# No. 42,531. Vehicle Gear. (Train de voiture.)

Thomas F. Updegrove, Avery, Kansas, U.S.A., 10th April, 1893;

Claim.—1st. The herein described running gear for a wagon, Consisting of an axle, an axle beam of 1-shaped form to provide upper and lower flanges projecting from opposite sides thereof, an I-shaped bolster mounted on said beams and above the same and in like many of the property like manner formed with flanges, and single bolts extending through has manner formed with flanges, and single bolts extending through the flanges of said parts at opposite sides and ends thereof, and having their lower ends secured against the under portion of the axle beam, substantially as described. 2nd. The herein described running gear for a wagon, consisting of an axle, an axle beam of I-shaped form to provide upper and lower flanges projecting from opposite sides thereof. II-shaped angle plates centrally mounted on onposite sides thereof, U-shaped angle plates centrally mounted on said axle beam apart from each other to form a guide, an I-shaped bolster mounted on said angle plate and secured thereto, a reach bar adapted to fit between and move through said angle plates, and a single bolt arranged at each of the opposite ends of said parts on single bolt arranged at each of the opposite ends of said parts on opposite sides of the same and extending through the flanges thereof and and secured at their lower ends against the under portion of the axle, a space also being formed by the said angle plate between the bolston and secured as their lower ends against the under portion of the hounds, bolster and axle beam for the insertion and retention of the hounds, substantial axle beam for the insertion and retention of the hounds, substantially as described. 3rd. The herein described running gear for a way and a solid ends for a wagon, consisting of an axle of hollow metal having solid ends formed to metal having solid ends formed to metal having solid ends formed to mean to provide formed into spindles, an axle beam of I-shaped form to provide upper and have a spindles and axle beam of I-shaped form to provide and upper and have a spindles and axle beam of I-shaped form to provide and upper and lower flanges projecting from opposite sides thereof and having the ends bevelled or cut away, an I-shaped bolster mounted on and above said beam, U-shaped angle plates mounted between the said hear and bolster below the said hear a and above said beam, U-shaped angle plates mounted beam and bolster to provide an intervening space or guide, hounds of U-shaped form having portions thereof between the said beam and bolster and the front ends of the same formed into boxes, a tubular much be and the front ends of the bounds and extending tubular reach bar adjustably mounted on the hounds and extending through the bar adjustably mounted on the hounds and vertical through the space or guide formed by the angle plates and vertical bolts extending through the flanges of the hounds, bolster and beam, and located in the hounds thereof and the state of the state and located on both sides of said parts at opposite ends thereof and being of single form at said opposite ends of said sides and having the lower and being of single form at said opposite to the under side of the the lower ends of the same secured adjacent to the under side of the axle, substantially as described.

# No. 42,532. Baker's Oven. (Four de boulangerie)

Fritz Duhrkop, New York, state of New York, U.S.A, 10th April, 1893; 6 years.

Claim.—1st. A baker's oven having a double front wall that encloses an upright air space  $g^2$ , a fire door  $a^1$ , openings  $g^3$ , back of outlet, substantially as specified. 2nd. A baker's oven having hot air flues, a discount of the communication of the baking chamber, a heatair flues, a disconnected air space below the baking chamber, a heating space above the baking chamber, and a second air space in front of the baking chamber and a second air space in front of the baking chamber and a second air space in front of the baking chamber and a specified. 3rd. The comof the baking chamber, substantially as specified. 3rd. The combination of baking chamber, substantially as specified floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor, with an evaluation of baking chamber d, having perforated floor d, havi evalorating tray beneath said floor, substantially as specified. 4th. The combination of baking chamber a, having perforated floor, with drip can i talk to be a substantially as specified. drip cup i, tube  $i^1$ , and tray h, substantially as specified.

# No. 42,533. Method of and Apparatus for Annealing Metals. (Méthode et appareil pour recuire les métaux.)

James Douglas Storie, Oshawa, Ontario, Canada, 10th April, 1893;

Claim.—1st. The herein described method of annealing metals onsisting. consisting in providing in the fire chamber two separate beds of coal full transfer in providing in the fire chamber two separate beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates beds of coal full transfer in the fire chamber two separates and the fire chamber two separates are considered in the fire chamber the fire c coal fuel, the high state of combustion of one of which acts upon the other and other and cokes it so that the combined flames arising from the portion being state of combustion protion being coked and the portion in a high state of combustion produces a flavored and the portion in a high state of combustion produces a flavored by the duces a flame of great heat which is materially augmented by the introduction of great heat which is materially augmented by the introduction of heated air into the combustion chamber, from which the natural of heated air into the combustion chamber from which the natural of heated air into the combustion chamber from which the natural of heated air into the combustions and the combustion of the combustion o the natural draught causes the then intensely heated flame to enter through a 4. through a flue into the top of the annealing chamber, as and for the purpose specified. 2nd. The herein described apparatus for annealing metals consisting of the fire chamber C, having the grate tanks in the purpose specified of the fire chamber C, having the grate bars (\*, upon which is placed the coal screenings in a high state of combustion, and the should the mon which is placed the screenings combustion, and the shelf H, upon which is placed the screenings which are coloud to shelf H, upon which is placed the screening or door, the comwhich are coked, and the shelf H, upon which is placed the screenings which are coked, and the usual ash pit with opening or door, the combustion chamber B, having flues J, leading from the top of the fire chamber into the analysis chamber and the flue K leadchamber B, having flues J, leading from the top or the me chamber into the combustion chamber, and the flue K leading from the combustion chamber into the annealing chamber, the openings O combustion chamber into the annealing chamber from the hollow Tom the combustion chamber into the annealing chamber, and openings Q extending into the annealing chamber from the hollow wall, and connected to the outer air by the opening O, as and for the naving the grate bars G, and shelf H, the openings R closed by the cover v, and the usual ash pit and door as specified, of the combustic. cover v, and the usual ash pit and door as specified, of the combustion chamber B, provided with openings J and Q, and openings K leading into the purpose tion chamber B, provided with openings J and Q, and openings K leading into the annealing chamber, arranged as and for the purpose specified. 4th. The combination with the fire chamber C, having specified, the combination with the usual ash pit and door, as Q, and opening K leading into the annealing chamber, of the blast purpose specified.

## No. 42,534. Sash Fastener. (Arrête-croisée.)

Adelbert Raymond and Francis Smith North, both of Detroit, Michigan, U.S.A., 10th April, 1893; 6 years.

Claim.—1st. In a sash fastener, the combination of a series of key plates adapted to be secured in the upper sash, of a detachable key having means for locking in said plate and a stem extending freely into the path of the lower sash, substantially as described. In a sash fastener, the combination of the upper sash having a key plate, a detachable key having means for securing it in said plate, and a stem extending over the lower sash, a wing on said stem having a curved bearing and a wearing plate on the meeting rail of the lower sash against which said wing is adapted to bear, substantially as described. 3rd. In a sash fastener, the combination of the upper sash having a vertical series of key plates, a detachable key having means for securing it in said plate, and a stem extending over the lower sash, a wing on said stem having a curved bearing, a wearing plate on the meeting rail of the lower sash, against which the curved bearing is adapted to be turned, and a cam-shaped lug on the wearing plate against which the side of the wing bears to draw the meeting rails together, substantially as described. In a sash fastener, the combination of a key plate in the upper window sash, a detachable key adapted to engage therein, a locking lug on said key, and a wing on the stem at right angles to the lug, whereby the wing normally tends to turn the key by gravity to its locked position, substantially as described.

#### No. 42,535. Method of and Machinery for Making Nets. (Méthode et machine pour faire des filets.)

William Ireland, Buckhaven, Fife, Scotland, 10th April, 1893; 6

Claim.—1st. In a machine for the manufacture of fishing nets the combination of the hooks f with the needles a, hooks b, fallers c and chopping bar x, operating to produce a double hitch or twist knot, substantially as described. 2nd. In a machine of the class set forth the combination in conjunction with ordinary knotting mechanism of hooks f, actuated to produce in conjunction with the said mechanism a double hitch knot, substantially as described. 3rd. In a machine of the class set forth a cam s having at one part of its circumference a fish-shaped piece r swivelling on a center  $r^1$  carried by a strip t secured to the cam in combination with the bar n having a pin or roller  $t^1$ , which alternately passes under and over the fish piece and causes the hook bar k to move to the right and left alternately as described.

### No. 42,536. Friction Clamp. (Crampon & friction.)

James M. Ulsh, Harrisburgh, Pennsylvania, U.S.A., 10th April, 1893; 6 years.

Claim.—1st. A friction clamp, substantially as described, comorising the jaws arranged to be drawn together by a single bolt to prising the jaws arranged to be drawn together by a single bolt to hold itself and an implement or part upon a frame or object, as and for the purpose described. 2nd. A friction clamp, substantially as described, comprising the jaws, an intermediate plate, and a bolt, as set forth. 3rd. A friction clamp made of a single casting, and comprising the two jaws, and the intermediate plate arranged relatively to the jaws to bind with one jaw upon a frame and with the other jaw upon an implement, and a bolt, substantially as described.

4th. A friction clamp, comprising the laws the binding plate injused. 4th. A friction clamp, comprising the jaws, the binding plate joined to the jaws and terminating at its free end between or within the same, and means for drawing the jaws together, substantially as described. 5th. A friction clamp having the intermediate plate be-tween its jaws, said plate and one jaw conforming to the frame or part to which the clamp is to be applied, and the other jaw being part to which the clamp is to be applied, and the other jaw being arranged relatively to the plate to form a socket for an implement or other part, the jaws being adapted to be compressed by suitable means, as set forth. 7th. A friction clamp comprising the segmental jaw, the segmental plate, another jaw joined to the other parts and forming, with the plate, a socket, and a single bolt, substantially as described. 7th. A friction clutch comprising the two jaws, the intermediate plate joined to the jaws and arranged between the same, and with its free end terminating within the space inclosed by the and with its free end terminating within the space inclosed by the jaws the free ends of said jaws being converged to receive a single through bolt, substantially as described.

### No. 42,537. Churn. (Baratte.)

Carl Gustaf Patrik De Laval, Stockholm, Sweden, 10th April, 1893; 6 years.

Claim.—1st. The combination, with the stationary shell or casing of the churn, of an axial supply inlet at one end, revolving beaters arranged within the shell or casing, and a central discharge at the opposite end, through which the product of butter and churn milk the product of butter and churn milk continuable discharged substantially as set forth. See The is continuously discharged, substantially as set forth. 2nd. The combination, with the stationary shell or casing of the churn, having a supply inlet at one end, of revolving beaters arranged within the shell or casing, and a discharged tube secured to the beaters and rotating therewith, substantially as set forth. 3rd. The combination, with the stationary shell or casing of the churn, of a hollow supply shaft arranged in the inlet end of the shell or casing, means whereby said hollow shaft is rotated, and beaters arranged within said shell or casing and connected with said shaft, substantially as set forth. 4th. The combination, with the stationary shell or cas-