their ends bearing against the cams, substantially as described. 2nd. In a rotary engine, the vertically elongated shell A having an enlarged horizontal diameter forming extended lateral abutments M, M, in combination with a rotary cylinder D provided with sliding piston blades E, E, substantially as described. 3rd. In a rotary engine, the combination, with the fixed cams F, F, and the spiral springs L, L, let into said cams to form for the inner ends of the sliding pistons, substantially as described. 4th. In a rotary engine, the combination, with the sliding piston blades E, E, having grooved edges d and steam apertures a, of the detachable steel packing or bearing strips c, cl, formed with a shank and a rounded head, substantially as described. 5th. In a rotary engine, the combination of the vertically elongated shell A, having steam inlet passages (f, g, h, i) and exhaust passages k, k, m, m, t, t, p, H, the stationary cams F, F, shaft C, cylinder D and sliding piston blades E, E, substantially as described. 6th. In a rotary engine, the combination of the vertically elongated shell A, having an enlarged horizontal diameter forming lateral abutments M, M, the shaft C, rotary cylinder D provided with radial slots and recessed ends, the fixed cams F, F having yielding bearing plates K, K, and the sliding piston-blades E, E having packing strips c, c_i , substantially as described.

No. 20,056. Road Cart. (Cabrouel.)

A. Sidney Upson, Louis Sloman, Lester E. Rose, Eunice W. Tibbitts and Bernard Lilly (assignee of Thomas O'Brien), Coldwater, Mich., U.S., 13th July, 1885; 5 years.

U.S., 13th July, 1850; 5 years.

Claim.—1st. The combination, in a two-wheeled cart, of the shaft, the shaft-bar, the seat bars having their forward end, pivo:ed in the top shafts in advance of the shaft bar, a bar spring secured midway its ends on the shaft bar and extended under the seat bars, and the crib having opening spring bars secured at their forward ends to the shaft bar and their rear ends to the seat bars, substantially as set forth. 2nd. The combination, with the seat bar having depending lugs and elastic block secured between the lower ends of said lugs, of the spring having its end inverted through between the said elastic block and the seat bar, substantially as set forth. 3rd. The combination of the seat bars, substantially as set forth. 3rd. The combination of the seat bars, the lugs depending from said bars, the elastic block secured between the lower end of said lugs, and the spring having its lower end inserted between the elastic block and the seat bar, and provided on its outer ends with right-angled ears, substantially as set forth. tially as set forth.

No. 22,057. Automatic Car-Coupling.

(Accouplage Automatique de Chars.)

Herbert M. Sturgis, Stocy B. Rankin and John Rankin, South Charleston, Chio, U.S., 13th July, 1885; 5 years.

leston, Chio, U.S., 18th July, 1885; 5 years.

Claim.—1st. In a car-coupling, the combination, with a draw-head having an opening to receive a portion of the opposite draw-head, of a coupling hook or latch pivoted therein, and consisting of a body portion having an arm or arms provided with a hook or hooks, substantially as set forth. 2nd. In a car-coupling, the combination, with a draw-head divided into an upper and lower portion, as shown, and having a longitudinal opening, as shown, of a coupling hook pivoted in said opening, said coupling hook, consisting of a body portion having two forwardly extending arms provived with hooks, substantially as set forth. 3rd. The combination, with a draw-head divided into an upper and lower portion, as shown, having their forward ends bevelled on their upper and lower sides, and having a longitudinal opening, as shown, of a coupling hook pivoted in said opening, said coupling-hook, consisting of a body portion having two forwardly-extending arms provided with hooks, substantially as set forth. 4th. The combination, with a draw-head divided into an upper and lower sides and having a longitudinal opening, so shown, having their forward ends bevelled on their upper and lower sides and having a longitudinal opening, of a coupling hook pivoted in said opening, said coupling-hook consisting of a body portion having two forwardly-extending arms provided with hooks and a double lever pivotally secured to said hook, substantially as set forth.

No. 22,058. Match Box. (Boîte à Allumettes.)

Onésime Fréchette, Trois-Rivières, Que., 13th July, 1885; 5 years.

unesime frechetle, trois-Kivieres, Que., 13th July, 1805; 5 years.

Réclame.—Dans les boites d'allumettes, la mise en de telle boites de pamphlets, cartes d'annonces ou réclames postiches, quelconques comme moyen de colportage d'annonces. L'a mise en paquets d'allumettes ligaturées par des rondelles de caoutchouc 'I', ou par des bandes de papier R ou Ri, ou en tout autre matière qu'en papier L ou par des cartouches S, l'excédant (s) couvrant la partie sablée les recouvrements inconfiammable II et imperméable H et imperméable H ou non tels qu'y collés ou non collés le compartiment l, l'espace K, l'incision L, l'ouverture M et le bloc de bois E tel que sablé ou non, le tout tel que décrit ci-dessus et pour les fins indiqués.

No. 22,059. Churn. (Baratte.)

James H. Taylor, Westfield, Mass., U.S., 13th July, 1885; 5 years.

Claim.—1st The combination of the churn dasher F, formed of the end pieces l, diagonally arranged cross-pieces l, and pieces l bevelled at both edges for removing the cream from the walls of the churn and deflecting it towards the centre, with the churn body A having the flanges d, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the churn body A, composed of the staves a and heads b, b, the staves being grooved at c to receive partial thickness of the heads b, b, with the flanges d, substantially as and for the purpose hereinbefore set forth. 3rd. The churn body formed with the flanges d, in combination with the castings formed with the flanges d, in combination with the castings formed manges d, in combination with the castings d formed with curb flanges e^2 and handle pieces e, substantially as and for the purpose hereinbefore set forth. 4th. The churn body A having the substantially as and for the purpose hereinbefore set forth. 5th. The churn body A of the churn, provided with half bands or hoops E, E, formed with lips or projections g, g, in combination with bolts h, levers i and pivoted links i1, arranged for Claim.-1st The combination of the churn dasher F, formed of the

trussing up the body of the churn, substantially as and for the purpose hereinbefore set forth. 6th. The combination of the iron cleats s_i, s with lips or handles therein, with the churn cover rabbeted at both ends to part rest on churn ends and hold the cover level, and part projecting inside of the churn and butting against churn ends to prevent cream from splashing out, substantially as described.

No. 22,060. Peanut Roaster.

(Torréfacteur de Pistache.)

Louis Rosencranz, Rhinebeck, N.Y., U.S., 13th July, 1885; 5 years.

Louis Rosencranz, Khinebeck, N.Y., U.S., 13th July, 1885; 5 years. Claim.—1st. The combination, with the heater A, of the drum B and warming-box C, substantially as described. 2nd. In a peanutrosster, the heater A formed with the opening c and collar d and provided with the false bottom b having the solid central portion b1, substantially as and for the purpose set forth. 3rd. The combination, with the heater A, having perforated false bottom b, having central solid portion b1, of the roasting drum B adapted to be revolved in the heater A, substantially as described. 4th. The heater A, provided with the stirrups f, in combination with the drum B, formed with the gudgeons c1, c1, the gudgeon c2 being screw-tapped to receive the crank or shaft g3, substantially as described.

No. 22,061. Waggon Jack. (Chèvre de Currosserie.)

Albert H. Fell, Toronto, Ont., 13th July, 1885; 5 years.

Albert II. Fell, Toronto, Ont., 13th July, 1885; 5 years.

Claim.—1st. In a lifting waggon jack, the shoes a, b attached to the standard A, and the strut B respectively, substantially as and for the purpose hereinbefore set forth. 2nd. In a waggon jack, the combination of the standard A and the strut B adapted to be separated at their lower ends more or less, to adjust the height of the device to conform to the height of the axle before being lifted, substantially as and for the purpose hereinbefore set forth. 3rd. In a waggon jack, the combination of the lever C and the strut B, pivoted together and adapted to sustain the weight of the axle, and also to sustain the weight of the axle, and also to sustain the whole device in position by merely bringing said lever C into line with said strut B, or as nearly in line as may effect that purpose, substantially as and for the purpose hereinbefore set forth. 4th. In a waggon jack, the combination of the strut B, with the standard A and the hand lever C, all pivoted together so as to be adapted to lift an axle and sustain themselves in position by merely bringing the hand lever C into line, or nearly into line, with the standard A and the hand lever C purposes hereinbefore set forth.

No 22,062. Vacuum Brake. (Frein à Vide.)

Louis P. Lawrence, Passaic N.J., U.S., 13th July, 1885; 5 years.

No 22,062. Vacuum Brake. (Frein à Vide.)

Louis P. Lawrence, Passaic N.J., U.S., 13th July, 1885; 5 years.

Claim.—1st. In an air-ejector for vacuum brakes, the body A having an upwardly slanting steam induction channel B3, an interior steam expansion chamber B4, drip-channels a1, a3 and an enlarged air-chamber D, all made integral in one casting, substantially as set forth. 2nd. In an air-ejector for vacuum brakes, an ejector body A having a slanting steam-induction channel B3, a steam-expansion chamber B4, drip channels a1, a3, an air-chamber D, and valve seats a, e and f, all cast integral in one piece, substantially as described. 3rd. In an air-ejector for vacuum brakes, the combination of an ejector-body A having a slanting steam-induction channel B3, and a steam-expansion chambers B4, with an air-exhaust pipe G and a steam-expansion chambers B4, with an air-exhaust pipe G and a steam pipe B5 secured to the expansion chamber, and a steam supply valve arranged at one end of the ejector-body and at some distance below the air exhaust pipe, substantially as set forth. 4th. In an air-ejector for vacuum brakes, the combination of the ejector-body A, having an exhaust pipe A1 and interior drip-channels a1, a3 and a gutter i2 around the raised seat of the air valve, with a drip valve N and ilscharge pipe N1 at the lower part of the ejector-body, substantially as set forth. 5th. In an air-ejector for vacuum brakes, the combination of the ejector-body A having a seat a, a steam-supply valve B having a forked extension b2, and an anti-friction roller b3, and an eccentric F having an exterior lever F2 for opening or closing the steam-supply valve, substantially as described. 6th. In an air-ejector for vacuum brakes, the combination b2 and anti-friction roller b3, an eccentric F having a shank F, guide cylinder F3 and lever F2, yoke C and set screw J, substantially as set forth. 7th. In an air-ejector for vacuum brakes, the combination of the ejector-body A having a drip-channel a6, and a recessed valve disk f1 secure