and lowering of the machine and the levelling frame; 2nd. In combination with the levelling frame I, the rocker plate K, attached on the under side and the lugs l, l, for the attachment of the reach; 3rd. The independent reach K, when constructed with the lugs l, l, and block N, and employed either in connection with the levelling frame or as a stay beneath the machine; 4th. In combination with the main frame C, the standard O, when connected with the segment block t, by passing through a socket in the same and secured by the guide plate and pin V; 5th. In combination with the main frame C, the rigid shore N, when passing through a socket of the segment block t, and made adjustable in the manner specified; 6th. The boxes P^1, P^2, made convex or rounding on the four sides and provided with the cylindrical projections v^2, v^2, for fitting the sockets S^1, S^2, of the pinions; 7th In constructing the rear box p^2, in two parts p^2, p^2, one of metal and the other of wood; 8th. In combination with the box O^2, which sustains the roller U^2, the base bar W^2, and clamp X^2; 9th. In combination with the bull-wheel D, the guide block or blocks T, when made adjustable by the wedge h^2, or equivalent as described; 10th. The brake U, bearing upon the rim of the spur gear F, when arranged to receive the foot of the operator; 11th. The angular or rounded end b^2, of the sweep arm S, fitting in the space between the block M, and rim of the bull-wheel when said end is provided with the hook c^2, and said block with the eye d^2; 12th. The staking bars P, Q, connected at one end with the bearings W, W, and at the other end with each other by the eye and elbow u; 13th. In combination with the bull wheel D, of a horse power, the windlass V, and its spur gear n^2, when the same has an end or vertical movement to throw it into or out of gear; 14th In combination with the bull-wheel D, the dead plates p^2, p^2, or equivalent pinions on a rack frame; 15th. The hanger X, and brace O^2, when said hanger incloses the bottom of spur gear F, and allows the vertical adjustment of box q^2, which holds pinion G

No. 2507. ONESIME THIBAUDEAU, Montreal, Que., 8th July, 1873, for 5 years: "Machine for Sweeping and Scraping Streets." (Machine à balayer et gratter les rues.)

Claim--1o. Une machine à gratter et à enlever la boue des rues et à les balayer, la combinaison des grattoirs E, tel que décrit, 2o. La combinaison des ressorts F, passant dans la coulisse verticale de la tête des grattoirs E; 3o. La combinaison des ressorts d'acier G, pour maintenir les grattoirs E, à leur place; 4o La combinaison manivelle U, avec l'axe vertical Y, et son pignon pour communiquer le mouvement du tambour T; 5o. La combinaison de la clef entaillée X, et son bouton à écrou X^1, avec la platine hexagone de l'axe vertical Y, pour retenir le rouleau balayeur P, lorsqu'il est relevé et l'empêcher de balayer, 6o. La combinaison du tambour T, et des chaines K^1, pour relever le rouleau balayeur P; 7o. La combinaison des guides N, des grattoirs E, et les languettes O, pour lever et abaisser les grattoirs E: 8o. La combinaison des trois rouleaux H, et de leurs chaines pour relever un des jeux des grattoirs E, à volonté, 9o. La combinaison d'un quatrieme rouleau J, et ses chaines pour relever ou abaisser les trois jeux de grattoirs E, en même temps, 10o. La combinaison des roues à gouttière Z, et Z1, et la chaine sans fin à maille carrée G1, pour communiquer le mouvement au rouleau balayeur P, 11o. La combinaison de la planchette C1, pour empêcher la poussière de s'élever et de se répandre de tous cotés; 12 La combinaison des grattoirs E, pour gratter et enlever la boue des rues et le rouleau balayeur P, pour les balayer; 13o. La combinaison des ressorts ou bandes de fer N1, pour baisser le brancard de derrière B, à mesure que s'usent les lames ou baleines métalliques du rouleau balayeur P; 14o. L'ensemble de la machine et la combinaison de toutes ses parties.

No. 2508. JOHN COWAN, Dromore, Kenmare, Ireland, 8th July, 1873, for 5 years: "Apparatus for Heating Green Houses, &c." (Appareil de chauffage des serres, &c.)

Claim.--In the combination of a lime burning kiln A, with a hot water boiler B, and circulating pipes C.

No. 2509. JOHN WALMSLEY, Elmira, Ont., 8th July, 1873, for 5 years: "A Harvester Reel." (Un râteau de moissonneuse.)

Claim.--1st The hinges h, h, joining the radial arms A, A, to the longitudinal bars B. B, 2nd A reel having the radial arms A, A, attached to the longitudinal bars B, B, by flexible joints or hinges h, h, or having the radial arms A, A, constructed with flexible joints or hinges at or near the longitudinal bars B. B, 3rd. The pins D, D, or their equivalents fixed to the bars B, B, for causing the bars B, B, to rotate or turn on the hinges h, h, from the withdrawing position r, to the working position R; 4th. The latches E, E, or their equivalents arranged to work automatically in engaging with the catches c, c, for temporarily securing the bars B, B, in their working position R; 5th The catches c, c, or their equivalents attached to the bars B, B; 6th The curved arm G, or its equivalent from actuating the bars B, B, and latches E, E, automatically; 7th. The arrangement and combination with a reel having its longitudinal bars B, B, attached to its radial arms A, A, by flexible joints or hinges of the pins D, D, latches E, E, catches c, c, and arm G, or their equivalents for automatically working the bars B, B. 8th The reel carrier or standard H, when attached to or erected on the extreme front of the divider piece I, of the platform, 9th. The arrangement and combination with an adjustable reel of the intermediate pulley P, pivoted in line with the pivot of the reel carrier F. to admit of adjusting the height of the reel, without affecting the tension of the belt or belts transmitting rotation to the reel, each substantially as specified.

No. 2510. ELAM F. AUSTIN, Rochester, N. Y., U. S., 8th July, 1873, for 5 years: "Velvet and Plush Mats and Robes." (Robes de voitures et nattes en velour et en peluche.)

Claim.—As an improved article of manufacture in a mat or robe having a trimming of long wooled skin B, combined with a central portion A, of plush velvet, cloth or carpet as set forth.

No. 2511. LORENZO P. WHITING, Poughkeepsie, N. Y., U. S., 8th July, 1873, for 10 years: "Adjustable Lathe Dog." (Mandrin de tour mobile.)

Claim.--An adjustable lathe dog consisting of the stationary plate A, the scroll plate E, centre plate H, jaws B, B, adjusting screws K, K, and nuts L, L, arranged substantially as and for the purpose described.

No. 2512. ALMON H. CALKINS, Chesterton, Ind., U.S., 8th July, 1873, for 5 years: "A Washing Machine." (Une machine à laver.)

Claim.--1st. A washing machine provided with yielding washing-rollers the combination and arrangement of the metallic blocks H, H, and the metallic pieces I, I; 2nd. A washing machine provided with yielding rollers the pins L, L, provided with the pins a, a, and arranged in the spiral part of the springs K, K, operating in connection with the yielding rollers; 3rd. A washing machine consisting in part of a combination and arrangement of rollers substantially, as specified, the pendant bar O, arranged in the manner described; 4th. A rotary washing machine, the grooved base-board C, in combination with the removeable extension block Q, and the supporting block P1.

No. 2513. HANNON W. CORNELL, Oswego, N Y., U. S., 8th July, 1873, for 5 years: "A Corn Sheller." (Egrenoir à blé-d'Inde.)

Claim.--1st. The shelling wheel J, having curved shelling surfaces on both sides extending inward from the periphery toward the centre for a certain distance as shown and provided with teeth S, S, of equal length, set in curved rows around the entire curved surfaces on both sides; 2nd. The adjustable double throat B, provided with feed passages a, a, angular bar b, with ears i, i, and the slotted flanges d, d; 3rd. In combination with the jaw C, arm G, and spring h, the adjustable slide h, to which the spring is attached for regulating the tension thereof, and set screw N, for adjusting the jaw; 4th. The combination of the feed wheels D. D, jaws C, C, and convex shelling wheel j, all constructed and arranged as described, and operated by the double cog-wheel K, pinion T, and cog-wheel M.

No. 2514. JOHN W. CLOSE, St. Thomas, Ont., 8th July, 1873, for 5 years: "A Railway Rail Chair." (Un coussinet de rail de chemin de fer.)

Claim.—1st. A frog chair A, constructed with or having flanges B, turning over up and out side the wing rails D, to prevent them from spreading when the chair is secured to the ties; 2nd. The bifurcated plate E, in combination with the chair A, and bolt G, for holding down the wing rails and for securing the frog I, fixedly as set forth; 3rd. The guard rails braces J, in combination with the chair A, and guard rail K.

No. 2515. GEORGE B. SNOW, Buffalo, N. Y., U. S., 8th July, 1873, for 5 years: "Steam Apparatus for Ringing Locomotive Bells." (Appareil à vapeur pour sonner les cloches de locomotives.)

Constructed in such a manner as to prevent any apparent leakage either of water or steam, without resorting to the use of the stuffing boxes and also to effect the admission and release of the steam directly by the motion of the piston without the use of any intermediate parts between the piston and valve.

Claim--The combination of the cylinder A, piston G, piston rod D, slotted rod C, and crank B, when constructed and operated in the manner and for the purpose described.

No. 2516. EDWIN S. FIELD, Hartford, Ct., U. S., 8th July, 1873, for 5 years: "A Spring Bed" (Un lit à ressorts.)

Claim.--1st. A wire netting composed of the V, shaped links hooked together; 2nd. The peculiarly shaped link g, for forming a straight edge to such a netting; 3rd. The corner sockets b, provided with the adjusting screws b, in combination with the side rails C.