

No. 10,415. Remedy for the Relief and Cure of Ear-ache. (*Remède pour l'adoucissement et la guérison du mal d'oreille.*)

Joseph F. Avery, Halifax, N. S., 2nd September, 1879, for 5 years.

Claim.—A composition of marigold, arnica, glycerine, sweet-oil, laudanum, chloroform, triars balsam and carbolic acid.

No. 10,416. Improvements on Telephones. (*Perfectionnements aux téléphones.*)

George M. Phelps, Brooklyn, N. Y., U. S., 2nd September, 1879, for 15 years.

Claim.—1st. The permanent magnet of a horse-shoe shape, with one pole bent inwardly for the attachment of the electro-magnet, casing and diaphragm, and with the other pole perforated for the passage of the conducting wires; 2nd. The combination of the horse-shoe shaped permanent magnet with its inwardly bent pole and the electro magnet, case, diaphragm and mouth piece mounted on said pole.

No. 10,417. Improvements on Pans. (*Perfectionnements aux poêles.*)

Edward A. C. Pew, Welland, Ont., (Assignee of William J. Abrich, Elkton, Maryland, U. S.), 3rd September, 1879, for 5 years.

Claim.—In combination with the pan A, the cover C having a flanged rim D, a valved opening F and condensing diaphragm E.

No. 10,418. Improvements on Dental Engines. (*Perfectionnements aux engins dentaires.*)

Eli T. Starr, Philadelphia, Pa., U. S., 3rd September, 1879, for 15 years.

Claim.—1st. Is the combination of the dental engine base, the engine arm and mechanism for inclining said base and arm; 2nd. The combination of the dental engine base, provided with a device or mechanism to tilt or incline it, with the engine arm capable of rocking on said base; 3rd. The combination of the base, its inclining or tilting mechanism, the engine arm and the treadle mounted on the base, whereby said base, arm and treadle may be tilted or inclined together; 4th. The combination of the base, its arm, a tilting device to incline said base and arm, and mechanism to lock the tilting device in position; 5th. The combination of the dental engine base, its arm and devices to incline the base in different directions, or tilt the said arm to either side of the perpendicular; 6th. The combination of the base, the engine arm capable of rocking on said base and mechanism to lock said arm in different positions relatively to the base; 7th. The combination of the base, the engine arm capable of rocking thereon having its pivot or hinge coincident with the axis of the fly or driving-wheel, and mechanism for locking the arm in the desired position or angle relatively to the base; 8th. The combination of the base, its fixed standard, the engine arm rocking thereon, and mechanism to change the normal position of said arm carried by the base or standard; 9th. The combination of the base, the engine arm rocking thereon and the device to tilt the base at an angle to the plane of the independent rocking movement of the said arm; 10th. The combination of the base, its tilting device, the rocking engine arm and the independent mechanisms for locking the inclining device to the base and the base to the arm; 11th. The combination of the base, its tilting mechanism, the driving pulley and the engine arm, the driven pulley and the flexible shaft; 12th. The combination of the base, its tilting mechanism, the driving pulley, the treadle, the rocking engine-arm, the mechanism for changing the normal position of said arm, the driven pulley, its spindle, the flexible shaft and the hand piece; 13th. The combination of the tilting engine base, the engine arm, and the flexible shaft and its enveloping sheath carried by said arm; 14th. The combination of the base, its rocking arm, the plate and its locking device for varying the normal position of the rocking arm, while still permitting it to rock, and the counterbalancing spring connected at one end with said plate and at the other with the engine arm; 15th. The combination of the base, the rocking arm, the flexible shaft connected with the rocking arm, the adjustable plate for varying the normal position of said arm and the spring connected with said plate at one end and acting upon the rocking arm at the other, to maintain it in its normal position, while permitting it to be deflected or rocked upon its pivots; 16th. The combination of the base, the forked engine arm pivoted thereon and the ears or lugs upon said arm to limit its range of movement; 17th. The combination of the base, the engine arm, mechanism for varying the normal position of said arm, lugs or devices for limiting the range of rocking movement of the arm and the counterbalancing spring acting upon the arm; 18th. The combination of the pivoted plate, to change the normal position of the engine arm, with a spring locking device to secure said plate to the engine base or its standard; 19th. The combination of the base, the engine arm rocking thereon, the spring connecting the base and arm and the telescoping cover or envelope for said spring; 20th. The combination of the plate, for changing the normal position of the engine arm, with the counterbalancing spring and the jointed or yielding cover of said spring; 21st. The combination of the base, the engine arm rocking thereon, the pivoted plate for changing the position of said arm, the counterbalancing spring connecting said plate and arm and the device to vary the tension of said spring; 22nd. The combination of the lateral arm or engine head, the pivot crosswise of said arm upon which said arm rocks and the driven pulley overhanging said pivot at the side thereof opposite that at which said lateral arm extends; 23rd. The combination of the lateral arm or engine head, the rocking pivot crosswise of said arm, the driven pulley overhanging said pivot at the side thereof opposite that at which the lateral arm extends, and the flexible power conveyor driven by said pulley; 24th. The combination of the lateral arm or engine head, the rocking pivot of said arm, the driven pulley overhanging said pivot and the shank of said lateral arm with which it is connected by the rocking pivot; 25th. The combination of the lateral arm, the rocking pivot of said arm, the driven pulley overhanging said pivot and the shank of said lateral arm with which it is connected by the rocking pivot, the flexible power conveyor and the hand piece; 26th. The combination of the lateral arm, the rocking pivot thereof, the shank of said arm, the shank spring, the engine arm and the overhanging driven pulley carried by said lateral arm; 27th. The combination of the lateral arm, the rocking pivot thereof, the pivotal shank of said arm, the shank spring, the engine arm, the overhanging driven pulley carried by said lateral arm and the flexible power conveyor driven by said pulley; 28th. The combination of the lateral arm,

the rocking pivot thereof, the pivotal shank of said lateral arm, the shank spring, the engine arm, the overhanging driven pulley, the flexible power conveyor and the shank thereof; 29th. The combination of the lateral arm, the rocking pivot thereof, the pivotal shank of said lateral arm, the shank spring, the engine arm, the overhanging driven pulley, the flexible power conveyor and the hand piece; 30th. The combination of the lateral arm, the rocking pivot thereof and the adjusting device to lock the arm, when desired, in the position to which it is rocked; 31st. The combination of the lateral arm, the rocking pivot thereof, the adjusting device to lock the arm, when desired, in the position to which it is rocked and the driven pulley overhanging said pivot at the side thereof, opposite that at which the lateral arm extends; 32nd. The combination of the lateral arm, the rocking pivot thereof, the adjusting device to lock the arm when desired in the position to which it is rocked, the driven pulley overhanging said pivot at the side thereof opposite that at which the lateral arm extends, the flexible power conveyor driven by said pulley and the hand piece.

No. 10,419. Butter Working Machine. (*Machine à appâler le beurre.*)

James B. Burbank and Joseph W. Atkins, Danville, Que., 3rd September, 1879, for 5 years.

Claim.—The combination of the hollow bed or dish A with the tapering pieces B and the rims C C with the hole D, also the hinged legs E E with the pins F F and the revolving lever roller H with the revolving handle J and pivot I.

No. 10,420. Improvements in Fire Extinguishers. (*Perfectionnements aux extincteurs d'incendie.*)

Henry S. Parmelee, New Haven, Conn., U. S., 3rd September, 1879, for 5 years.

Claim.—1st. In combination with a system of main and branch pipes, the outlets of which are provided with distributors arranged to spread the water, a seal arranged to be released by the fusion of metal or solder; 2nd. The combination, with a system of pipes provided with distributors and closed with seals or caps depending on the fusion of metal for their release, of the tank F or any other automatic supply of water, gas or fluid; 3rd. The combination, with a system of pipes provided with distributors and closed with plugs, seals or caps depending on the fusion of metal for their release, of an alarm operated by the flow of the water acting on a float; 4th. The combination, with a distributor, of a cap arranged to fit over and protect the distributor; 5th. In an automatic fire extinguisher, the combination, with a distributor, of a cap secured to the distributor by a low fusible material; 6th. The combination, with a fluid supply, mains and branches provided with distributors, of a metal cap arranged to fit over the distributors and secured thereto in any manner, so that the same will be released by the action of heat on a fusible material; 7th. The combination of an automatic fire extinguisher with the mains and branches of a distributor within which a seal is secured depending on the fusion of metal for its release; 8th. A distributor, provided with an extended base, in combination with a cap secured to said base by low fusible solder; 9th. A revolving distributor, provided with a hollow spindle having ports and a ring or cap provided with discharge openings arranged to revolve the same by the discharge of a fluid or gas; 10th. The combination, with an alarm, of an elongated valve extending through the valve opening and arranged to be moved a distance before the valve is opened, so as to operate an alarm; 11th. The combination, in a valve, with the valve seat and an extension nearly fitting the valve opening, of a groove or by way.

No. 10,421. Means of Cleansing Bolting Screens. (*Moyen de nettoyage des tamis de blutage.*)

William W. Huntley, Abel P. Holcomb and August Heine, Silver Creek, N. Y., U. S., 3rd September, 1879, for 5 years.

Claim.—1st. Loose balls arranged on the underside of the screen and supported by an open or perforated surface; 2nd. In combination with a vibrating bolting screen, provided with pockets or compartments on its under side, loose balls d arranged in said compartments and a rough perforated surface e by which said balls are supported.

No. 10,422. Knitting Machine. (*Machine à tricoter.*)

Hiram P. Ballou, Needham, Mass., U. S., 3rd September, 1879, for 5 years.

Claim.—1st. In combination with the spindle G and the adjustable part m, of the needle cam K, the helically grooved rotary head L and the bar or rod n arranged with and applied to such spindle and movable part; 2nd. In combination with the vertical needle cam K, the mechanism for turning it around laterally and stopping it, such mechanism being the arm M and the stops N O; 3rd. In combination with mechanism for turning the needle cam laterally and stopping it at the extreme of its arc of motion, the vertical needles' thread guide applied so as to be movable into or out of action with such needles; 4th. In combination with the two sets of needles, mechanism for effecting the vertical adjustment of the vertical set relatively to the horizontal set, such mechanism being the screw w, its eccentric stud t and the grooves applied to the arch and the spindle; 5th. In combination with the two sets of needles, mechanism for forcing upwards certain of the horizontal needles, while the next adjacent vertical ones may be descending, such mechanism being the cam b applied to the cam ring D; 6th. The cam groove of the horizontal needles made with a straight branch e f and a curved branch f g.

No. 10,423. Fertilizer Distributor. (*Distributeur d'engrais.*)

Walter Marks, Hopewell, N. Y., U. S., (Assignee of Gilbert Jessup), 3rd September, 1879, for 5 years.

Claim.—1st. The rotating cylindrical feed cup composed of the shell A and bottom plate B, separated by a continuous opening which is closed by the stationary ring C having a lateral feed opening and a gate; 2nd. The combination of the rotary feed cup A provided with an opening, near its bottom, surrounded by the stationary ring C having a lateral feed opening and a gate, and the rotating distributor D; 3rd. The combination of the