shafts B, with cams a_i , a_{1i} , and a_{2i} , 4th. The arrangement and combination of the shaft c_i carriage L_{1i} , block N, shaft K, frame K_{1i}, divided half nuts m_i , m_{1i} , and spiral springs n_i , n_i for removing the formed ellip from the mandrel 1, 5th. The arrangement and combination of the spring pins P, bolts P₁, sliding blocks R_{1i} , provided with pieces S_{1i} , cank arms S_i connecting bar J^2 , and lever J^1 , for simultaneously locking the cam shafts B, to the spur wheels G.

Machine for Making Clips for Railway Rail Joints. No. 5794.

(Machine à faire les éclisses pour les joints des rails de railroutes.) John Forbes, Halifax, N. S., 16th March, 1876, (Extension of Patent No. 869), for 5 years.

No. 5795. Brick Machine. (Machine à brique.)

Joseph Close, Woodstock, Ont., 16th March, 4876. (Extension of Patent No. 886), for 5 years.

Claim.—1st. The stamping stock D, the press gauge G, and roller pin E, attached to the rim of the wheel H, 2nd, The open spaces I, in the stamping box B, the covering plates K, the cross bar M, and weight box N, attached thereto by the chain P; 3rd. The lever Q, and ratchet R, 4th. The mould frame roller S, attached by a reries of levers to the long lever V, the roller pin W, fixed to the rim of the wheel X, the lever weight Y, and lever block Z.

No. 5796. Horse Shoe Nail Machine.

(Machine a clau a cheval.)

Nelson W. Goodrich, Vergennes, Vt., L. S., 16th March, 1876, (Extension of Patent No. 1904), for 5 years.

No. 5797. Horse Shoe Nail Machine.

(Machine à clou à cheval.)

Nelson W. Gooderich, Vergennes, Vt., 47.8., 16th March, 1876, (Extension of Patent No. 1904), for 5 years.

No. 5798. Improvements on Saw Mills.

(Perfectionnements aux scieries.)

Benjamin F. Crabtree, Amity, N. Y., U. S., (Assignee of F. N. Whitcomb), 20th March, 1876, for 5 years.

20th March, 1876, for 5 years.

Claim.—1st. The conical pulley G, adjusted upon the end of the saw arbor B, by the end screw f; 2nd. The tubular box or bearing p, provided with a vertical projection n, on its upper and lower sale and held by vertical screw pivots x, to torm the self-adjusting bearings for the inner end of the counter shaft k, 3rd. The combination of the counter shaft k, excentre bearing box t, and the collar or sleeve w, held by the vertical pivot serews r, 4th. The combination of the eccentric bearing box t lever N connecting bar o, shaft R, with arm P, and lever S, the segment as with notch x and the spring book y, 5th. The combination of the ratchet wheels H. H., on the shaft D, shells Gr, Gr, pawls m, m, springs m, n., links tt, tr, collars k, k), and shaft L. (sh. The combination of the shelts Gr, Gr, baving spring pawls m, and arm p, cast m one piece, and the shaft I, having notches n, n, and lever J; 7th. In combination with a head block A, and knee Bt, the short shaft tr, and colled spring \(\sigma_t \), extending up to the side of the kateomary bar P, with notches on its outer face with bent portion \(f_t \), of the connecting rod R, and the notch \(\epsilon_t \), in the head block. the connecting rod Ri, and the notch e2, in the head block.

Machine for Fastening Window Sashes. (Machine à assujeter les croisées.)

Levi H. Montross, Simcoc, Ont., 20th March, 1876, for 5 years.

Claim.—The combination of the arms C. C. having cam-shaped faces working excentrically with the pivot E, and spring F.

No. 5800. Improvements on Pump Valves.

(Perfectionnements aux valves de pompes)

Linus Hubbard and William A. Hart, Buffalo, N. Y., U. S., 20th March, 1876, for 5 years.

Claim.—1st. A steel or other hand metal valve seat piece C—provided with a wrench section E_c valve seats D_c D_c and serces F_c F_c adapted to serew into the body H_c on one side, and the cage B_c on the opposite side, $2\pi d_c$ A removable reversible double seated valve piece in combination with the parts B and H_c

Machine for Drying Tobacco, No. 5801. Fruits, &c. (Machine a secher le labae, les fruits, &c.)

Joab Scales, Toronto, Out., 20th March, 1876, for 5 years.

John Scates, Toronto, Out., 20th March, 1876, for 5 years,
Claum.—188. A box A, provided with dampers M, and ventilating shaft L,
and heated by steam pipe K, in combination with travelling endless belts B,
and C, 2nd. The scrapers O, provided with fretion rollers R, and attached
to the cross-piece O, in combination with the springs R, and frame P, applied to the travelling belts B, and C; 3rd. The process for treating tobacco,
fruit, and other materials, the said process consisting in passing the material
to be operated upon, on endless travelling belts through a dose chamber or
box heated by hot air or steam, the said box being provided with a perforated
steam pipe indepted to moisten the material when desired during its progress
through the chambers and fitted with inlet and outlet flues for controlling
the admission and exit of the air.

No. 5802. Oil Squeezer. (Pressur a Phade.)

Edward Rawlings, Montreal, Que., (Assignee of H. Olsen), 20th March, 1876, for 5 years.

Claim:-ist. An oil squeezer constructed with two sides A. A. hinge B. squeezing surface of corrugated metal E, horse hair braids G, rods f, strip of leather L, metal strips I, and handle C.

No. 5803. Hydraulic Hoisting Machine.

(Elécatour hydraulique.)

William Askwith, Montreal, Que., 20th March, 1876, for 5 years.

Claim.—The combination of cylinder X, cover J, piston rod H, piston head I, gin block G, rope wheels D, E, F, threeway cock K, tank G, float cock S check valve T, and cock V.

No. 5804. Improvements on Chairs.

(Perfectionnements aux chaises.)

Joseph A. Eno and Charles H. Sherraden, Council Bluffs, Iowa, U. S., 20th March, 1876, for 5 years.

Claim.—ist. The combination with the legs of a chair of the divided cross braces D, and clamps 11.

No. 5805. Fire Extinguisher.

(Extincteur d'incendie.)

Joseph H. Connelly, New Brighton, Pa., U. S., 20th March, 1876, for 15 years Claim .- lst. The combination of a system of carbonic ucid gas mains the tributing pipes valves and connections to the several rooms or compartments in or parts of the building to be protected, and one more fixed or permanent in or parts of the building to be protected, and one more fixed or jermanous carbonic acid gas generators connected with such system of mains for the supply of carbonic acid gas the reto for extinguishing fires. 2nd The combination of a steam ejector nozzle with a system of main service and distributing pipes of a carbonic acid gas apparatus in order to employ stoom a connection with carbonic acid gas an extinguishing fires. 2nd The constant of a steam ejector with a line of hose from the carbonic acid gas service pipe for the throwing by the ordinary hose nozzle of a stream of commagned gas and steam; 4th. The combination of a gas ejector with the dischage pipe or orifice of a fice plug for the throwing of a stream of commingled gas and water in the extinguishing of fires. 5th. The combination of a gas become a water hose and a gas ejector at the place of union; 6th. The combination of a fixed or stationary receiver or receivers for the storage of water charge of a fixed or stationary receiver or receivers for the storage of water charged of a fixed or stationary receiver or receivers for the storage of water-charged with gas under pressure with a carbonic acid gas main or generator, a water main and service pipes, 7th. A service or bettery of portable gas recovers with a hose or pape connection therefrom, to and in combination with a lose leading from a fire plug or pump; 8th. The nozzle H, for throwing gas by steam pressure, having handles h_i , of a low-heat conducting capacity.

No. 5806. Improvements on Churns.

(Perfectionnements aux barattes.)

John Wood, South Eimsley, Out., 20th March, 1876, for 5 years.

Claim,—1st. The dasher shaft B, having the perforated vertical cria norm wings H, connected by a circular horizontal plate I, 2nd. The prevision to the exterior of the chamber A, of the casing J, having internal ribs. k, at the sides and bottom, and provided with such and outlet upertures L. M

No. 5807. Improvements on Steam Engines,

(Perfectionnements aux machines à vapeur.,

William H. Law, Riverside, Pa., U. S., 20th March, 1876, for 5 years.

Claim.—1st. The combination with any stationary engine of the bed plate A, formed as an inverted are and having chord B, with or without scroll end; 2nd. Inany semi portable horizontal engine, the combination of the bed-plate A, of any horizontal-engine, the hollow cylinder K, attached thereto, spring N, and pin L, secured to the axle of a pair of wheels; 4th. In combination with any vertical boiler, the flanged hollow eylinder K, having spring spring inside it, and pin L₀, with axle of wheel formed upon it. 5th. In combination with the end of any connecting rod, the arrangement with the brasses S₁, S₂, of the brass S, with sloping upper-surface corresponding with the under-surface of the block T, hollowed out and filled in clastic material V.

No. 5808. Improvements in Gas Stoves.

(Perfectionnements dans les poeles a gaz.)

Charles Burnham and Joseph G. Taite, Philadelphia, Pa., U. S., 20th March 1876, for 5 years.

Claim .- 1st The base A, reflector B, and gas ring D 2nd The combina tion of the reflector and gas ring with the radiating drum C.

No, 5809, Knitting Machine, (Machine a track

Jonas Hinckley, Norwalk, Ohio., U. S., 20th March, 1876, for 5 years.

list. The serrated bar I, thread carrier T, and looper C, 2nd. The teeth J, having the hooks 74. 3rd In combination with the teeth J having the hooks 74, the grooves 10; 4th. The thread carrier T., 5th. The thread the hooks 74, the grooves 10; 4th. The thread carrier T., 5th. The thread carrier T. provided with the spring cap T., and throat 19, 6th. The spring cap T., provided with the spring cap T., and throat 19, 6th. The spring cap T., provided with the sooks 18, 7th. The looper C. carri 29, and ever P. 8th. The looper C. provided with the elongated stud 18, 9th. The finger 94 and 95, arranged to operate in combination with the tooper C. teeth J. and the dearrier T: 10th. The slot 1), for actuating the inoger 95, 1th The brackst Q. provided with the can 79, 1sth. The brackst Q. provided with the can 79, 1sth. The brackst Q. provided with the same in combination with the lever P., 15th. The finger 95 pivoted directly to the finger 94, and provided with the sun 33, and with aspring at its provided supporting the thread carrier T. hooper C. primar R, and stripper 22; 17th. The stripper 22, in combination with the looper C, carrier I, teeth J, and fingers 94 and 95, 18th. The stripper 22, provided with the spring 21, to permit 14 and 55, 18th. The stripper 22, provided with the fanges 125, 20th. The adjustable thread guide f. in combination with the carrier T; 21st. The pitman N, provided