

contact devices for engaging the conductor or conductors within the conduit, and connections secured to the portion of the contact device exterior to the conduit for propelling it therealong. 10. h. A conduit for electric railways, having an insulating conductor-supporting body, and a metallic exterior protective casing composed of metallic bars or pieces inclosing the conductor supporting body, and forming a slotted exterior casing therefor, and suitable chairs adapted to receive and to unite the conductor supporting body or casing. 11. h. A conduit for electric railways, having an insulated conductor supporting body, a metallic exterior casing composed of two trough-shaped metallic parts inclosing the said body from opposite sides, and forming a slotted exterior casing therefor, and suitable chairs for receiving and holding the body and its protective casing. 12. h. A closed slotted conduit for electric railways, having an insulated conductor supporting body formed with a groove therein to receive the conductor, flexible strips of non-conducting material attached to the conductor supporting body and arranged to close the conductor containing groove therein, metallic troughs fitted sidewise upon the conductor supporting body to inclose the same and form a slotted exterior casing therefor and hold the grooved closing packing in position, and suitable chairs for receiving and sustaining the conductor supporting body and its protective casing.

No. 35,588. Pouch for Tobacco. (*Sac à tabac.*)

William James Cussen, Richmond, Virginia, U.S.A., 10th December, 1890; 5 years.

Claim.—1st. A bag for tobacco and other moist materials, constructed with an extension at one side, the entire upper edge of the bag and extension having a hem and a gathering-string extending through said hem, whereby the bag may be gathered, closed and sealed at the mouth and securely fastened, substantially as specified. 2nd. A tobacco pouch, consisting of a bag provided with a series of eyelets in its rear side, a cord attached to one side of the bag, and adapted to be passed around the same and interlaced in the said eyelets, substantially as and for the purpose described. 3rd. A bag having one of its sides extended to form a flap, and provided with a series of holes in its rear side, in combination with a string or braid attached to the said flap and adapted to be passed around the bag, and fastened by being interlaced in the said series of holes, substantially as and for the purpose described.

No. 35,589. Trace Fastening for Safety Whiffletrees. (*Accroche-traits pour palonniers.*)

Peter Henry Cox, Paris, Ontario, Canada, 10th December, 1890; 5 years.

Claim.—In a safety whiffletree trace fastening, the stud A, having a slit in it, and having the pivoted end B located in said slit, and pivoted on the rivet E, the pivoted end B, having a pointed end, substantially as and for the purpose hereinbefore set forth.

No. 35,590. Storm Rig for Vessels.

(*Grément de tempête pour vaisseaux.*)

Isaac Paine, administrator of Alvin Francis Paine, South Wellfleet, Massachusetts, U.S.A., 10th December, 1890; 5 years.

Claim.—1st. The combination, with a vessel and its rig, of an independent stay-band and stay secured to said stay-band, and to which a storm sail independent of the ship's regular rig may be bent or secured, substantially as described. 2nd. The combination, with the mast of a vessel, of a stay-band encircling the mast and a stay secured to said stay-band, substantially as described. 3rd. The combination, with the mast of a vessel, of a detachable stay-band encircling the mast and a stay secured to said stay-band, substantially as described. 4th. The combination, with a vessel and its rig, of an independent stay-band and a yard secured to or suspended from said stay-band, substantially as described.

No. 35,591. Spring for Vehicles.

(*Ressort pour voitures.*)

Frank Dupee, Lawrenceville, New York, U.S.A., 10th December, 1890; 5 years.

Claim.—1st. In a vehicle gear, the combination of the frame, the transverse bars 8, the coupling box connecting the inner ends of the bar and provided with an adjusting screw, and the coiled springs arranged on the transverse bars, and each having one end secured to the frame, and the other end arranged to be engaged by an adjusting screw, substantially as described. 2nd. In a vehicle gear, the combination of the frame, the transverse bars journaled on the frame, the coiled springs arranged upon the bars and each having one end secured to the frame, and the brackets arranged upon the bars and provided with adjusting screws engaging the springs, substantially as described. 3rd. In a vehicle gear, the combination of the frame, the transverse bars journaled in suitable bearings of the frame, the coiled springs arranged on the bars and each having one end secured to the frame, and the brackets mounted upon the bar and composed of perpendicular plates, and provided with arms having adjusting screws engaging the spring to regulate the tension thereof, substantially as described.

No. 35,592. Machine for Sharpening Knives, etc. (*Machine pour affiler les couteaux, etc.*)

Alfred Bidwell Benedict, Buffalo, New York, U.S.A., 10th December, 1890; 5 years.

Claim.—1st. The combination, with a holding frame, of a spring case provided with a hub or sleeve extending from one side and mounted loosely on a stationary shaft, and carrying a coil spring

having one end secured to the shaft, and the other end secured to the case, a strap connected with the hubs of the case having an operating stirrup at its free end, a roller clutch rigidly connected to the opposite end of the hub or sleeve, and a grinding wheel connected loosely on said hub, provided with a cam case, and cam rollers located with the cam within the cam case, substantially as and for the purposes described. 2nd. The combination, with a holding frame, of a spring case provided with a hub or sleeve carrying a roller clutch at one end, and the spring case carrying a coil spring at the other end, the whole mounted loosely on a fixed shaft secured in the frame, the coil spring having one end secured to the stationary shaft, and the other end to the spring case, and a grinding wheel loosely mounted on the hub or sleeve, a cam case connected to the wheel inclosing the cam and its rollers, and a strap provided with a stirrup connected to the spring case hub, substantially as described.

No. 35,593. Magnetic Transmitter.

(*Transmetteur magnétique.*)

Austin Devoe, Hamilton, Ontario, Canada, 10th December, 1890; 5 years.

Claim.—In a magnetic transmitter, the double bar magnet D, with spool E attached, having insulated wire E, the encasement A, having vertical slots J, and attached standards K, the cover B, adapted to said case and recessed to admit the magnet keeper C, all formed, arranged and combined, substantially as and for the purpose hereinbefore set forth.

No. 35,594. Belt Fastener. (*Agrafe de courroie.*)

William Lyon Kinsey and Harlan Henry Hill, both of Lowell, Vermont, U.S.A., 10th December, 1890; 5 years.

Claim.—1st. In a belt fastener, the combination, with the clamping plates, substantially S-shaped in cross section, whose clamping edges are roughened or serrated and adapted to receive the ends of the belt between the inner faces thereof, and also provided with a series of apertures, of a coupling link provided with a series of inwardly extending teeth passing into the apertures of the clamping plates, the inner ends of said teeth being flush with the inner edges of the apertures in the clamping plates, substantially as set forth. 2nd. In a belt fastener, the combination, with a coupling link provided with a series of inwardly extending lugs or projections, and a central strengthening piece or cross bar, of clamping plates inserted between the sides of the link, said plates being substantially S-shaped in cross section, and provided with central notches, into which fit the central strengthening piece, and also provided near their upper convex edges with a series of apertures adapted to receive the inwardly extending lugs or projections, substantially as set forth. 3rd. In a belt fastener, the combination, with the herein described coupling link provided with a transverse strengthening strip of clamping plates substantially S-shaped in cross section, provided at their upper edges with lateral inwardly extending teeth, and also provided with vertical notches for the reception of said strengthening piece, and having end horizontal notches to receive the end pieces of the coupling, and support the plates in position within the same, substantially as set forth.

No. 35,595. Mechanical Accountant.

(*Calculateur mécanique.*)

The American Arithmometer Company, assignees of William Seward Burroughs, all of St. Louis, Missouri, U.S.A., 10th December, 1890; 5 years.

Claim.—1st. The combination of a series of numbered independent indicators, a series of independent keys to each indicator, connections between each of the series of keys and each indicator, said connections being arranged to insure the movement of each indicator upon the movement of any key of its series, and including a series of stops to each series of keys adjustable by but independent of the keys arranged to vary the extent of the movement of the indicator, according to the position of the key struck, substantially as described. 2nd. The combination of a series of independent indicators, a series of keys to each indicator, connections whereby any key of indicator is operated on the movement of any key of its series, connections whereby each indicator on completing a revolution turns the adjacent indicator of higher order one step, and means for disconnecting the indicators from one step, and means for each number is registered, to permit the connections, after each number is registered, to permit the connections to assume a position to operate the indicators to register another number, substantially as described. 3rd. The combination of the series of independent numbered indicators, and a series of independent keys, having uniform movements connected with each indicator, and constructed to operate two or more of the indicators simultaneously when released by the action of two or more keys, and locking and releasing devices operated by but independent of the keys for releasing and regulating the movement of the indicator operating devices, substantially as described. 4th. The combination, with the series of indicators and with a series of keys connected with each indicator, of a series of levers, each connected to turn the indicator by its movement, and locking and releasing and regulating devices arranged between each lever and its keys, whereby the lever is released and its movement regulated according to the position of the key struck, substantially as set forth. 5th. The combination, with the indicators and pinions and independent keys arranged in series of actuating levers, carrying racks engaging with the pinions, and regulating devices between each lever and each series of keys, the keys capable of movement, independently of said devices, substantially as specified. 6th. The combination, with the keys, indicators and intermediate operating connections between each key and each indicator, of means, substantially as described, for moving the indicators to throw them out of gear with the said connections upon their return motion, substantially as set forth. 7th. The combina-