

other, a centrally-located longitudinal shaft connecting the trucks, universal couplings joining the shaft-sections, gears having a beveled face and removably clamped to the truck-axles, and a tender-frame hinged to the main frame and mounted upon a single truck driven from the central shaft, substantially as described.

21. In a locomotive, the combination of longitudinal diamond-shaped main frames, a pivoted truck at each end thereof, motor-engines mounted in and projecting through the openings in the frame at an angle to each other, a centrally-located longitudinal shaft connecting the trucks, universal couplings joining the shaft-sections, gears having a beveled face and removably clamped to the truck-axles, and a tender-frame hinged to the main frame and mounted upon a single truck driven from the central shaft, which are maintained in alinement by an inclosing and self-contained gear-frame, substantially as described.

22. In a locomotive, the combination of a truck at each end of the main frame, a central longitudinal shaft connecting the pair of trucks, a tender-frame hinged to the main frame, and mounted upon a rear driving-truck, a separate central shaft, coupling the rear truck directly to the motor-shaft, and so arranged that it is independent of the connections that drive the intermediate truck, substantially as described. www.gearedsteam.com

23. In a locomotive, the combination of a swiveled truck at each end of the main frame, an intermediate truck a central motor-shaft, a gear mounted thereon, and meshing with a gear fastened to the second shaft, and so arranged as to drive the rear truck, independent of the intermediate truck, substantially as described.

24. In a locomotive, the combination of a truck at each end of the main frame, a central motor-shaft, a gear mounted thereon, and meshing with a gear fastened to a fixed section of the second shaft, a shaft-section mounted upon the rear truck, and a floating-shaft section, connecting the fixed section of the second shaft, with the section on the rear truck, substantially as described.

25. In a locomotive, the combination of a truck at each end of the main frame, a central motor-shaft, a gear, mounted thereon and meshing with a gear fastened to a fixed section of the second shaft, a shaft-section mounted upon the rear truck, a floating-shaft section interposed between the fixed shaft-section, and the section on the truck, and knuckle-joints connecting the shaft-sections, substantially as described. *Geared Steam Locomotive Works*

26. In a locomotive, the combination of a truck at each end of the main frame, a central motor-shaft connected with the trucks, a second shaft driving the rear truck, and passing centrally over and clear of the intermediate truck, substantially as described.

27. In a locomotive, the combination of a truck at each end of the main frame, a central motor-shaft connected with the trucks, a second shaft driving the rear trucks, and passing over the intermediate truck, which is fitted with two king-bolts, one on each side of the second shaft and arranged to permit free movement of the truck and shaft, substantially as described.

28. In a locomotive, the combination of longitudinal diamond-shaped main frames, a truck at each end thereof, a centrally-located longitudinal shaft, motor-engines mounted in and projecting through the openings in the frames at an angle to each other, a brake-cylinder located under the motor-engines and near the cylinders thereof, suitable levers connecting the brake-cylinder with a centrally-located rod, situated under the central shaft and connecting with suitable brake-levers upon the truck, substantially as described.

29. In a locomotive, the combination of a main frame, a boiler mounted thereon and fitted with a fire-box, an ash-pan, located beneath the fire-box, and arranged with a hinged drop-bottom, a crank-arm provided with a link, connecting it with the hinged bottom, an operative lever forming part of the crank-arm shaft, a latch or stop, for securing the lever when the bottom is in a closed position substantially as described.

30. In a locomotive, the combination of a truck at each end of the main frame, a centrally-located longitudinal driving-shaft, connecting the trucks, a boiler mounted upon the main frame and fitted with a fire-box, an ash-pan located beneath the fire-box, and arranged with a hinged drop-bottom, operated by a lever, substantially as described.

31. In a locomotive, the combination of a truck at each end of the main frame, a centrally-located longitudinal driving-shaft connecting the trucks, a boiler mounted upon the main frame and provided with a fire-box, an ash-pan fitted with an arch so as to clear the central shaft, a hinged drop-bottom on each side of the arch, operated by a suitable lever, substantially as described.

32. In a locomotive, the combination of a main frame 1, a second frame 14 pivotally connected to the main frame, parallel rods 60 and 60', attached to opposite ends of a compensating bar 61, which is attached to a suitable lever mounted upon the second frame and connected with the brakes; the parallel rods terminating on opposite sides of the pivoted connection, one end pivotally attached to the main frame, and the other attached to any suitable power for operating the brakes.

33. In a locomotive, the combination of a main frame 1, a second frame 14, the parallel rods 60 and 60' the compensating bar 61, the upright lever 59 connected to the compensating bar, as shown and described.

34. In a locomotive, the combination of a main frame 1, a second frame 14, the paral-