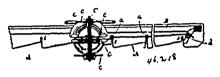
and the clips elastically connected with the said red adapted to secure the ends of a line to the same, substantially us described. 5th. In a device of the class described, the combination of the red, and the clips substantially V-shaped in form having the inner ends of the limbs of each attached to the reel, substantially as described. 6th. In a device of the class described, the combination of the springs bth. In a device of the class described, the combination of the springs coiled in the form of discs, the clips connected by the said springs, and the reel journalled between the said springs, substantially as described. 7th. In a device of the class described, the combination of the clips substantially V-shaped in form, the springs connecting the inner ends of the limbs of one clip with the inner ends of the limbs of the other clip, the said springs being so wound as to form bearings, and the reel mounted between the said springs with the ends of its axle journalled in the bearings formed by the springs, substantially as described.

## No. 46,218. Wire Fence Machine.

(Machine à clôture de jil de fer.)

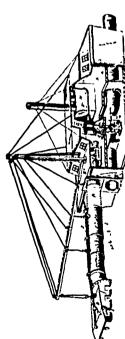


William N. Parrish and Charles F. Peelle, both of Richmond, Indiana, U.S.A., 2nd June, 1894; 6 years.

Claim, -1st. In a fence machine, a movable frame composed of the parts A A and B B arranged to permit a spool frame cc to traverse its sides carrying spools upon which wires b b are coiled, said spool frame adapted to revolve on the riby working in the recess sam spoot trame anapted to revove on the to j working in the recess h, in the manner and for the purpose as herein described. 2nd. In a spool frame for a fence machine, the circular head plate provided with recesses h h, bevel gear n, friction pulleys j j, and a slotted opening from centre to circumference one way of its diameter, as herein set forth.

## No. 46,219. Hydraulic Dredging Machine.

(Machine de drogage hydraulique.)



John M. Robbins and Hattie M. Pendery, both of Fort Worth, Texas, U.S.A., 2nd June, 1891; 6 years.

Claim. - 1st. A suction pipe provided with a receiving box having an inclined open end, and a hydrauin incinced open end, and a hydrau-lically and pneumatically operated gate for the said open end, substan-tially as set forth. 2nd. A suction pipe provided with a receiving box open at its outer end and a hinged gate for said open end and provided with a float having water and air pipes leading to it, substantially as set forth. 3rd. The combination, with a hull adapted to float or sink by water ballast, a longitudinal conduit in the base of the hull, a shaft rotatable longitudinally in the conduit, a screw blade thereon, and a driving mechanism for the shaft, of a flexing discharge pipe at one end of the conduit, a flexing extension at the other end of said conduit, a receiver box on said extension, and a water jet device supported on said extension, substantially as described. 4th. The combination, with a hull composed of two con-partments and adapted to float or sink by water ballast, a longitudinally extended conduit within the lower compart ment of the hull, an axially sup-ported rotatable shaft within the conduit and having a screw blade

thereon, and a driving mechanism for the shaft, of a water pump in the upper compartment of the hull, means to drive the pump, a jet pipe extended forwardly from the pump, a forward extension on the conduit, adapted to flex laterally and vertically, a receiver box on said extension and penetrated by the jet pipe, and means to float and sink the box, substantially as described. 5th. The combination, with a hull divided into two compartments by a floor, of a bent con duit below the floor, an axially supported rotatable shaft in the conduit and a screw blade on the shaft, an engine adapted to

secure the ends of a line to the reel the said reel being so mounted as of a flexibly jointed discharge pipe on the conduit, a forward to be rotatable independently of the clips, substantially as described, the combination of the reel, water pump within the hull, means to drive the pump, and a water pump within the hun, means to drive the pump, and a jet pipe extending from the pump into the box and through the latter, substantially as described. 6th. In a hydraulic dredging machine, a floating structure that may be sunk by water ballast, a cylindrical conduit arranged longitudinally within the hull, a bellows-jointed discharge pipe on one end of the conduit, and means to flex the discharge pipe in one end of the conduit, and means to flex the discharge pipe in one end of the front and of the to flex the discharge pipe, an extension at the front end of the conduit, a water jet device on a box on said extension, a hinged gate on the box, and floats on the box and gate adapted to receive air or water, substantially as shown and described. 7th. A suction pipe having a receiving box provided with floats and a float actuated gate for the box and water and air pipes leading to said box and gate floats, substantially as set forth.—Sth. In a hydraulic dredger, a conduit longitudinally located in a hull and exhydraulic dredger, a conduit longitudinally located in a hull and extended at one end, and adapted to flev in all directions, a receiving box on the conduit, a cylindrical float on each side of the box, a gate on the front end of said box, inclined forwardly and downwardly, a cylindrical float on the gate, an air and water supplying device in the hull, substantially as described. 9th. A suction pipe having a flexible section permitting it to be swung in all directions, a receiving box at its outer end provided with floats, a float-actuated gate floats, substantially as set forth. 10th. In a hydraulic director, a flexible iont for an extension of the conduit exquencion dredger, a flexible joint for an extension of the conduit, comprising arcager, a nector junctor an excusion of the conduct, comparing a corrugated flexible shell, a series of rings secured at intervals within the shell, a series of chains longitudinally extended within the shell and attached to the rings, and means to clamp the shell on to the ends of the conduit, substantially as described. 11th, In a hydraulic dredging machine, a submergible hull having a through a hydraunic dredging machine, a submergible but having a through conduit below the water line, and means for inducing a current through said conduit, substantially as and for the purpose specified. 12th. In a hydraulic dredging machine, a submergible hull having a through conduit below the water line, a propeller blade arranged in said conduit for inducing a current therethrough, and an induction pipe leading to the conduit within the hull, said induction pipe provided with means for disintegrating the material to be dredged, substantially as and for the purposes specified. 13th. In a hydraulic dredging machine, the combination with a sinkable hull having a through conduit below the water line, of a rotatable shaft arranged in said conduit and provided with propeller blades for inducing a current through said conduit, and an engine mounted for inducing a current through said conduit, and an engine mounted in the hull and directly connected with the rotatable shaft in the conduit, substantially as and for the purposes specified. 14th. In a hydraulic dredging machine, a sinkable hull, having a floor which divides it into two compartments, a through conduit in the lower compartment, the area of said conduit being preserved throughout, a rotatable shaft arranged in said conduit and provided with a probable blade said thaft prejudicing from the goodnit and an area of said. a rotatable shaft arranged in said conduit and provided with a propeller blade, said shaft projecting from the conduit, and an engine coupled directly to the propeller shaft, substantially as and for the purposes specified. 15th. In a hydraulic dredging machine, the combination with a hull having a through conduit and means for inducing a current therethrough, of an intake having a detachable connection with the conduit of the hull, substantially as and for the purposes specified. 16th. In a hydraulic dredging machine, the combination with a hull having a through conduit, of an intake having a detachable slide connection with the conduit of the hull, substantially as and for the purposes specified. 17th. In a hydraulic dredging machine, the combination of a hull having a conduit, an intake connected with the conduit of the hull, means for inducing a current through said intake and conduit, and means for disintegrating and stirring up the material to be operated on by the dredge, substantially as and for the purposes specified. 18th. In a hydraulic dredging machine, the combination with means for inducing a substantially horizontally flowing current, of an open bottom intake box having a substantially horizontal intake leading therefrom to box having a substantially horizontal intake leading therefrom to the dredge proper, substantially as and for the purposes specified. 19th. In a hydraulic dredging machine, a submergible hull, having a laterally curved through conduit, and means for inducing a current through said conduit, substantially as and for the purposes specified. 20th. In a hydraulic dredging machine, the combination with a submergible hull having a through conduit below the water line, of an intake having means for stirring the material operated upon, and mean for inducing a current through said mtake and conduit, substantially as and for the purposes specified. 21st. In a hydraulic dredging machine, the combination with a submergible hull, of a curved or bent through conduit below the water line, a propeller blade arranged in said conduit and having a shaft which projects through the walls of the bend or curve of the conduit, and means for actuating the propeller shaft, substantially as and for the purposes specified.

## No. 46,220. Vehicle Hub. (Moyeu de roue.)

Henry W. Broesquin, St. Louis, Missouri, U.S.A., 401 Tomo 1891; 6 years.

Claim. 1st, A combined vehicle step and axle nut adapted to embrace and cover the outer end of a vehicle hub, the same adapted to answer the function of an axle nut and guard for the hub and axle, and also a vehicle step, substantially as set forth 2nd. In a rotate the shaft, and a steam generator supplying said engine, now article of manufacture, a combined vehicle step and axle nut,