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INVENTIONS PATENTED.

NOTE-Patents are granted for 15 years. The term of years for which the fee has been paid, is given after the date of the patent.

No. 31,695. Tug Strap Holder for Looms. (Guide-courroie pour métiers mécaniques.)

Thomas Kendry and George N. Matheson, Sarnia, Ont., 2nd July'

Requires reoutly and reorge R. matneson, Sarnia, Ont., 2nd July' 1889; 5 years. Claim.-lst. A plate fastener G, and a tug-strap holder A, one hav-ing recesses H and the other projections P fitted loosely to said re-cesses, in combination with means for clamping them together and to the side of the picking stick, as and for the purpose set forth. 2nd, The stud or flange S, in combination with the plate fastener G, pin or bolt K having head or shoulder K, spring N, dog L, thumb nut Er, ratchet R, and bolt E, as and for the purpose set forth. 3rd. A plate fastener G and a tug strap holder A, one having recesses H and the other projections P fitted loosely to said recesses, in combination with a picking stick, as and for the purpose set forth. 4th. A plate fastener G and a tug strap holder A, one having recesses H and the other projections P fitted loosely to said recesses, in combination with a ratchet R, thumb nut Et, bolt E, dog L, spring N, and pin K formed with shoulders K1, as and for the purpose set forth. 5th. A plate fastener G and a tug strap holder A, one having recesses H and the other projections P fitted loosely to said recesses, in combination with a ratchet R, thumb nut Et, bolt E, dog L, spring N, and pin K formed with shoulders K1, as and for the purpose set forth. 5th. A plate fastener G and a tug strap holder A, one having recesses H and the other projections P fitted loosely to said recesses, in combination with a ratchet R, thumb nut Et, bolt E, picking stick D, dog L, spring N, pin K formed with shoulder K1, and stud or flange S, as and for the purpose set forth.

No. 31,696. Bureau. (Commode.)

Dwight C. Clapp, Charles E. Rigley, David M. Estey and The Estey Manufacturing Company, Owosso, Mich., U.S., 2nd July, 1889; 5 years.

years. Claim.—1st. The herein-described drawer, the sides of which are dropped back from the outer edge to form shoulders on the outer ends of the drawer, each extending beyond the sides of the drawer, and the inner portions of the shoulders being inclined or berelled, where-by the opening in the bureau may be larger than the drawer, and the drawer may present the same appearance as though it occupied the entire space, substantially as and for the purpose set forth. 2nd, The combination, with a bureau having openings for the reception of the drawers, of a series of drawers in the openings, each drawer being smaller than the space within the bureau, and having its sides dropped back from the outer edge to form shoulders, which extend be-yond the sides of the drawer, and have their inner portions inclined or beveiled, whereby the drawer apparently fills the entire space of the opening in the bureau, and presents a neat appearance, substantially as and for the purpose set forth.

No. 31,697. Apparatus for the Desiccation of Materials. (Appareil de demication.)

Thomas R. Houseman and Christian B. M. Sprowles, Philadelphia, Penn., U.S., 2nd July, 1889; 5 years.

Penn., U.S., 2nd July, 1889; 5 years. Claim-1st. In combination, perforated disks, a series of pipes passing through said disks into which heat is carried, a piston and mechanism to operate said piston, substantially as described, so as to compress any material upon said disks and desiccate it, and means to carry off said liquid. 2nd. In combination, perforated disks, a series of pipes passing through said disks, in which heat is carried and radiated through the mass, a perforated cylinder surrounding said disks, a cylinder surrounding said perforated cylinder provided with channels, a piston and mechanism to operate said piston, sub-stantially as described, so as to compress any material upon said disks and desiccate it, substantially as and for the purpose specified. 3rd. In combination, double perforated disks having supports and divisions between the upper and lower portions thereof, guide or guides upon which said disks are strung, a piston and mechanism to

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Oprise specified. States and selecate it, substantially as and for the purpose specified. States are strong, a perforated splinder, a piston and mechanism to operate said piston, substantially as described, so as to compress any material upon said disks and desiccate it, substantially as described, so as to compress any material upon said disks and selecate it, substantially as described, so as to compress any material upon said disks and selecate it, substantially as described, so as to compress any material upon said disks are strung, a series of pipes passing up through said disks, a cylinder surrounding said perforated splinder, a pipe of the surrounding said disks, a cylinder surrounding said disks, and selecates the selecate state and lower portions to operate said piston, substantially as described, so as to compress any material upon said receptacles. 6th. In combination, pipes passing up through said pipes (passing through said disks, a sple c in each of said pipes c for condensed steam, a piston and mechanism to operate said piston, substantially as described, so as to compress any material upon said disks and esiccate it. 7th. In ombination, perforated disks, and esiccate it. 8th. In combination perforated disks, and esiccates it. 8th. In combination, perforated disks, and esiccates it. 8th. In combination, a pitcon and esiccates it. 8th. In combination, a pitcon, serves H. Ht, beet gear A, At, spur-wheels At, At, whereby said piston, some sets and piston, serves H. Ht, beet gear A, At, spur wheels At, At, spur wheels

No. 31,698. Process for Purifying Crude Spirit and Regenerating the Purifying Agent. (Procede d'épuration des esprits bruts et de révivification Je l'agent épurateur.)

Marie C. A. Ruffin, Paris, France, 2nd July, 1889; 5 years.

Claim.-Ist. The herein-described process for purifying crude spirit by passing through it heavy petroleum oil of the kind men-tioned, and for regenerating the oil, so that the process can be carried on continuously on a given quantity of spirit during the time neces-sary for its purification.

No. 31,699. Automatic Apparatus for Testing Mine Gases. (Appareil automatique pour éprouver les gaz des mines.)

Thomas Shaw, Philadelphia, Penn., U.S., 2nd July, 1889; 5 years. Claim. -1st. The combination, with a gas tester, of two pumps, one communicating with a chamber containing the gas to be tested, and