking column to maintain the position of the jack frame relative to the jacking column.

25. The jack of claim 19, wherein the jack is a rotary chain jack, the hoist comprising a chainwheel and a chain coupled with the chainwheel.

26. The jack of claim 19, wherein the hoist comprises a winch.

27. The jack of claim 26, wherein the jack is a separate structure from the winch.

28. A method of lifting a shiplift platform above a yard level of a shipyard, the method comprising:

jacking-up a hoist, wherein the hoist is positioned adjacent the shiplift platform at the shipyard, wherein, during the jacking-up of the hoist, the hoist is decoupled from the shiplift platform, and wherein the jacking-up of the hoist comprises raising the hoist, relative to the yard level, from a first hoist height to a second hoist height;

securing the hoist at the second hoist height;

coupling the hoist, at the second hoist height, with the shiplift platform;

with the hoist at the second hoist height and coupled with the shiplift platform, jacking-up the shiplift platform by raising the shiplift platform toward the hoist, from a first platform height to a second platform height; and

securing the shiplift platform at the second platform height.

29. The method of claim 28, wherein the jacking-up of the hoist and the jacking-up of the shiplift platform are performed until the shiplift platform is raised above the yard level.

30. The method of claim 28, wherein the jacking-up is performed using a jack comprising an actuator coupled with a jack frame and coupled with a hoist frame of the hoist.

31. The method of claim 30, wherein the actuator is actuatable into at least two positions including a first position and a second position, wherein in the first position the hoist frame and the jack frame are spaced apart by a first distance, wherein in the second position the hoist frame and the jack frame are spaced apart by a second distance, and wherein the second distance is greater than the first distance.

32. The method of claim 31, wherein the actuator is a linear actuator, wherein the first position is a retracted position of the linear actuator and the second position is an extended position of the linear actuator.

33. The method of claim 32, wherein the linear actuator is a hydraulically actuated jack, pneumatically actuated jack, or electrically actuated jack, the jack comprising a rod movably engaged within a cylinder, wherein one of the rod or the cylinder is coupled with the hoist frame, and wherein the other of the rod and the cylinder is coupled with the jack frame.

34. The method of claim 30, wherein the jack comprises a jacking column, and wherein the jacking-up comprises coupling the jacking column with the shipyard adjacent the hoist; wherein securing the hoist at the second hoist height comprises coupling the hoist frame with the jacking column to maintain a position of the hoist frame relative to the jacking column; and wherein securing the shiplift platform at the second platform height comprises coupling

the jack frame with the jacking column to maintain a position of the jack frame relative to the jacking column.

35. The method of claim 34, wherein securing the hoist at the second hoist height comprises coupling jacking beams with both the hoist frame and the jacking column, and wherein securing the shiplift platform at the second platform height comprises coupling jacking beams with both the jack frame and with the jacking column.

36. The method of claim 33, wherein jacking-up the hoist comprises extending the rod to push the hoists upwards relative to the yard level, and wherein the jacking-up of the shiplift platform comprises retracting the rod to pull the shiplift upwards towards the hoists.

37. The method of claim 28, wherein, prior to jacking-up the hoist, the hoist is decoupled from the shipyard.

38. The method of claim 28, wherein the shipyard comprises a plurality of hoists positioned adjacent the shiplift platform at the shipyard, and wherein each hoist comprises a hoist frame and a jack comprising an actuator coupled with a jack frame and coupled with a hoist frame of that hoist, the method comprising jacking-up the plurality of hoists relative to the yard level and jacking-up the shiplift platform by raising the shiplift platform toward the plurality of hoists.

39. The method of claim 38, wherein the plurality of hoists are jacked-up synchronously.

40. The method of claim 28, further comprising performing maintenance on the shiplift platform while the shiplift platform is raised above the yard level.