

substantially as and for the purposes described. 9th. The combination of the rods A, clamps B, having brackets D, and arms K and L, clamps B', having lugs *x*, cutter C, having pin *a*, hanger F, roller G, nuts H, with a double roll of paper and carbon paper, substantially as and for the purposes described. 10th. The combination of the rods A, clamps B, having brackets D, and arms K and L, clamps B', having lugs *x*, cutter C, having pin *a*, hanger F, roller G, nuts H, substantially as and for the purposes described. 11th. The combination of the rods A, clamps B, having brackets D, and arms K and L, clamps B', having lugs *x*, cutter C, having pin *a*, hanger F, roller G, nut H, substantially as and for the purposes described.

No. 41,162. Brake for Cars. (Frein de chars.)

John G. Zimmermann, John J. Zimmermann and Rivington A. Stiles, all of West Troy, New York, U. S. A., 10th December, 1892; 6 years.

Claim.—1st. In a car brake, the combination of brake beams provided with brake shoes, a rocker shaft provided with a pair of eccentrics, whose centres are arranged at opposite sides of said shaft, said eccentrics being connected to said brake beams, so as to move the latter relatively in opposite directions, and mechanism whereby a rocking motion can be imparted to said shaft from opposite ends of a car, as and for the purpose herein specified. 2nd. In a car brake, the combination of brake beams provided with brake shoes, a rocker shaft, provided with a pair of eccentrics, whose centres are arranged at opposite sides of said shaft, horizontal levers arranged adjacently to said brake beams and connected to said eccentrics and brake beams, so as to move the latter relatively in opposite directions, and mechanism whereby a rocking motion can be imparted to said shaft from opposite ends of the car, as and for the purpose specified.

No. 41,163. Toy. (Jouet.)

Waldo V. Snyder, Canton, Ohio, U. S. A., 10th December, 1892; 6 years.

Claim.—1st. The combination of the travelling platform A, having mounted thereon the body B, the pivoted legs *d* and *d'*, the connecting wires *e*, the arms *f*, the compound bell crank F, the bars E, the pitman G and means for communicating rotary motion to the travelling wheels *a*, substantially as and for the purpose specified. 2nd. The combination of the travelling platform A, the hollow post or standard D, the bar *h* having fixed thereto the yoke *h*, carrying the travelling wheel *b*, the head M fixed to the top or upper end of the bar *h*, and the guide bar N, substantially as and for the purpose specified. 3rd. The combination of the bar *h*, provided with the arm *k*, the wire or cord *k'*, the pivoted tail shank *k''*, and the tail *k'''*, substantially as and for the purpose specified. 4th. The combination of the body B, having fixed thereto the movable head M, and means for communicating movement to the head M, and the tail *k'''*, substantially as and for the purpose specified. 5th. The combination of the travelling platform A, having mounted thereon the body B, provided with the movable legs *d* and *d'*, the crank shaft I provided with the wheel L, the wheel *g*, and the drive chain *g'*, substantially as and for the purpose specified. 6th. In a toy a travelling platform mounted on wheels, an animal's body, mounted on, and fixed to said travelling platform, and means for propelling the travelling platform and communicating movement to the legs of the animal, substantially as and for the purpose specified.

No. 41,164. Method of Electrically Welding Metal.

(Méthode de souder les métaux par l'électricité.)

Mark Wesley Dewey, Syracuse, New York, U. S. A., 10th December, 1892; 6 years.

Claim.—1st. The hereindescribed method of electric welding or metal working, consisting in subjecting the work to the influence of a magnetic field, rapidly changing the strength or polarity of the field, thereby raising the temperature of the work to the required extent, and then performing the desired operation upon the same. 2nd. The hereindescribed method of electric welding or metal working, consisting in subjecting the work to the influence of a magnetic field, rapidly changing the strength or polarity of the field, partly or wholly surrounding the work with suitable material to prevent radiation of heat, thereby raising the temperature of the work to the required extent, and then performing the desired operation upon the same. 3rd. The hereindescribed method of electric welding or metal working, consisting in subjecting or exposing the work at a point to be heated to the influence of a magnetic field, rapidly changing the strength or polarity of the field, thereby raising the temperature of the work to the required extent, and then performing the desired operation upon the same. 4th. The hereindescribed method of electric welding or metal working, consisting in generating an irregular electric current in a conductor including a coil of insulated wire, locating an iron core within the coil, placing the work in proximity to one or both poles of the core, exposing said work to the magnetic action until sufficiently heated, and then performing the desired operation upon the same. 5th. The hereindescribed method of electric welding or metal working, consisting in generating an irregular electric current in a conductor including a coil of insulated wire, locating a laminated iron core within the coil, placing the work in proximity to one or both poles of the core, exposing said work to the magnetic action until sufficiently heated, and then performing the desired operation upon the same. 6th. The hereindescribed

method of electric welding or metal working, consisting in generating an alternating electric current in a conductor including a coil of insulated wire, locating a laminated iron core within the coil, placing the work in proximity to one or both poles of the core, exposing said work to the magnetic action until sufficiently heated, and then performing the desired operation upon the same. 7th. The hereindescribed method of electric welding or metal working, consisting in generating an alternating electric current in a conductor including a coil of insulated wire, locating a laminated iron core within the coil, placing the work in proximity to and between both poles of the core, exposing said work to the magnetic action until sufficiently heated, and then performing the desired operation upon the same. 7th. The hereindescribed method of electric welding or metal working, consisting in generating an alternating electric current in a conductor including a coil of insulated wire, locating an iron core within the coil, placing the work in proximity to one or both poles of the core, partly or wholly inclosing the work, and the one or both poles in proximity thereto with a suitable material to prevent radiation of heat, exposing said work to the magnetic action until sufficiently heated, and then performing the desired operation upon the same. 9th. The hereindescribed method of electric welding or metal working, consisting in subjecting the work to the influence of a magnetic field, rapidly changing the strength or polarity of the field, thereby raising the temperature of the work to the required extent, controlling the temperature by varying the strength of the field, and then performing the desired operation upon the same. 10th. The hereindescribed method of electric welding or metal working, consisting in generating an irregular electric current in a conductor including a coil of insulated wire, locating an iron core within the coil, placing the work in proximity to one or both poles of the core, exposing said work to the magnetic action until sufficiently heated, controlling the heat by varying the distance between the pole or poles and the work, and then performing the desired operation upon the same. 11th. The hereindescribed method of electric welding or metal working consisting in subjecting the work to the influence of a magnetic field, suitably holding or supporting the work, rapidly changing the strength or polarity of the field, thereby raising the temperature of the work to the required extent, and then performing the desired operation upon the same. 12th. The hereindescribed method of electric welding or metal working, consisting in generating an irregular electric current in a conductor, including a coil of insulated wire, locating an iron core within the coil, placing the work in proximity to one or both of the poles of the core, suitably holding or supporting the work, exposing said work to the magnetic action until sufficiently heated, and then performing the desired operation upon the same.

No. 41,165. Magnetic Separator.

(Séparateur magnétique.)

Jonas Wenstrom, Orebro, Sweden, and Olof Wenstrom, Marquette, Michigan, U. S. A., 10th December, 1892; 6 years.

Claim.—1st. In a magnetic separator, the combination, with suitable armatures, of a magnet for said armatures, and means whereby the distance between said magnet and armatures may be varied for the purpose set forth. 2nd. In a magnetic separator, the combination with suitable movable armatures, of a fixed magnet, past which said armatures are arranged to move, and suitable means whereby said armatures and magnets may be adjusted with respect to each other. 3rd. In a magnetic separator, the combination with a stationary magnet, of an armature barrel arranged to revolve around said magnet, and suitable means whereby said barrel and magnet may be adjusted with respect to each other. 4th. In a magnetic separator, the combination with suitable standards, of a stationary magnet, adjustable sockets for sustaining said magnet within said standards, an armature barrel, substantially as described. 5th. In a magnetic separator, the combination with suitable standards, of a magnet sustained by said standards, an armature barrel wherein said magnet is held, and suitable barrel supports encircling the shafts of the armature, and wherein the barrel may be revolved, substantially as described. 6th. In a magnetic separator, an armature barrel comprising a series of soft iron bars, having threaded ends, and a ring or flange through which said ends of the armature bars extend, and suitable insulating bars between said armature bars, substantially as described. 7th. In a magnetic separator, the combination with an armature barrel and a magnet eccentrically sustained within said barrel, of a counterpoise for said magnet, substantially as described. 8th. In a magnetic separator, a feed mechanism comprising a delivery hopper, a feed pan and a suitable tappet wheel for imparting a shaking motion to said feed pan, substantially as described. 9th. In a magnetic separator, a feed mechanism comprising a delivery hopper, a feed pan and a suitable tappet wheel for imparting a shaking motion to said feed pan, and an adjusting screw for limiting the extent of movement of said feed pan, substantially as described. 10th. In a magnetic separator, a feed mechanism, comprising a delivery hopper, a feed pan for delivering the ore to the armatures, a tappet wheel for imparting a shaking movement to said feed pan, and suitable elastic bars for sustaining the feed pan, substantially as described. 11th. In a magnetic separator, the combination with a magnet and its armatures, of a frame having standards for sustaining said magnet and armatures, and having extensions, a drive shaft journaled in said extensions, and a hopper connecting said uprights and extensions,