

the rear, having the upper sections secured to the body and at the front end to the shaft, the lower section being secured to the axle, and at the front end connected to an adjustable bearing upon the front end of the lower part of the body, as set forth. 2nd. The combination, with the body, the axle, and the shafts of a spring on each side of the body, consisting of an upper and lower section united at their rear ends, the upper section being secured to the body and thence extending forward and having its front end secured to a shaft, and the lower section secured to the axle, and thence extending forward and having its front end adjustably connected to the front of the body, and coiled springs secured to the axle and to the rear ends of the shafts, substantially as set forth.

No. 36,922. Fence Making Machine.

(*Machine à cloture.*)

William Henry Smith, Fairfield, Nebraska, U.S.A., 4th July, 1891; 5 years.

Claim.—1st. The herein described fence making machine, comprising a series of twisting heads having the toothed portions and the gear wheels engaging therewith, and provided with short studs projecting therefrom, and the movable frame having arms connected to said studs, substantially as set forth. 2nd. As an improvement in fence making machines, the twisting heads having toothed portions and opposite slits or openings, in combination with the gear wheels in engagement therewith and the movable frame connected to said gear wheels, substantially as set forth. 3rd. The herein described fence making machine, comprising a series of twisting heads having toothed portions and opposite slits or openings, the gear wheels engaging therewith and provided with short studs projecting therefrom, and the movable frame connected to said studs, substantially as set forth. 4th. The combination, with the frame having the lateral arms provided with end grooves or recesses, of the twisting heads having central reduced portions in said grooves or recesses, and the removable blocks or sections securing said twisting heads in place, substantially as set forth.

No. 36,923. Signal for Electric Railways.

(*Signal de chemin de fer électrique.*)

Charles Darwin Tisdale, Boston, Massachusetts, U.S.A., 4th July, 1891; 5 years.

Claim.—1st. A railway divided into electric blocks or sections, each of which has a signal at each end independent of the other blocks or sections, in combination with electric circuits and electric motors or electro magnets arranged between the two signals of a block or section, said electric circuits being adapted to be alternately opened and closed for the setting and unsetting of the signals of the blocks or section, substantially as described. 2nd. In a railway, a signal on a revolving shaft, a lantern, a suitable support for said lantern which is connected to the signal shaft and arranged to be revolved therewith, in combination with electric circuits and an electro motor or electro magnet for operation on said shaft, and support for the setting and unsetting of the signal and lantern, substantially as and for the purpose specified. 3rd. In an electric railway signal, the combination, with a vertical shaft adapted to turn in suitable bearings, a lantern supported thereon, an arm suitably connected to an electric motor or armature of an electro magnet and having a mitre gear secured thereto, of a signal or semaphore secured to a horizontal shaft adapted to turn in bearings in a suitable support, having a cord and weight attached thereto and provided with a mitre gear engaging with the vertical shaft gear, for the purpose specified. 4th. In a railway, a signal on a revolving shaft, a cord or weight secured to said shaft, in combination with an electro magnet and its armature, one end of said cord being attached to the armature, substantially as and for the purpose specified.

No. 36,924. Plumb for Builders.

(*Plomb pour constructeurs.*)

William John Workman, Toronto, Ontario, Canada, 4th July, 1891; 5 years.

Claim.—A plumb bob suspended by a plumbing line within a closed recess formed within a plumb board, in combination with a pendulum pivoted within the said recess at a point near the plumb bob, and having a pin formed on it to project through an opening in the plumb board.

No. 36,925. Building Block, or Shape Brick.

(*Bloc de construction ou brique.*)

Rudolf Bohme, Berlin, Prussia, 4th July, 1891; 5 years.

Claim.—A shaped brick or building block having the shape of two truncated wedges one above the other, the width and height of both of said truncated wedges being the same, and the inclination of sides of both of said truncated wedges being the same, the other two sides of the brick being plane faces, substantially as set forth.

No. 36,926. Revolving Churn.

(*Baratte rotative.*)

George Branum Dowsell, Hamilton, Ontario, Canada, 4th July, 1891; 5 years.

Claim.—1st. In a revolving churn, the combination of the head E, on the top of the staves B, fitting in the cork seat D, around the bottom of the head C, in connection with the metal ring I, on the inside of staves B, as described. 2nd. In a revolving churn, the combination of the gas vent G, screwed through the stave B, and flange N, with the flaring rim O, and recessed plate K, with the gas ducts L, all substantially as herein set forth.

No. 36,927. Coil Spring Power Hammer.

(*Marteau mécanique pour ressorts spiraux.*)

Philippe D. Dupont, St. Johnsbury, Vermont, U.S.A., 4th July, 1891; 5 years.

Claim.—1st. The combination, of the box B, front plate C, and bolts W, substantially as and for the purpose hereinbefore specified. 2nd. The combination, in a coil spring power hammer, of the links H, arms F, and slip sleeve U, substantially as and for the purpose hereinbefore specified. 3rd. The combination of the arms F, links H, spring G, collars I, set screws J, and check nuts p, substantially as set forth and for the purpose specified. 4th. The combination of the slotted connecting rod L, slotted crank plate N, crank pin Z, substantially as and for the purpose specified. 5th. The combination of the solid head Q, internal bushing P, crank shaft O, and crank N, substantially as and for the purpose specified. 6th. The combination of the coiled spring G, the collars I, set screws J, and check nuts p, substantially as shown and for the purpose specified. 7th. The combination of the joint pins d, the bushing p, and pin q, as shown and for the purpose specified. 8th. The combination of the lug D, head Q, with lug pin a, arm T, and pulley S, as shown and for the purpose specified.

No. 36,928. Piano.

(*Piano.*)

George Steak, New York, State of New York, U.S.A., 7th July, 1891; 5 years.

Claim.—1st. The combination of plate a, with perforated rails b, rods c, passing through the perforations and nuts d, embracing the rods, the perforations in the rails being larger than the perforations in the nuts, substantially as specified. 2nd. The combination of plate a, with rails b, having countersunk perforations b', rods c, passing through said perforations and nuts d, embracing the rods and entering the countersunk perforations, substantially as specified. 3rd. The combination of the plate a, with step-shaped rails having countersunk perforations, rods passing through said perforations, and with nuts embracing the rods and having rounded ends that are received by the countersunk perforations, substantially as specified. 4th. The combination of plate a, with a sound producing spring consisting of a lower plate g, and of an upper spring e, secured to and projecting beyond plate g, substantially as specified.

No. 36,929. Artificial Hand.

(*Main artificielle.*)

Samuel Lucas, Poguetanuck, Connecticut, U.S.A., 7th July, 1891; 5 years.

Claim.—1st. The combination, with a palm having hinged thereto a series of fingers with ratchet teeth, a corresponding series of spring pawls, as set forth, and a corresponding series of springs connecting the said palm and fingers, substantially as and for the purpose specified. 2nd. In an artificial hand formed essentially of a series of hinged fingers with ratchet teeth and pawls, as set forth, and in combination therewith, a thumb pivotally attached to said hand and formed with a strengthening boss that is seated in a mortise in said hand, substantially as specified. 3rd. In an artificial hand, a series of hinged fingers with ratchet teeth, a corresponding series of pawls engaging said teeth, and means as set forth, for raising said pawls, the said fingers being rigid from the hinge joint outward and partly closed, as and for the purpose specified. 4th. In combination, with an artificial hand, a shank pivoted therein and arranged to yield laterally under pressure, and a spring, substantially as described, for holding said shank normally in alignment with the hand. 5th. In an artificial hand, a series of hinged fingers with ratchet teeth, a corresponding series of pawls engaging said teeth, and a fork or similar tool clamped to one of said fingers by a spring ferrule, as described.

No. 36,930. Burglar Alarm.

(*Avertisseur à sonnerie.*)

George Arter, Cleveland, Ohio, U.S.A., 7th July, 1891; 5 years.

Claim.—1st. The combination, in an alarm sounder, of the plate A, a bolt M, loosely secured thereto, having its ends m, and N, projected outside of the diameter of said plate, its front end adapted to rest against an opposing object, the rear end portion N, to form a handle by which said portion of the bolt may be thrown into or out of engagement with the retaining shoulder E, and a spring to throw the bolt longitudinally and transversely and to hold it out of engagement with the movement and the shoulder, substantially as described and for the purpose set forth. 2nd. The combination, in an alarm, of the plate A, having a perforation C, on one side of its central portion, and a perforation D, on the other side diametrically opposite or thereabout, the latter having a retaining shoulder E, and a bolt M, having its ends m, and N, projected outside of the diameter of the plate A, said bolt adapted at its front portion for a longitudinal movement, and at its rear portion for longitudinal and transverse movement, projected portions o, to engage the movement and portion p, to engage the shoulder E, to hold the portion o, in engagement with the movement, substantially as described and for the purpose set forth.

No. 36,931. Machinery for Moulding and Pressing Clay, Coal Dust, etc.

(*Aggloméré d'argile et de poussière de charbon.*)

William Johnson, Leeds, York, England, 7th July, 1891; 5 years.

Claim.—1st. The pistons b¹, b², the slots b³, the links n, and the inclines n¹, n², in combination with the main shaft A, the pressing cams l, l', the two cam wheels H, with the parts g, g', the presser head D, provided with plungers d, substantially as and for the pur-