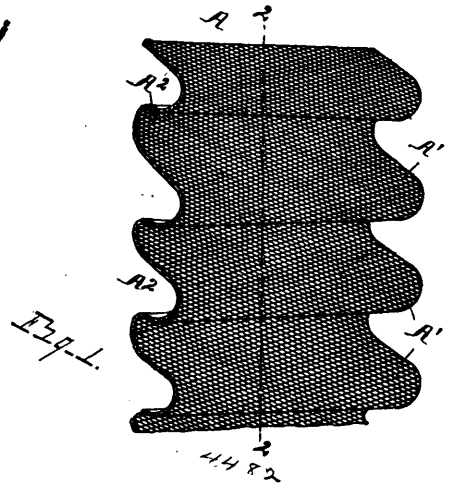
No. 44,822. Screen. (*Ecran.*)

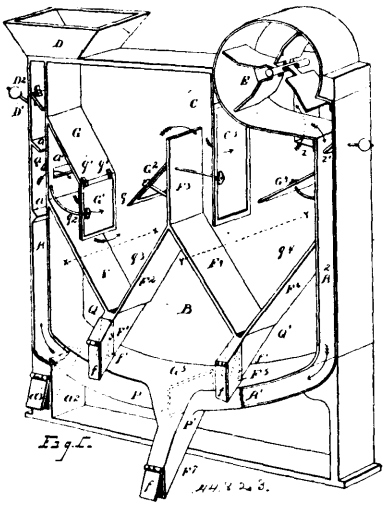


David J. Davidson, Abraham S. Martin and Stephen G. Martin, all of Port Huron, Michigan, U.S.A., 5th December, 1893; 6 years.

Claim.—A corrugated screen, substantially as set forth.

No. 44,823. Separator and Grader.

(*Appareil de nettoyage et de gradation des grains.*



David J. Davidson, Abraham S. Martin and Stephen G. Martin, all of Port Huron, Michigan, U.S.A., 5th December, 1893; 6 years.

Claim.—1st. A vertical or perpendicular purifier, separator and grader, arranged and provided with means to effect a continuous air current therein, the desired separations of the stock supplied thereto being effected by gravity in connection with said air current, substantially as set forth. 2nd. A vertical or perpendicular purifier, separator and grader, provided with a vertical air trunk to receive the stock, and means for effecting an air current in said air trunk, substantially as set forth. 3rd. A vertical or perpendicular purifier, separator and grader, provided with vertical communicating air trunks into one of which the stock is fed, and means to provide an air current in said air trunks, substantially as set forth. 4th. A vertical or perpendicular purifier, separator and grader, constructed with a vertical air trunk, a fan to effect an air current therein and means to diminish the force of the air current, and thereby cause a separation of the stock, substantially as set forth. 5th. In a purifier, separator and grader, the combination of a fan, an interior air chamber communicating with the interior of the fan case, a feeding device, and a continuous air passage leading from the fan to said feeding device and communicating with said interior air chamber, substantially as set forth. 6th. In a purifier, separator and grader, the combination of a fan, an interior air chamber communicating with the interior of the fan case, a feeding device, and a continuous air passage leading from the fan downward underneath the air chamber, and upward to the feeding device and communicating with said air chamber, substantially as set forth. 7th. In a purifier separator and grader, the combination of multiple communicating air trunks, an interior air chamber communicating therewith, and a fan to produce an air current through said air trunks and chamber, substantially as set forth. 8th. In a purifier, separator and grader, the combination of an interior air chamber, a fan, a continuous air passage leading from the fan case and communicating with said air chamber, and a feeding device communicating with the air trunk, provided with a valve to control the passage of stock into the air trunk, substantially as set forth. 9th. In a purifier, separator and grader, an interior air chamber, a fan, a feeding device, a continuous air passage leading from the fan to said feeding device and communicating with said air chamber, and an automatic valve to control the feed of the stock into said air passage, substantially as set forth. 10th. In a purifier, separator and grader, an interior air chamber, a fan, a feeding device, a continuous air passage leading from the fan to the feeding device and communicating with said air chamber, said air passage beneath the feeding device, provided with breakers to throw the stock into the centre of the air passage, substantially as set forth. 11th. In a purifier, separator and grader, the combination of an interior air chamber, and multiple communicating air trunks forming a continuous air passage, said air trunks provided with discharge ducts or outlets, substantially as set forth. 12th. In a purifier, separator and grader, the combination of an interior air chamber, vertical or perpendicular air trunks A, A^2, an air trunk A^1, connecting the air trunks A, A^2, a feeding device communicating with the trunk A, and a fan having its case communicating with the air trunk A^2 and with the interior air chamber, the trunk A communicating with the air chamber, substantially as set forth. 13th. In a purifier, separator and grader, the combination of a fan, an interior air chamber communicating with the interior of the fan case, a continuous air passage leading from said fan case and communicating with said chamber, a series of separating devices located within said air chamber, and means of discharging the products separated within said air chamber, substantially as set forth. 14th. In a purifier, separator and grader, the combination with the air trunk A, A^1, A^2, of a feeding device communicating with the upper end of the trunk A, and a fan having the interior of its case communicating with the upper end of the trunk A^2, the trunk A provided with a discharge opening at its base, substantially as set forth. 15th. In a purifier, separator and grader, the combination of an interior air chamber, air trunks A, A^1, A^2, communicating one with the other, the fan having its case communicating one with the other, the fan having its case communicating with the interior chamber and with the trunk A^2, the trunks A, A^2 provided with discharge ducts or outlets, substantially as set forth. 16th. In a purifier, separator and grader, the combination of an interior air chamber, air trunks A, A^1, A^2, a fan to produce an air current through said air trunks and air chamber, and a valve located within the trunk A^2 to control the air current, substantially as set forth. 17th. In a purifier, separator and grader, the combination of a fan, an interior air chamber communicating with the fan, a feeding device, a continuous air passage leading from the fan to the feeding device and communicating with the interior chamber below the feeding device, an interior cant board within the air chamber below the inlet orifice, a diaphragm supported above the cant board and forming a passage therebetween, a discharge duct or outlet located at the base of said cant board, and means to control the discharge through said outlets, substantially as set forth. 18th. In a purifier, separator and grader, the combination of a case forming an interior air chamber, a fan having its case communicating with said chamber, a feeding device, and a continuous air passage leading from the fan to the feeding device, and communicating therebelow with the interior air chamber, a series of cant boards located within the air chamber provided with corresponding diaphragms thereabove, said cant boards and diaphragms arranged substantially as and for the purposes set forth. 19th. In a purifier, separator and grader, the combination of a case forming an interior air chamber, air trunks communicating one with another and with the interior chamber, a feeding device communicating with the air trunks, a fan communicating with the air trunks and with the interior chamber, the interior chamber provided with cant boards F, F^2, discharge duct F^1 at the base of said cant boards and diaphragms G^1, G^2 supported above said cant boards, substantially as set forth. 20th. In a purifier, separator and grader, the combination of a case forming an interior air chamber, air trunks communicating one with another and with the interior chamber, a feeding device communicating with the air trunks, a fan communicating with the air trunks and with the interior chamber, the interior chamber provided with cant boards F, F^2, and discharge duct F^1 at the base of said cant boards, diaphragms G^1, G^2 supported above said cant boards, a division wall at the upper end of the cant board F^2, additional cant boards F^4, F^6 provided with a discharge outlet at their base and diaphragms G^3, G^4 located above the cant boards F^4, F^6, substantially as set forth. 21st. In a purifier, separator and grader, the combination of an enclosing case forming an interior air chamber, vertical air trunks A, A^2, an air trunk A^1, connecting the lower ends of the trunks A^1, A^2, discharge outlets leading from said latter air trunks, and separating diaphragms and cant boards located within the air chamber and provided with corresponding