

No. 10,608. Process for Converting Fish into Manure. (*Procédé pour produire de l'engrais de poisson.*)

George B. Oakes, Digby, N. S., 5th November, 1879, for 5 years.

Claim.—The process of cooking fish, fish refuse or gurry, either with or without the addition of alkalies, acids or salts, then by drying, adding lime or other absorbents, to render the mass portable, practical and commercial.

No. 10,609. Tilling Apparatus. (*Appareil de labourage.*)

Charles E. Sackett, Matilda Furnace, Penn., U. S., 5th November, 1879, for 5 years.

Claim.—1st. A plough in combination with a pulverising mechanism, said pulverising mechanism being adapted to operate by the side of the plough in the furrow previously made and receiving and pulverizing the earth as it is turned; 2nd. The combination of a plough carried on a frame, of a wheel supporting said frame and adapted to move on the bottom of the furrow last made and to receive and pulverize the earth from the furrow in process of making; 3rd. A revolving pulverizer, closed or partially closed on the furrow side, adapted to receive the earth from the land side and provided with internal pulverizing apparatus; 4th. In combination with the revolving pulverizer, radially arranged teeth or transverse bars; 5th. In combination with the revolving pulverizer having bars and teeth, the shield; 6th. The combination of a plunging and pulverizing device mounted upon one frame, and operating together with the main frame of a carriage, upon which it is vertically adjustable; 7th. The combination of a carriage frame, of a frame carrying plunging and pulverizing devices, and of the lever; 23. Lifting bars 26, shackle bars 25, lifting cranks 27 and the shaft crank, connecting rod and lever or their equivalents; 8th. In combination with the lifting apparatus and the suspended frame, the springs 24 arranged upon the bolts of the principal lever bars 23 and operating with the controlling lever to raise the frame; 9th. The combination of a carriage frame and combined plough and pulverizing frame with the lifting springs 24, the principal levers 23, lifting bars 26, the shackle bars 25, lifting cranks 27, crank shaft 28, angling crank 29, connecting rod 31, controlling lever 31 and stop frame 32; 10th. In a vertical wheel pulverizer, the combination of transverse removable bars and the perforated rims, whereby the spaces are made adjustable in width; 11th. A vertical wheel pulverizer 2, in combination with a pulverizing plate 15 having hinged finger bars or cleaners 17 and springs 19, whereby obstructions which will not pulverize are passed without injury to the implement; 12th. The plough made laterally adjustable in combination with the vertical wheel pulverizer, the mould board of the plough being adapted to the inner periphery of the pulverizer; 13th. A vertical wheel pulverizer 2, in combination with a plough 4 made fast to a sliding beam 5, sliding upon rods as 66 and actuated by a screw 7 and crank handle 8 or similar device, all into connection with the common frame 111, whereby the amount of earth turned into the harrow may be regulated; 14th. In a combined plough and pulverizer, the combination therewith of a wheel 10 actuated and adjusted by the angle lever 9 and rod 11, forming with the pulverizer, a rolling support for both sides of the implement and to regulate the depth of cut; 15th. A seed drill 22 working in combination simultaneously with a plough and pulverizer, and the devices for its adjustment and operation in combination therewith; 16th. The combination of a carriage frame and wheels with a plough, pulverizer and seed-drill working simultaneously; 17th. The combination with a carriage, of substantially the construction described, of a supplemental frame suspended on one side and carrying plunging and pulverizing devices, which operate in connection with each other, and of a seed dropping device mounted on the opposite side, the whole operating to plough, harrow and plant at one operation.

No. 10,610. Remedy for Diphtheria. (*Remède contre la diphthérie.*)

Samuel H. Longard, Halifax, N. S., 5th November, 1879, for 5 years.

Claim.—The following ingredients viz: Myrrh, rectified spirits of wine vitriolic acid and aqua pura.

No. 10,611. Improvements on Telephones. (*Perfectionnements aux téléphones.*)

Henry P. Andrew and George Moore, Toronto, Ont., 5th November, 1879, for 5 years.

Claim.—1st. In telephones, the combination of a diaphragm and a compound or horse-shoe magnet, said diaphragm being placed in electrical connection with one pole of the magnet; 2nd. The combination with the diaphragm of a telephone, of one or more compound or horse shoe magnets and an induction coil, said magnets being so arranged that one pole of each is grouped opposite to the centre of the diaphragm within an induction coil while the opposite pole of the magnet or each magnet is placed in electrical contact with the diaphragm; 3rd. The combination with a telephone diaphragm constructed of mix or equivalent material, of a metal plate provided with one or more radial arms; 4th. The combination with the diaphragm B, magnet C and induction coil D, of the adjustable core pin J; 5th. The combination with a telephone, of the mouth and ear funnels F G, said funnels being curved to the outline shown and one or both being provided with a hinge joint for adjustment.

No. 10,612. Improvements on beds. (*Perfectionnements aux lits.*)

Frederic Bouchonnet, Montreal, Que., 5th November, 1879, for 5 years.

Claim.—The body B having the straps C C, rollers D D, belts H H, buckles I I, spring L, support L, the fastening of the support to the body by the bolts M M, the arrangement by which the straps N N are used to raise and lower the support L, also the arrangement and manner of using and working the rollers D D O by the use of the cranks F F.

No. 10,613. Improvements on Wrenches. (*Perfectionnements aux manches de taraulds.*)

Joseph W. Calef, North Easton, Mass., U. S., and Austin D. Cable, Montreal, Que., 5th November, 1879, for 5 years.

Claim.—1st. A sliding motion, with the pieces C B, having one, two or more cogs either on a straight or circular position, also with teeth E or with

out them; 2nd. The pin F through the piece D, and handle A, which holds them together; 3rd. The flange I on both pieces C and D for carriage purposes or any other place required; 4th. The same sliding motion applied to the pipe wrenches.

No. 10,614. Improvements on Telephones. (*Perfectionnements aux téléphones.*)

Frederick K. Fitch, Jersey, N. J., U. S., 5th November, 1879, for 15 years.

Claim.—1st. The combination in an electric circuit, of solid conducting bodies in constant contact with each other, one of said bodies being of proper form to be thrown into vibration by the impingement of atmospheric sound waves upon it, and by its vibrations producing variations in the area of surface contact between said bodies, and consequently corresponding variations in the resistance offered to an electric current at the place of such contact by diminishing the strength of the constant current flowing through the circuit; 2nd. The combination of the casing or chamber, its yielding or semi-elastic lining and the solid conducting transmitting plates secured therein with their adjacent faces in contact with each other.

No. 10,615. Improvements on Harvesting Machines. (*Perfectionnements aux machines à moissonner.*)

Rufus Dutton, Yonkers, (Co-inventor with Alfred Tornquist, New York.) N. Y., U. S., 5th November, 1879, for 5 years.

Claim.—1st. The combination, with the hand lever Y and its pocket piece T, connected to the finger bar outside of the place of its hinged connection with the frame, of the spring bolt t and rod y, for varying the length of the lower arm of such lever; 2nd. The combination of the foot lever Z and hand lever Y with its spring bolt f forming a double lifting device by which the operator, while on the machine, can raise either the inner end of the finger bar or the outer end, but partially to pass obstructions, or vertically for transportation and can at pleasure vary the length of the lower arm of the hand lever; 3rd. In combination with the lever Y and its socket piece T, the pivoted arm U and spring bolt t, for changing the leverage or length of the lower arm of that lever; 4th. The latch 2 and its sustaining spring which keeps it out of engagement combined with the foot lever Z, whereby when said foot lever is depressed the inner or operative end of said latch is raised up and caused to engage with the ratchets a b; 5th. A pivoted hand lever provided with a segment ratchet combined with a latch having an elongated hole for its pivot pin and a sustaining spring whereby said latch will be thrown out of engagement except when its outer end is depressed; 6th. The latch 2, having a sustaining spring and an elongated hole for the pin e, whereby it is made capable of motion on said pin, as a centre, or at a point near its rear end; 7th. In lifting mechanism, whereby the inner end of the finger bar may be raised and sustained, combined with mechanism for raising the outer end of said finger bar and locking mechanism for the same, so controlled by suitable devices as to be inoperative except when said inner end is raised up; 8th. A gear F which rotates with the main axle K and in mesh therewith, a gear E oscillating upon a ball and socket joint and an arm M for driving knife, fastened rigidly to said oscillating gear, combined with a support N for said arm adapted to prevent rotation of said oscillating gear, but to permit free reciprocation of said arm; 9th. In combination with the driving arm M and support N, the link u; 10th. In combination with the differential gearing E F, the crank l having bearings l₁ l₂, one at each end, for the purpose of preventing wear and insuring greater uniformity in the oscillations of the gear E; 11th. The combination with the double bearings l₁ l₂, of the cap c; 12th. In combination with the crank l₁, the fly-wheel L, placed between the crank and the bearing l₂, and crank box composed of two globular halves e f, strap g, wedge h and gib i; 13th. In combination with the oscillating gear E, link n and support N, the crank l for equalizing the oscillations of the gear E and giving uniformity to the length of the vibrations of the arm at m; 14th. The inner shoe S of a harvesting machine hinged to one side of a brace or arm P, which arm in turn is hinged at its lower end to one end of the frame D, by a hinge 9 diagonal to the shoe hinge, the other end of the arm extending upward and forming a handle convenient to be operated by the driver, while sitting on the machine; 15th. In combination with the vibrating arm M, the diagonal hinge 9 for the purpose of raising and lowering the points of the fingers; 16th. In combination with the diagonal hinge 9, the latch and recess p, for steadying the brace P; 17th. The combination of the differential gearing E F, the vibrating arm M and the diagonal hinge 9; 18th. The inner shoe S of a harvesting machine hinged to one side of a brace or arm P, which arm in turn is hinged to one end of the vibrating frame by a hinge diagonal to the shoe hinge and bisecting the axis thereof at or near the pitman joint at the heel of the cutter-bar; 19th. The combination with the rotating nut B and threaded sleeve D of the adjusting collar H; 20th. In combination with the rotating nut B, the handle A and adjusting collar H; 21st. The spring bolt G, in combination with the rotating nut B, ring H and recessed flange d.

No. 10,616. Improvements on Pitman Connections. (*Perfectionnements aux raccords des bielles.*)

Rufus Dutton, Yonkers, (Co-inventor with Alfred Tornquist, New York.) N. Y., U. S., 5th November, 1879, for 5 years.

Claim.—1st. A pitman joint consisting in the blocks B B and balls F G, in combination with a wedge nut C and bolt D, to cause the blocks to press equally on opposite sides of the balls in the direction of the thrust; 2nd. A single wedge nut C and threaded bolt D, in combination with a ratchet band spring I; 3rd. The loop E in combination with the bolt D for keeping the parts in place.

No. 10,617. Improvements on Barley Forks. (*Perfectionnements aux fourches à orge.*)

Sidney Dillingham, Fenelon, Ont., 5th November, 1879, for 5 years.

Claim.—1st. The handle and middle finger A A made of one piece of timber; 2nd. The head and two outside fingers B C D made of one piece of timber; 3rd. The adjustable fingers E F; 4th. The opposable thumb K.