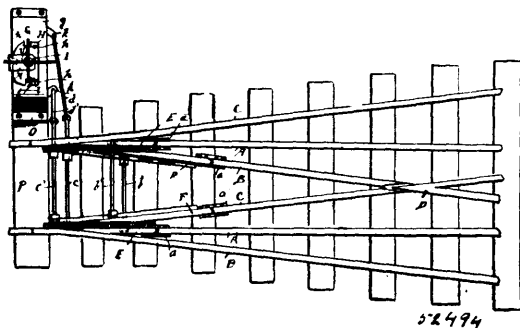


Claim.—1st. In a three-throw switch, the combination with a main line, two turnouts, one on either side of the main line, two sets



of switch-points, one set being connected to the ends of the main-line rails, and the other to the inner rails of the turnouts, and tie-bars connecting the switch-points of one set with those of the other, of a switch-stand provided with a hollow base, a disk located in said base, the disk having a recess in its periphery, bell-cranks pivotally mounted within the hollow base, their forward ends projecting through openings therein, and their ends adapted to bear on the periphery of the disk and enter the recess therein in operation, and means for turning the disk, whereby the bell-cranks are operated to open or close either track at will. 2nd. In a three-throw switch, the combination with a main line, two turnouts, one on either side of the main line, two sets of switch-points, one set being connected to the ends of the main-line rails, and the other to the inner rails of the turnouts, and tie-bars connecting the switch-points of one set with those of the other, of a switch-stand provided with a hollow base, a peripherally-recessed disk located within the base, said disk having a lateral projection provided with a stud in line with the recess, bell-cranks pivotally mounted within the hollow base, their forward ends projecting through openings therein and their rear ends adapted to bear on the periphery of the disk and be guided into and held in the recess by said stud, an operating-rod on which the disk is secured, and a switch-lever secured to the operating-rod for turning the latter, whereby the bell-cranks are operated to open or close either track at will. 3rd. In a three-throw switch, the combination with the main line, two turnouts, one on either side of the main line, two sets of switch-points, one set being connected to the ends of the main-line rails, and the other to the inner rails of the turnouts, and tie-bars connecting the switch-points of one set with those of the other, of a switch-stand provided with a hollow base, a peripherally-recessed disk located within the base, said disk having a lateral projection provided with a stud in line with the recess, bell-cranks pivotally mounted in the hollow base, their forward ends projecting through openings therein and their rear ends adapted to bear on the periphery of the disk and be guided into and held in the recess by said stud, an operating-rod on which the disk is secured, a notched cap, a switch-lever secured to the operating-rod above the notched cap, a handle secured in the outer end of a switch-lever and adapted to turn the operating-rod, whereby the bell-cranks are operated to open or close either track at will, said handle resting normally in one of the notches in the cap, and means for automatically locking the handle when in normal position. 4th. In a three-throw switch, the combination with a main line, two turn-outs, one on either side of the main line, two sets of switch-points, one set being connected to the ends of the main-line rails, and the other to the inner rails of the turnouts, and tie-bars connecting the switch-points of one set with those of the other, the ends of which project through openings in the base of the switch-stand and are connected with the tie-bars, means for operating the bell-cranks to open or close either track at will, and guard-plates sliding loosely with the bell-cranks in operation and adapted to close the openings in the base of the switch-stand.

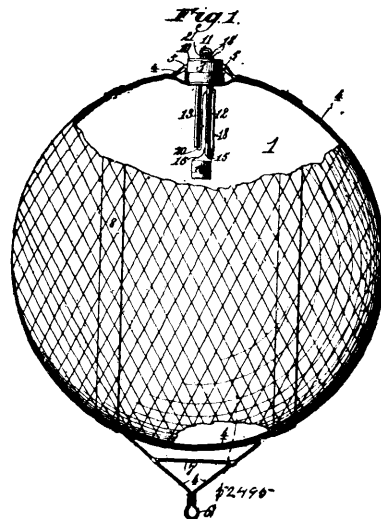
No. 52,495. Apparatus for Raising Sunken Ships, etc.

(Appareil pour mettre à flot les vaisseaux coulés.)

Frederick Findt and John Charles Davis, both of Saratoga, Wyoming, U.S.A., 2nd June, 1896; 6 years. (Filed 7th April, 1896.)

Claim.—1st. In apparatus to raise sunken vessels and prevent the sinking of ships, an inflatable gas tight and water tight bag or sack adapted to be secured to water craft or submerged objects and provided, in the interior of said bag, with a holder for gas producing material, and electrical devices for igniting said material to generate a gas for inflating the bag, substantially as described. 2nd. In apparatus to raise sunken vessels and prevent the sinking of ships, an inflatable gas tight and water tight bag or sack provided with means for securing it to water craft or submerged objects, and inclosing a detachable holder for gas producing material, in combination with electrical devices for igniting said material to generate a gas for inflating the bag, substantially as described. 3rd. In apparatus to raise sunken vessels and prevent the sinking of ships, the combination of an inflatable gas tight and water tight bag, a steel cable secured to and surrounding said bag and adapted to serve as a means

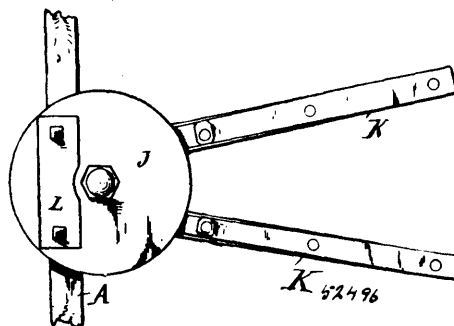
for attaching the bag to water craft or submerged objects, means for bracing the bag on its outer side, a holder for gas producing material



inclosed in the bag, and means for igniting or exploding said material to generate a gas and inflate the bag, substantially as described. 4th. In apparatus to raise sunken vessels and prevent the sinking of ships, the combination of an inflatable gas tight and water tight bag, means for securing said bag to water craft or submerged objects, an internally screw threaded collar secured in an aperture in one side of the bag, a screw plug detachably fastened in said collar and carrying within the bag a holder for gas producing material, and electrical devices for igniting said material to generate a gas and inflate the bag, substantially as described. 5th. In apparatus to raise sunken vessels and prevent the sinking of ships, the combination of an inflatable gas tight and water tight bag adapted to be secured to water craft or submerged objects, a collar fastened in an aperture in one part of said bag, a plug detachably secured in said collar and provided with a safety valve, tubes secured to the inner side of said plug to contain a gas producing material and each communicating at one end with the interior of the bag, a cartridge in the open end of one of said tubes, electric wires connecting with said cartridge, a fuse extended from the material in the closed end of one tube to the material in or near the open end of the other tube, and a hood for the open ends of said tubes, substantially as described.

No 52,496. Ball Bearing Fifth-Wheel.

(Rond d'avant-train à coussinet à boule.)



Francis A. Taylor, Mansfield, Ohio, U.S.A., 2nd June, 1896; 6 years. (Filed 30th April, 1896.)

Claim.—A ball-bearing fifth-wheel composed of an upper and lower half, the lower half forming part of the axle, the upper half formed into a hollow cap, and provided with a tempered steel ring to form the upper track for the balls, the lower half provided with a flat tempered steel plate, having a ball track formed within the face of the same, and provided with suitable balls, sleeves formed upon the upper side of the lower half, and upon the under side of the upper half, the said sleeves to fit one within the other, and held together by a centre bolt substantially as shown and described.

No. 52,497. Valve. (Soupape.)

The Redway Manufacturing Company, New York, State of New York, assignee of William Edwin Gibbs, Fanwood, New Jersey, both in the U.S.A., 2nd June, 1896; 6 years. (Filed 11th May, 1896.)