

Vol. VIII.—No. 10.

OCTOBER, 1880.

Price in Canada \$2.00 per An. United States - \$2.50

CONTENTS.

INVENTIONS PATENTED	171
INDEX OF INVENTIONS	
INDEX OF PATENTEES	CLXXXV
Illustrations	187

INVENTIONS PATENTED.

No. 11,659. Improvements on Back Stay for Shoes. (Perfectionnements aux renforts des souliers.

Charles E. Whittlesey and Samuel A. Stevens, New Haven, Ct., U. S. 19th August, 1880; for 5 years.

Claim.—A heel stay shaped from leather or other suitable flexible material and adapted for attachment to the inside of the finished shoe.

No. 11,660. Improvements on Chromatic Printing Machines. (Perfectionnements aux machines à imprimer en couleur.

George M. Wright, Philadelphia, Pa., U. S., 19th August, 1880; for 5

Claim .- 1st. The platen D, in combination with the double crank shaft Claim.—18t. The platen D, in combination with the yokes E, provided with stems H, and the base a. 3rd. The platen D, in combination with the weighted levers V, pivoted to the base a and bearing combination with the weighted levers V, pivoted to the base a and bearing against the stems H. 4th. The inking rollers J and guided boxes or bearings JI, in combination with the jointed arms K. rock shaft L, arm MI nd cam M. 5th. The vibrating rollers S, in combination with the hinged bat T, consisting of two or more pieces hinged together, and each hinged to the frame A and provided with ears m. 6th. The cylinders N Ni NiI, the intermittently operated fountain roller Q and oscillating roller P. 7th. The stop or throw off Z, in combination with the elbow lever X, which carries the pawl of the feed ratchet. 8th. The ratchet W, pawl WI, elbow lever X, screw or throw off Z, and telescopic piece Y, in combination with the feed rollers. 9th. The combination with the feed rollers. 9th. The combination with the feed rollers, of the telescopic piece Y, spring t and adjusting put tr. piece Y, spring t and adjusting nut t_1 .

No. 11,661. Improvements on Bolt Fastenings. (Perfectionnements aux arrête-boulons.)

Edward Leslie, Orangeville, Ont., 21st August, 1880; (Extension of Patent

No. 11,662. Improvements on Bolt Fastenings. (Perfectionnement aux arrête-boulons.)

Edward Leslie, Orangeville, Ont., 23rd August, 1880; (Extension of Patent No. 11,004.)

No. 11,663. Governor for Horse Power. (Gou. verneur de manége.)

Josiah D. Heebner, Marritonville, and Anthony H. Seipt, Skinpackville, Pa., U. S., 24th August, 1880; (Extension of Patent No. 5,119.)

No. 11,664. Governor for Horse Power. (Gou. verneur de manége.)

Josiah D. Heebner, Marritonville, and Anthony H. Seipt, Skippackville. Pa., U. S., 25th August, 1880; (Extension of Patent No. 5,119.)

No. 11,665. Improvements on Car Links. (Per. fectionnements aux chainons des chars.)

Allen Middleton, Philadelphia, Pa., U. S., 26th August, 1880; for 5 years. Claim. A weldless link of steel, the ends of which are re-enforced in thickness and in which the grain of the metal is straight throughout. No. 11,666. Improvements on Boat Sliding Seats. (Perfectionnements aux siéges des bateaux en coulisse.)

Octavius L. Hicks, Etobicoke, Ont., 26th August, 1880; for 5 years.

Claim.—The combination of the rollers or wheels G G, which may be loose or fixed on their axis, concave or convex on their surface, or fixed in such a manner as to carry the seat on their circumference and run on the tracks B B.

No. 11,667. Improvements on Rollers for Printing, Dyeing, Embossing and other like purposes. (Perfectionnements aux rouleaux pour imprimer, teindre, bosseler et autres fins semblables.)

Joseph J. Sachs, Manchester, Eng., 26th August, 1880; for 5 years.

Claim .- Casting Spence's metal, or other metal or composition of a like nature, in a tube of copper, brass or other suitable material.

No. 11,668. Improvements on Machines for Grinding and Reducing Grain and other Materials. (Perfectionnements aux machines à triturer et réduire le grain et autres objets.)

John Stevens, Neenah, Wis., U. S., 26th August, 1880; for 5 years.

John Stevens, Neenah, Wis., U. S., 26th August, 1880; for 5 years.

Claim.—1st. A grinding mill or cylinder taving a dress composed of a series of rounded ribs with the advancing sides of easy bevel, and the retreating sides of sharper bevel. 2nd. A grinding concave having a dress composed of a series of rounded ribs, with the sides opposed to the revolution of the cylinder of easy bevel and the other sides of sharper bevel. 3rd. In a grinding mill, the combination of a cylinder having a dress composed of a series of parallel rounded ribs with a concave having a dress composed of a series of parallel rounded ribs of easy bevel, on the sides opposed to the revolution of the concave and of sharper bevel on the other sides. 4th. The combination of a cylinder having a dress composed of a series of rounded ribs of which the advancing sides are of easy bevel and the retreating sides of sharper bevel, with a concave having a similar dress applied reversely to that upon the cylinder, so that corresponding faces of the ribs may meet. 5th. The concave journalled in sliding blocks, in combination with the rearwardly extending lever rigid therewith, and the adjusting screw working in or against such lever and taking into a swivel block on the frame. 7th. The combination, with the concave mounted in sliding blocks, of the adjusting screws for determining its maximum of retreat from the cylinder, springs for holding it against such cylinder. 8th. The combination, with the concave mounted in sliding blocks, of the adjusting screws for determining its maximum of retreat from the cylinder, springs for holding it against the cylinder and means for adjusting screws for holding it against the cylinder and means for adjusting stress of such springs without affecting the adjustment of the screws. 9th. The combination, with the concave mounted in sliding blocks, of the adjusting screws for holding it against the cylinder and means for adjusting the stress of woth springs without affecting the adjustment of the screws to adjust the st determining its maximum of retreat from the cylinder, springs for holding it against the cylinder coiled about such adjusting screws and nuts upon the screws to adjust the stress of the springs. 10th. The combination with the concave mounted in sliding blocks, of adjusting screws having their heads at the exterior of the machine passing through the frame and threaded into such blocks, and bearing against the pillow-blocks of the cylinder, to determine the minimum of distance between said cylinder and concave. 11th. The combination of the concave mounted in sliding blocks, ofsprings to press against the cylinder and adjusting screws having their heads at the exterior of the machine passing through the frame and threaded into pillow blocks, of the concave and bearing against the pillow blocks, of the cylinder to determine the limit of approach of said concave to the cylinder. 12th. The combination, with the sliding blocks in which the concave is mounted, of springs to press it against the cylinder, adjusting devices to determine the minimum of retreat from said cylinder and adjusting devices to determine the minimum of distance between the two. 13th. The combination of the concave, the adjusting screws E to determine its maximum by retreat from the cylinder, and the adjusting screws F passing axially through the former threaded into the sliding blocks of the latter and bearing against the pillow blocks of the cylinder, to determine the minimum of distance between the