

### CONTENTS.

LLDON PATENTED	123
LUSTRATIONS PATENTED. INDEX OF INVENTIONS. INDEX OF PATENTERS.	151
INDEX OF INVENTIONS.	I
Index of Inventions.	II

#### INVENTIONS PATENTED.

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

## No. 18,747. Broom Support. (Porte-Balai.)

William T. Shaffer, Evanstown, Wyoming, U. S., 1st March, 1884 ; 5 years

Claim. As an improved article of manufacture, the broom pocket made single an improved article of a broom, and provided with A  $\frac{G_{adim}}{G_{adim}}$  As an improved article of manufacture, the broom pocket a closed similar in shape to the brush of a broom, and provided with sportare, and the slot C extending from the top down to, and through width greater than the diameter of a broom-handle, as set forth.

No. 18,748. Fire-Escape. (Sauveteur d'Incendie.) John Usborne, Arnprior, Ont., 1st March, 1884; 5 years. Claim or and the sliding a

John Usborne, Arnprior, Ont., 1st March, 1884; 5 years. Chain, -lst. In a reversible fire-escape, the sliding arm or guide ends, with friction blocks B, and also provided, at one of its two with an actuating spring, and also adapted to be operated by hand, either by the attendant is enabled to grasp and operate by means of its springs. 2nd. In a fire-escape, the frame or body bracks, the other being automatically actuated at the same time provided with the fixed friction surfaces B and C;, the two pivoted action of both springs. 2nd. In a fire-escape, the frame or body bracks of its springs. 2nd. In a fire-escape, the combination, with bracks of its apprings applied to actuate said brakes, whereby the control of the operator. 3rd. In a fire-escape, the combination, with brack of and springs the stationary friction surface CI, of the pivoted as cancelled, whith a series of notches to admit of the band being E with the bar and the brake blocks C, C2, all substantially as de-brake and for the purpose set forth. No. 18.740 A: Stationary (Poéle à Huüle.)

INVN.

# No. 18,749. Oil Stove. (Poéle à Huile.)

John E. Fleming, Minneapolis, Min., U.S., 1st March, 1884 ; 5 years. Claim lot m. John E. Fleming, Minneapolis, Min., U.S., 1st March, 1884 : 5 years. Gram. Ist. The cone supporter N having legs of unequal length, in the insides of the cone supporter N having legs of resting against as above and described. 2nd. In an argand burner, the combination of the cone M having lugs i, i, and cone supporter N having slots e, e, the cone M having lugs i, i, and cone supporter N having slots e, e, the cone M having lugs i, i, and cone supporter N having slots e, e, the cone from its supporter, substantially as shown and described. or the annular diaphragm Q, substantially as shown. 4th. The stand in the purpose of attaching and detaching and detaching and described. 5th. The combination of the drum table T, with the removable or adjustable cone M, substantially move dome W, the adjustable cone supporter N and internal air or adjustable cone M, the adjustable cone d, unbatantially as shown and described. 5th. In combination of the wick-raiselly as shown and described. 6th. In combination and internal air or diabatable contral air supplying cone M, provided with a perfor-No. 18.750. Hydro-Carbon Lamp. No. 18,750. Hydro-Carbon Lamp.

Thomas Walsh, Montreal, Que., 1st March, 1884; 5 years. Claim-lat, Montreal, Que., 1st March, 1884; 5 years. and plate L. The combination of the pipe F, nozzle H, thimble K plate L, having opening M, constructed, arranged and operated, substantially as described. 2nd. The combination of the vessel A stop-cock E, pipe F, nozzle H, thimble K and plate L having opening M, the whole substantially as described. 3rd. The combination of the vessel A having valve N and pipe O, with the pipes D and F, nozzle H, stop-cock K and plate L having opening M, the whole sub-stantially as described. stantially as described.

#### No. 18,751. Rock Drill. (Foret de Mine.)

Edwin A. Armstrong, Detroit, Mich., U. S., 1st March, 1884; 5 years. Claim.—1st. In a rock-drill and in combination with the frame A thereof, the cross-head G provided with means for automatically feeding said cross-head within the frame A, substantially asset forth. 2nd. In a rock-drill and in combination with the frame A mounted upon trunions, substantially as described, the cross-head G actuated by the feed shaft H, which carries a crown ratchet I, which in turn is actuated and engages with pawls Y operated by the lever W, and the wipe V upon the main shaft L, substantially as described. 3rd. In a rock-drill and as a means for controlling the rotation of the drill shaft or bar, the ratchet wheels R, Ri, provided with spiral and straight splines k, l respectively, which engage with proper channels in the periphery of the drill-bar, substantially as and for the purposes specified, 4th. As a means for regulating or throw-ing off the feed lever w, and in combination therewith, the thumb regulator screw Z, substantially as set forth. 5th. In a rock-drill and in combination with the frame A and tripod E thereof, the trunions a, clip box B, trunions C and boxes D for securing adjustment to the frame A, substantially as and for the purposes specified. 6th A tri-pod for supporting a rock-drill, the legs of which terminate in feet or kness adapted to receive divided balls or spheres for embrasing ex-tension legs D1 and H<sub>1</sub>, substantially as specified. 7th. A rock-drill wherein the blow of the drill is compelled by the expansion of a coil spring, adapted to be retracted by means of a cam upon the main driving shaft, substantially as described. Edwin A. Armstrong, Detroit, Mich., U. S., 1st March, 1884; 5 years.

#### No. 18.752. Grain Cleaner. (Nettoyeur des Grains.)

Elnathan Phelps, Hartford, Mich., U. S., 1st March, 1884; 5 years.

Einathan Pheips, Harttora, Mich., U. S., 1st March, 1884; 5 years. Claim.—Ist. The herein-desoribed grain-cleaner, consisting of the frame A and vertical shaft B provided with the suction fan D, dis-tributing beater-blades E, brush-frames J, I and Jz, in combination with the chamber C, perforated casing G, vertical rods F, inclined shelves H, Hz and air-chambers and discharge spouts, substantially as shown and for the purpose specified. 2nd. The inclined distribut-ing beater-blades E, arranged one above the other, in combination with the vertical rods F, inclined shelves H, H1 and perforated casing G, substantially as shown and described.

#### No. 18,753. Steam Boiler. (Chaudière à Vapeur.)

Patrick Fitzgibbons, Oswego. N.Y., U. S., 1st March, 1884; 5 years.

Claim.-In a return flue boiler having a rear end extension with a Utaim.—In a return flue boiler having a rear end extension with a man-hole in the bottom thereof, a water jacketed combustion cham-ber constructed of the rear flue sheet and inner water back sheet, having their edges flanged toward the combustion chamber, and their bottom flange rivetted directly to the boiler shell extension, at oppo-site edges of the man-hole, and the crown sheet extended to, and ter-minating at said man-hole, and rivetted to the exterior of the flanges of the aforesaid flue-sheet and water-back sheet, and directly to the bottom portion of the boiler shell extension, the whole constructed and combined substantially as described and shown.

#### No. 18,754. Grain Feeder and Band Cutter for Thrashing Machines. (Alimentateur et Tranche-Hart pour Machines à Battre.)

Orrin C. Van Ness, Pomme de Terre, Minn., U.S., 1st March, 1884; 5 years.

Claim.—Ist. The combination, with a threshing machine, of a roll B journalled at the feed end of the machine, side pieces C pivoted at one end adjacent to the roll, side pieces Cr hinged to the other ends of the pivoted side pieces, a roll D journalled at the outer ends of the hinged side pieces, a travelling grain carrier mounted on the rolls, a travelling band-cutter carrier arranged above the delivery end of the