



Vol. XVII.—No. 5.

APRIL, 1889.

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

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. 31,024. Dyeing or Scouring Machine.

(Machine à dégraisser.)

Charles L. Klauer, Philadelphia, Penn., U.S., 2nd April, 1889; 5 years.

Claim.—1st. In a dyeing or scouring machine, the combination of a dye or liquor tank, a frame partly supported therein, inner and outer sets of cross bars carried by the frame upon which the skeins of yarn to be treated are hung, one of said sets of bars being adapted to rotate to gradually turn the yarn, projections moved with said rotatable cross bars, a pivoted stop in the path of said projections, and a spring to normally hold said stop in position, whereby as the frame carries the cross bars past the stop, the projections thereof strike the stop and impart to the bar a portion of a revolution, but when the bar is not free to rotate the pivoted stop is pushed aside by said projection and returns again to its normal position after the projection has passed it. 2nd. In a dyeing or scouring machine, the combination of a dye or liquor tank, a frame partly supported therein, inner and outer sets of cross bars carried by the frame upon which the skeins of yarn to be treated are hung, one of said sets of bars being adapted to rotate to gradually turn the yarn, projections moved with said rotatable cross bars, a pivoted stop in the path of said projections, a spring to normally hold said stop in position, whereby as the frame carries the cross bars past the stop the projections thereof strike the stop and impart to the bar a portion of a revolution, but when the bar is not free to rotate the pivoted stop is pushed aside by said projection, and returns again to its normal position after the projection has passed it, and an adjusting screw to regulate the tension of said spring. 3rd. In a dyeing or scouring machine, the combination of a dye or liquor tank, a frame partly supported therein, inner and outer sets of cross bars carried by the frame upon which the skeins of yarn to be treated are hung, one of said sets of bars being adapted to rotate to gradually turn the yarn, projections moved with said rotatable cross bars, a pivoted stop in the path of said projection, a spring to normally hold said stop in position, whereby as the frame carries the cross bars past the stop the projections thereof strike the stop, and impart to the bar a portion of a revolution, but when the bar is not free to rotate the pivoted stop is pushed aside by said projection and returns again to its normal position after the projection has passed it, and an indicator operated by said pivoted stop when moved. 4th. In a dyeing or scouring machine, the combination of a dye or liquor tank, a frame partly supported therein, inner and outer sets of cross bars carried by the frame upon which the skeins of yarn to be treated are hung, one of said sets of bars being adapted to rotate to gradually turn the yarn, projections moved with said rotatable cross bars, a pivoted stop in the path of said projection, a spring to normally hold said stop in position, whereby as the frame carries the cross bars past the stop the projections thereof strike the stop and impart to the bar a portion of a revolution, but when the bar is not free to rotate the pivoted stop is pushed aside by said projection and returns again to its normal position after the projection has passed it, an alarm or indicator consisting of a gong and hammer, and a connection between said pivoted stop and hammer. 5th. In a dyeing or scouring machine, the combination of a dye or liquor tank, a frame partly supported therein, inner and outer sets of cross bars carried by the frame upon which the skeins of yarn to be treated are hung, one of said sets of bars being adapted to rotate to gradually turn the yarn, star wheels loosely journaled in said frame acting as bearings for said rotatable cross bars, a stop in the path of the projections of said star wheel, whereby as the frame carries the cross bars past the stop the projections of the star wheels strike the stop and impart to the bar a portion of a revolution, ratchets connected with said star wheels and rotating with them, and pawls upon the frame to engage in said ratchet to prevent backward rotation of the cross bars. 6th. The combination of a dye or liquor tank, a frame partly supported therein, inner and outer sets of cross bars carried by the frame upon which the skeins of yarn to be treated are hung, and circular guides on the inner faces of said supporting

frame to keep the skeins away from said faces of the frame. 7th. The combination of a dye or liquor tank, a frame partly supported therein, inner and outer sets of cross bars carried by the frame upon which the skeins of yarn to be treated are hung, one of said sets of bars being adapted to rotate to gradually turn the yarn, suitable means to rotate the frame and move the cross bars through the liquor, and an indicator operated by said rotatable cross bars to indicate when through any accident one of said bars has not been rotated. 8th. The combination of a dye or liquor tank, a frame partly supported therein having its inner portions provided with concentric series of holes or bearings, inner and outer sets of cross bars carried by said frame, one of said sets of cross bars being adjustable to or from the other set in said concentric series of holes or bearings in the supporting frame, and suitable means to rotate said frame and move the cross bars through the liquor. 9th. In a dyeing or scouring machine, the combination of a rotatable frame, inner and outer sets of cross bars carried by said frame and removable therefrom, and having their ends projecting through one end of said frame, and upon which bars the yarn to be dyed or scoured is hung, a closed case for said rotating frame, the lower portion of which is adapted to contain the dye or other liquor, said case being provided with guiding surfaces adjacent to the ends of said bars, and doors located in the said guide surfaces and in the paths of the ends of said cross bars, through which doors said bars may be inserted in, or removed from, said frame, or adjusted in it. 10th. In a dyeing or scouring machine, the combination of a rotating frame supporting bars for the yarn adapted to rotate, and carried by said frame, a dye vat for the liquor through which said supporting bars are carried, and a spring stop arranged in the path of said rotatable supporting bars adapted to strike against them and impart to them a portion of a revolution, but if any of said bars is not free to rotate to be pushed aside and return again to its normal position after the bar has passed it. 11th. The combination of the dye tank or vat, a rotating frame having journals therein, longitudinally movable cross bars for carrying the yarn, whereby they may be removed or inserted in the rotating frame, a circular guide to prevent the longitudinal movement of the cross bars to lock them in operative position on the rotating frame. 12th. The combination of the dye tank or vat, a rotating frame having journals therein, longitudinally movable cross bars for carrying the yarn, whereby they may be removed or inserted in the rotating frame, a circular guide to prevent the longitudinal movement of the cross bars to lock them in operative position on the rotating frame, and removable doors or sections formed in said guides to permit the removal of the cross bars. 13th. The combination of the dye vat, a rotating frame, cross bars journaled therein for holding the skeins of yarn and carrying them through the liquor in the vat, mechanism for rotating said cross bars, and a gong or indicator to indicate when either of said cross bars becomes fast against rotation, and a connection between the gong or indicator and cross bar, adapted to be operated by the cross bar. 14th. The combination of the dye vat, a rotating frame, cross bars journaled therein for holding the skeins of yarn and carrying them through the liquor in the vat, mechanism for rotating said cross bars, and suitable means to prevent backward rotation to said cross bars.

No. 31,025. Method of Sorting Disintegrated Wood for the Manufacture of Cellulose and Apparatus therefor. (Mode et appareil de triage du bois trituré pour la fabrication de la cellulose.)

Ludwig Piette, Pilsen, Austria, 2nd April, 1889; 5 years.

Claim.—1st. A method of sorting disintegrated wood consisting in feeding the wood to a constantly moving sieve, on which a suction air current acts in such a manner that the lighter particles of the disintegrated wood are thereby held against the sieve while the heavier particles fall off, substantially as described. 2nd. In apparatus for sorting disintegrated wood, the combination, with endless travelling sieves, such as A and B, of a suction box or chamber, such as L, for drawing the lighter or less knotty particles of the wood from sieve A to sieve B, while the knotty and heavier particles remain on sieve A, substantially as specified. 3rd. In apparatus for sorting disintegrated wood, the employment of a suction box or chamber, such as L, partition N, second suction box or chamber, such as O, with reduced