

to the lever. 3rd. The combination, with the handle and a fulcral foot pivotally connected thereto, of a concave jaw pivotally mounted upon the inner end of the lever, and another jaw adjustably mounted upon draw-bars pivotally connected to the lever outside of the fulcral bearing thereof.

No. 35,740. Magnetic Separator.

(*Séparateur magnétique.*)

Thomas Alva Edison, Llewellyn Park, New Jersey, U.S.A., 12th January, 1891 : 5 years.

Claim.—1st. In a magnetic separator, the combination of a hopper having a flat bottom and an opening therein, with a magnet below said hopper for altering the trajectory of magnetic material falling therefrom, substantially as set forth. 2nd. In a magnetic separator, the combination of a hopper having vertical sides, and a flat bottom with an opening therein, with a magnet below said hopper for altering the trajectory of magnetic material falling therefrom, substantially as set forth. 3rd. In a magnetic separator, the combination of a hopper having a flat bottom and a row of small holes therein, with a magnet below said hopper for altering the trajectory of magnetic material falling therefrom, substantially as set forth. 4th. In a magnetic separator, the combination of a hopper having a thin metal bottom plate with an opening therein, with a magnet below said hopper for altering the trajectory of magnetic material falling therefrom, substantially as set forth. 5th. In a magnetic separator, the combination of a hopper having a thin metal bottom plate with a row of small holes therein, with a magnet below said hopper for altering the trajectory of magnetic material falling therefrom, substantially as set forth. 6th. In a magnetic separator, the combination, with a hopper having a flat bottom with an opening in it and means for vibrating it, of a magnet below said hopper for altering the trajectory of magnetic material falling therefrom, substantially as set forth. 7th. In a magnetic separator, the combination, with a hopper having a flat bottom with a row of small holes in it, and means for vibrating it, of a magnet below said hopper for altering the trajectory of magnetic material falling therefrom, substantially as set forth. 8th. In a magnetic separator, the combination, with the hopper, and the magnet for altering the trajectory of the magnetic material, of means for producing an air current acting upon the falling material, substantially as set forth. 9th. In a magnetic separator, the combination, with the hopper and the magnet for altering the trajectory of the magnetic material, of means for directing an air current against the falling material, substantially as set forth. 10th. In a magnetic separator, the combination, with the hopper, and the magnet for altering the trajectory of the magnetic material, of the inclined partition and the air pipe for directing a current of air against the falling material, substantially as set forth. 11th. In a magnetic separator, the combination of the hopper having an opening through which the material falls into a wide thin stream, the magnet below the same for altering the trajectory of the magnetic material, and the air pipe placed parallel with the falling stream, whereby the air current is directed against the full width of the stream, substantially as set forth. 12th. In a magnetic separator, the combination, with the hopper, of the open end or bar magnet below said hopper for altering the trajectory of the magnetic material, substantially as set forth.

No. 35,741. Vulcanized Plastic Compound.

(*Composition plastique vulcanisée.*)

William Kiel, Butler, New Jersey, U.S.A., 12th January, 1891, 5 years.

Claim.—1st. The herein described process of manufacturing vulcanized plastic rubber compounds, consisting in mixing together sulphur and rubber, the sulphur being in the proportion of not less than about eighty per cent. of the rubber, by weight, and vulcanizing the compound with an initial temperature of not less than about 300° Fah., and for the periods of time set forth, substantially as described. 2nd. The herein described process of manufacturing vulcanized plastic rubber compounds, consisting in mixing together sulphur, rubber, and oil, the sulphur being in the proportion of not less than about eighty per cent. of the rubber by weight, and vulcanizing the compound with an initial temperature of not less than about 300° Fah., and for the periods of time set forth, substantially as described.

No. 35,742. Process of Manufacturing Vulcanized Plastic Compounds.

(*Fabrication de composition plastique vulcanisée.*)

William Kiel, Butler, New Jersey, U. S. A., 12th January, 1891 : 5 years.

Claim.—1st. The herein described hard vulcanized plastic compound, consisting of crude rubber, sulphur and mineral oil, the sulphur being in the proportion of not less than approximately eighty per cent. of the rubber by weight, united by vulcanization, substantially as described. 2nd. The herein described hard vulcanized plastic compound, consisting of crude rubber, sulphur and kerosene, the sulphur being in the proportion of not less than approximately eighty per cent. of the rubber, by weight, united by vulcanization, substantially as described.

No. 35,743. Vise. (*Etau.*)

George S. Buok, Goodwill, Dakota, U. S. A., 12th January, 1891 : 5 years.

Claim.—The combination of the two jaws A, B, the screw rod which passes horizontally through them, the board G, a nut secured to the board and through which the screw passes, two bent rods N

secured to the board G, and connected together by a box or bearing O, and a rigid support F, which slides freely back and forth upon the smooth portion of the screw-threaded rod D, and which has its lower end secured to the lower end of the outer jaw A, substantially as shown.

No. 35,744. Roll for Reworking Steel Rails.

(*Cylindre pour refaire les rails d'acier.*)

Henry Harris and John B. Brobst, both of Reading, Pennsylvania, U.S.A., 13th January, 1891 : 5 years.

Claim.—The rolls herein described for splitting and forming billets from railroad rails, having the three grooves *a, b, and c*, as shown, whereby the head and base are severed from the web, and the three portions simultaneously rolled into billets of oval section at one pass, substantially as set forth.

No. 35,745. Process of Reworking Steel Rails. (*Procédé pour refaire les rails d'acier.*)

Henry Harris and John B. Brobst, both of Reading, Pennsylvania, U.S.A., 13th January, 1891 : 5 years.

Claim.—The herein described process of heating and decarbonizing steel rails or bars for reworking, which consists in subjecting the same to the heat of a furnace, while covered by a heat-conducting medium, substantially as described, containing ingredients, as set forth, adapted to decarbonize and soften said rails or bars while being simultaneously heated, substantially as set forth.

No. 35,746. Revolving Hook Machine.

(*Crochet tournant pour machines à coudre.*)

Anthony Miller, Huntingburg, and John T. Corn, Jasper, both of Indiana, U. S. A., 13th January, 1891 : 5 years.

Claim.—The combination, with the stitch-forming mechanism, of a rotary hook machine, of a supporting slide ring and means for locking the same in any adjusted position, and a bobbin cover, the former provided with two projections upon its inner engaging surface separated a suitable distance, and the latter provided with a single projection upon its outer engaging surface vibrating between and alternately engaging the two upon the slide ring, whereby the cover is allowed only a limited rotary movement, substantially as shown and described.

No. 35,747. Road Cart. (*Désobligeante.*)

James Henry Lewis and Charles Gardiner Hampton, both of Detroit, Michigan, U.S.A., 13th January, 1891 : 5 years.

Claim.—1st. In a road cart, a seat mounted on oscillating supports, and held in position by check springs, substantially as described. 2nd. In a road cart, the combination of the seat mounted on oscillating supports to have a free play in the longitudinal direction of the cart of check springs applied thereto, to counter-act the oscillations, and of seat bars supported independently of the seat and holding such check springs in position, substantially as described. 3rd. In a road cart, the combination of a supporting frame pivotally mounted upon a seat supporting spring, and carrying the seat free to oscillate in the longitudinal direction of the cart, of check springs on opposite sides of the seat and engaging with the oscillating supports to check their motion, substantially as described. 4th. In a road cart, the combination of a seat pivotally supported upon the spring free to oscillate in the longitudinal direction of the cart, of springs applied to said seat to check its oscillations and adjusting devices for said springs, substantially as described. 5th. In a road cart, the combination with the seat and the seat supporting spring, of the supports G, interposed between and pivotally supported upon said spring, the check springs which hold said supports in position, the independent seat bars to which said check springs are secured, and the supporting frame under the rear end of said seat bars, substantially as described. 6th. In a road cart, the combination of the seat supporting springs, the oscillating seat supports pivotally supported thereon, the check springs which hold it in position the independent seat bars to which said springs are secured, and the circular bearings between such seat and seat bars, substantially as described. 7th. In a road cart, the combination with the springs, of the U-shaped seat support G, the seat bars, hinged at their forward ends, the standards *b*, pivotally supporting the rear end of the seat bars, of the segmental circular faces *K*, and *L*, and the check springs *f*, sleeved upon the rod *e*, substantially as described. 8th. In a road cart, the combination, with the seat pivotally supported upon the springs, of the foot rest secured only to the seat, substantially as described.

No. 35,748. Combined Gauge and Syphon.

(*Indicateur et siphon combinés.*)

Wilfrid Emile Michel Robitaille, Quebec, Frank Gouin and Edgard Whiteford, Montreal, all of the Province of Quebec, Canada, 13th January, 1891 : 5 years.

Claim.—1st. A combined gauge for measuring the height of liquid in barrels and the like, and syphon, consisting of a graduated transparent tube connected at its lower end to a flexible tube, the said transparent having its upper end open, substantially as and for the purposes set forth. 2nd. A combined gauge for measuring the height of liquids in barrels, and the like, and syphon consisting of a transparent tube securely held and protected in a body, and means for attaching the said body to a barrel or cask, the said tube being graduated by a scale engraved upon it or stamped or painted on the