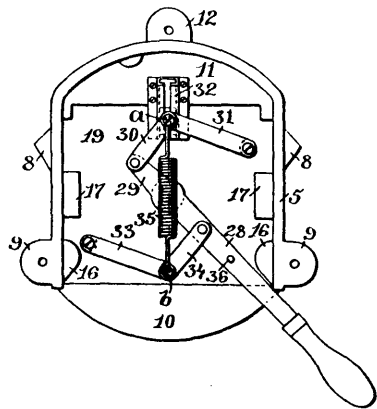


described. 13th. In combination, the mould, mechanism for rotating the same, a vertical shaft and supports therefor an arm connected with said shaft and engaging the mould to control the turning of the shaft, a horizontal support mounted to turn with and slide vertically on said shaft and provided with raising means, and a reciprocating steam or air engine carried by said support and vertically disposed and having its piston rod provided with a rammer to pack the material in the mould, substantially as described. 14th. The combination, with the rotary mould of the vertical shaft, an arm therefrom engaging said mould to control turning of shaft, means, substantially as described, to throw said arm out of operative relation with the mould, and the vertically movable reciprocating engine having its carrier sliding on said shaft, substantially as described. 15th. In combination, a bed, a rotary table supported thereon and capable of horizontal adjustment, a mould on said table, mechanism for adjusting said table horizontally, comprising a movable cross head connected with said table, a screw for shifting the head and table, a movable shaft mounted in said head and geared to drive said table, and mechanism for driving said shaft, substantially as described. 16th. In combination, a mould having a removable core provided with an upwardly extending lifting bar, a support extending upwardly and over the mould, a horizontally adjustable frame on said support, two horizontal shafts carried by said frame, provided with friction wheels to engage and lift said bar, and a longitudinally adjustable drive shaft geared to drive said horizontal shafts, substantially as described. 17th. In a sewer pipe machine, the combination, with operating and lifting mechanism, of a mould comprising an outer shell and an inner removable expandable core having inclined vertical faces, as described, and a lifting bar having means to engage said faces when moving down, and thereby expand the core, and means, substantially as described, whereby the core is contracted when said bar is raised, substantially as described. 18th. In combination, the mould having its bell end at the top, a bell mould, and stem or air ramming engine located above the same and capable of moving vertically and laterally, and means, substantially as described, to automatically swing said ramming engine laterally to pack the bell when the mould is filled to the bell, substantially as described. 19th. The combination, of the mould having its bell at the top, the vertically movable expandable bell mould and rammers and operating mechanism, substantially as described. 20th. The combination, of the mould, a vertically movable steam or air ramming engine for said mould, an air pump carried by the carrier of said engine and automatically operated by the movement of the engine, and a cylinder supplied by said pump, and having its piston connected to raise said engine, substantially as described. 21st. The combination of the rotary mould, the vertical shafts having arms held against the sides of the mould to control turning of shafts, means to yieldingly hold the arms against the mould, and the steam or air ramming engines carried by said shafts, substantially as described.

No. 42,787. Electric Switch. (Commuteur électrique.)

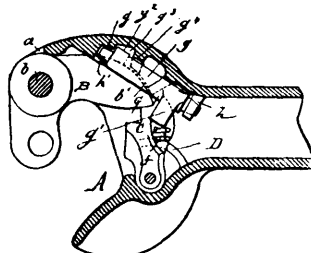


The Hope Electric Appliance Company, assignee of Augustus Wright, all of Providence, Rhode Island, U.S.A., 1st May, 1893; 6 years.

Claim.—1st. In a switching device, the combination with the case 5, having the cover 6 hinged thereto, a depending plate 10, an upwardly extending hood 11, a back 13 having the flange 15, and the lugs 16 and 17 extending from the inner surface of the case, of the partition or plate 19 formed of insulating material, and a switching device carried on said plate, as described. 2nd. In an electric switching device, the combination with contact posts and a rotatable block carrying contact plates, of a lever adapted to rotate said block, links pivoted to said lever, other links pivoted to the free ends of the first mentioned links and to stationary studs, and a spring adapted to exert an inward pressure on the ends of the first mentioned links, as described. 3rd. In an electric switching device, the combination with posts carrying contacts, a block carrying connecting plates, and a shaft suitably journaled to which said block is secured, of the lever 28 secured to said shaft and having the extension 29, a link 30 pivoted to said extension, a link 31 pivoted to the free end of the link 30, and to a sta-

tionary stud, the link 34 pivoted to the lever, a link 33 pivoted to said link and to a stationary stud, and a spring 35 secured at its ends to the pivots A and B, as described. 4th. In an electric switch, the combination, with a base, contact posts secured thereto, a shaft journaled in a perforation in said base, a block having connection plates secured to said shaft, and a handle 37 for rotating the same, of a lever secured to said shaft at the end opposite the block, double links pivoted to the ends of said lever and to a stationary stud, and means for exerting a contracting strain on the pivots connecting each pair of links, as described. 5th. The combination, with the case 5, having a hinged cover, a depending plate 10, an upwardly extending hood 11, a back 13, having the flange 15, and the lugs 16 and 17, extending from the inner surface of the case, of the insulating partition 19, a switching device secured thereto and operated by a shaft journaled in a perforation in said partition, a lever 28, secured to the end of said shaft, an extension 29 on said lever, a link 30 pivoted to said extension, a second link 31 pivoted to the link 30, and to a stud on the partition, the link 34 pivoted to the lever 28, the link 33 pivoted to the link 34, and to a stud on the partition, and the spring 35, the ends of which are secured to the pivots connecting the links 30 and 31 and 33 and 34, as and for the purpose described. 6th. In an electric switch, having binding posts and spring contact plates, the combination, with a lever journaled on a bracket, and carrying connecting plates insulated from one another, and having an extension arm in a line with said lever, of a link pivotally secured to said extension and to a spring operated sliding block movable in a slide, as described. 7th. The combination, in an electric switch, having contact plates carried by a pivoted arm, of an extension on said arm, a link 30 pivoted to said extension and provided with a stud, and a spring 31, secured at one end to said stud, and at the other to the switch base, as described.

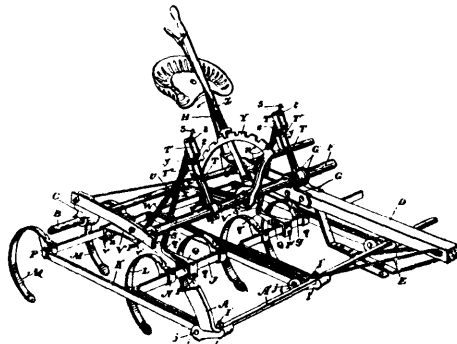
No. 42,788. Car Coupler. (Attelage de chars.)



The Gould Coupler Company
New York, assignee of
Willard Fillmore Richards,
Buffalo, all in the State of
New York, U. S. A., 1st
May, 1893; 6 years.

Claim.—1st. The combination, with the drawhead, the coupling jaw, and its lock, of a shifting device for opening the jaw, having an actuating arm projecting into the path of the lock, and a depending shifting finger for throwing the jaw to its open position when unlocked, substantially as set forth. 2nd. The combination, with the drawhead, the coupling jaw, having a locking arm, and the movable lock, of a rock shaft journaled in the drawhead, having an actuating arm arranged in the path of the movable lock, and a depending arm which engages against the locking arm and throws the jaw to its open position when unlocked, substantially as set forth. 3rd. The combination, with the drawhead, and the coupling jaw, having a locking arm, and the vertically movable lock for holding the jaw in its closed position, of a horizontal rock shaft journaled in the drawhead, and having a horizontal arm arranged above the vertically movable lock and in the path thereof, and a depending shifting finger, arranged on the rear side of the locking arm of the coupling jaw, substantially as set forth. 4th. The combination, with the drawhead and the coupling jaw, having a locking arm, and the lock, of a shifting device having an arm projecting into the path of the lock, and a depending shifting finger engaging against the locking arm of the jaw, and a guard which protects the shifting finger, from the blow of the jaw, substantially as set forth.

No. 42,789. Cultivator. (Cultivateur.)



The Peter Hamilton Manufacturing Company, assignee of Andrew Johnston, all of Peterboro', Ontario, Canada, 1st May, 1893; 6 years.

Claim.—1st. In a cultivator, the combination, with the frame, of a series of independent U-shaped sectional frames hinged at their