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LIST OF PATENT CLAIMS

Issued from the United States Patent Office. FOR THE WEEK ENDING AUGUST 26, 1851.

To David Allan, of St. Louis, Mo., for improvement in Washing Machines.

I claim the chamber or tub, with its narrowed neck and otherwise constructed, substantially as described, in combination with the plunger, which latter, with the clothes wrapped round it, passes through the narrowed neck of the chamber, and pressing forcibly on the water confined within the body of the chamber, drives it violently in the direction of the arrow, and through the body of the clothes, carrying the dirt with it.

To Hiram Carver, of Edinburgh, Va., for improvement in Cabbage Cutters.

I claim the two vertical bars confined to the sides of the feeding box, so as to rise and fall with the movement of the feeder, said vertical bars having handles by which the operator actuates the feeding box, and by the same exertion of his arms, renders the material self-feeding, simultaneously with the reciprocating motion of the feed box.

To B. Gillet & L. Allis, of Hartford, Conn., for improvement in Self Acting Cheese presses.

We claim the combination of the falling frame with the toggle joint levers and the fixed eccentric wedge, acting together and making the upward movement and pressure substantially as set forth and described.

To James Harrison, of Jamestown, N. Y., for improvement in Dental Hydraulic Cups.

I claim the construction of said machine of two or more plates, with vacancies between the same, and with pipes connected thereto.

I also claim the application of water, or any suitable liquid, to the space or vacancy between the plates, for the purpose of hardening and rendering more firm the contents of the cup while on the jaw.

I claim nothing for the outward form of the said plates, nor for the application of the same to the mouth, merely to take impressions.

I also claim the method of using the gate, as described.

To Jonathan F. Ostrander (assignor to A. B. & C. E. Hutchinson), of New York, N. Y., for improvement in Rotary Harrows.

I claim the use of the combination of the spur-wheel, with the hollow axis, for the purposes and in mode of construction substantially as set forth, and their combination with the circular frame, having the face, cog-wheel, and arms attached, for the purpose of producing a rotating harrow, substantially in principle of construction as set forth.

To Geo. McGregor, Robt. Lee, and Thos. G. Clinton, of Cincinnati, O., for improved Padlock.

We claim the combination of the bolt and cavity on the rotating end of the hasp, with the tumblers (two), having the characteristics described, or their equivalents, the tumblers, hasp, and bolt constituting a system of fastenings within and without the casing of the lock, the whole being arranged and operated substantially as described.

To P. H. Niles, of Boston, Mass., for improved Adjustable Tool Haft.

I do not claim the gripe as any novelty, but I claim the mechanism by which its jaws are closed, the same consisting of the eccentric groove, the pin, and the revolving tube, as described.

To G. W. Otis, of Lynn, Mass., for improvement in Insulators for Lightning Rods.

I claim the insulated support and point for lightning rods, consisting of the insulated point and opening in its shank, the insulating

cylinder of glass, with its lip or flange, and the wooden collar for securing the whole to the building, all as described.

To Horace Smith, of Norwich, Ct., (assignor to C. Palmer, of New York, N. Y., for improvements in Breech-loading Fire-Arms.

I claim operating the breech-pin directly by the finger lever, as described, in combination with the breech-pin and abutting lever, formed and operating substantially as described and for the purpose specified.

I also claim elevating the charge lifter by the direct contact of the breech-pin carrier, with an arm of the lifter lever, and depressing it by the direct contact of the finger lever, with the other arm of the said lifter lever, as described.

To David Tilton, of Stoneham, Mass., (assignor to himself and Samuel Sweetzer, of Boston, Mass.), for improvement in Padlocks.

I claim the combination of the turning hasp or contrivance, the tumbler and the slide, and its projection, or any mechanical equivalents, the whole being made to operate together, substantially as described.

To Samuel Brown, of Berwick, Pa., for improvement in Lime Kilns.

I claim, first, so forming the fire space in lime kilns, which are fixed at both ends so as to rise gradually from the centre of the kiln, to points above the eyes in each end thereof, substantially as described, for the purpose of so distributing the draft and heat as to secure the ever burning of the stone.

Second, I claim dividing the fire space by a partition wall in the centre into two chambers for the purpose of shifting and regulating the heat required in either end of the kiln, substantially as described, for the more evenly burning of the stone.

Third, I claim, in combination with the fire chambers and partition wall, the ash pits at each end of the kiln, connected by a narrow flue, so that when the eye at either end may be closed, for shifting the heat, sufficient draft will be kept up from the opposite end of the flue, to allow the fire to burn moderately without being entirely extinguished, as set forth.

To Geo. Bacon & R. J. Raven, of New York, N. Y., for improvement in Horizontal Square Pianofortes.

We claim connecting and combining, in the horizontal square pianoforte in one piece of cast-iron, or other metal or metals, the bridge, the brackets, the upper bearing by the flanges, the reverse bearing on the buttons, the application of the long bridge of the horizontal square pianoforte, of the method of firmly securing the whole to the rest plank by means of the screws and the application of the diagonal position of the flange, so as to make both strings of each note of equal length, to metal bridges, on horizontal square pianofortes, in the manner and for the purpose intended, as described.

To C. S. Bulkley, of Macon, Ga., for improvement in means of obviating difficulties arising from defective insulation of Telegraphs.

I claim reversing the connection of the main wire with the poles of the battery, so that the battery acts in opposition to the battery at the other end of the line, in the intervals between the contacts made by the key in writing (in place of merely breaking the circuit), by means of the apparatus and arrangement of wires, batteries, &c., substantially as described, for the purpose of counteracting the effects of imperfect insulation, as set forth.

To Henry Carter & James Rees, of Pittsburg, Pa., for improved Nut and Washer Machine.

We claim the two punches moved at the same time, with different velocities, and in the same direction, in combination with a die box, within which the nut is formed, substantially as set forth.

To J. P. Colrie, of New York, N. Y., for improvement in Machinery for Cutting Glass.

I claim, first, the combination and arrangement of the several parts for giving the reciprocating and circular movement herein described; that is to say, the combination of the bed plate and revolving plate, with the carriage, consisting of three pieces.

Second, the method of guiding the movements and adjusting the several parts of the machine, for the purpose of directing the course of the object to be shaped or figured, in passing the edge of the cutting wheel, by means of movable lettered or named stops and gauges,

prepared for particular patterns, and applied to the machine as required, the whole being constructed and operating substantially as set forth.

To D. W. C. McCloskey, of New York, N. Y., for improvement in Self-acting Blow-pipe Lamps.

I claim the use of the safety-valve and escape-pipe and stop-cock, in combination with the blow-pipe of a self-acting blow-pipe lamp, substantially as herein set forth.

To W. T. Richards, of New Haven, Ct., for improvement in machinery for forming joints of Elliptical Springs.

I claim the combination of the hollow die, with the lower die and half circular shears, actuated in the manner substantially as described and for the purpose set forth.

To J. P. Sherwood, of Fort Edward, N. Y., for improvement in Cut-Nail Machines.

I claim, first, in combination with knives, or the equivalent thereof, for cutting blanks sidewise from nail plates, a travelling, gripping, and heading tongs or jaws opening and closing in a direction perpendicular to the face of the nail plate, and constructed and actuated substantially as herein set forth, to gripe the blank on its flat sides without the necessity of turning it upon edge, as is customary with nail machines heretofore constructed to draw it from beneath the knives, and to hold it while being headed.

Second, I claim the direct acting knife stock, with knives secured to its opposite sides, in such positions, with respect to the stationary knives or to each other, that the knife upon the opposite side, in combination with a double graded cam, or other equivalent actuating mechanism, which shall cause the cutter bar to descend with two impulses, at each of which one knife acts to cut a nail blank.

Third, I claim the relative arrangement of the travelling gripping jaws and heading tool, the latter being actuated within the former, and travelling with it.

Fourth, in combination with two sets of knives, acting alternately, to sever nail plates, I claim a reciprocating gripping and heading carriage, which, travelling to and fro between the two sets of knives, gripes, heads, and delivers a nail at each single stroke, in alternate succession, at its opposite extremities, whereby much time and labor are saved, and the machinery to cut a given number of nails is condensed into a less space.

To J. H. Swett, of Concord, N. H., for improvement in Spike Machinery.

I claim the method of delivering the spike from the die, by means of the tilting rod and movable nippers, so as to allow the nippers to draw in the succeeding blank underneath the spike, and tip or tilt it out of the die, which prevents the possibility of a spike and blank being in the die at the same time, and the consequent breaking of the machine.

For the Scientific American.

Salivary Calculus, or Tartar of the Teeth.

I am pleased to see by a communication from a correspondent, in your paper of August 23, that the subject of concretions upon the teeth is attracting some attention: in this manner knowledge for good is often disseminated. It is possible that the articles in your valuable journal may be the means of calling the attention of some among your sixteen thousand subscribers (who might otherwise neglect it) to the importance of a proper care and cleanliness to the organs of the teeth, a healthy condition of which is so essential to the well-being of the whole human economy.

Your correspondent inquires, "Is that substance usually called tartar, found on the teeth, really so?" in answer, I would say that it is generally called so, but it is more properly *salivary calculus*, a name given to it by dental writers. There is considerable difference between the substance found on and around the teeth, called tartar, and that substance called by the same name generated by the fermentation of wine in casks; the one is an earthy and animal deposit from the saliva and mucous secretions of the mouth, the other an acid concrete.

Salivary calculus, or tartar of the mouth, is found more or less in its different stages on and around the teeth of every individual, whether they are accustomed to the use of wine or not; even the animal creation are not exempt,

Not long since I saw a clearly defined case of it in the mouth of a dog. The earthy matter entering into the composition of tartar of the teeth, is mostly phosphate of lime; the animal matter is made up of infusoria and the remains of minute animalculæ, the presence of which has been clearly detected by the microscope.

Tartar, or salivary calculus, differs in its relative proportions, as it is soft or hard; at first it is soft and light-colored, but by accumulation and exposure it becomes dark and hard. The analysis of Berzelius gives—phosphate of lime, 79; salivary mucous and saliva, 13.50; animal matter, 7.50—100. Dr. Dwinell gives—phosphate of lime, 60; carbonate of lime, 14; animal matter and mucous, 16; water and loss, 10—100.

Hard and dry tartar has more earthy and less animal matter than soft; American and English authors attribute it principally to one source—the saliva; the French authors to several. The fact that it is found in greater quantities on the outside of the upper molars, or double teeth, and inside of the lower incisors, or front teeth, which are opposite the mouth of the ducts, from whence the saliva issues, goes to prove its paternity. Tartar itself does not directly act upon the teeth, still its effects upon the mouth, in general, is extremely deleterious, vitiating as it always does its secretions, causing inflammation, abscess, and fungus growth of the gums, and destroying the alveoli, or sockets that contain the teeth—causes them, when perfectly sound, to loosen and fall out; it also, by eating away the gums, gives the teeth that long, dark, and unsightly appearance, and by admitting the air and acrid food to their bony structures, hastens decay, causing toothache and its accompanying evils: it not infrequently is one great cause of dyspepsia and derangement of the whole digestive apparatus; it also, if allowed to accumulate for any length of time, prevents, by irritation, a proper cleanliness of teeth—the brush cannot be used without pain, as the gums bleed at the slightest touch, hence many suffer their teeth to go to ruin for want of proper cleanliness.

There are many who, from ignorance of the effects of salivary calculus, appear to have a great affection for it, and are extremely loth to part with it, fearing its removal may injure the enamel. When persons, on examining their mouths, find an accumulation of this substance on and around their teeth, I would advise them to have it removed as soon as possible—not by using acids for the purpose, for, as I remarked in a former communication, any acid, no matter whether vegetable or mineral, that will dissolve tartar, will assuredly dissolve the teeth,—but by instruments constructed for that purpose in the hands of the dentist, after which, by using the tooth-brush twice a-day—in the morning when rising (for tartar accumulates freely during the night), and in the evening when retiring—with some simple alkaline dentrifice, will in almost every instance prevent an accumulation of this injurious substance. G. F. J. COLBURN, Dentist. Newark, N. J., 1851.

Patent Cases—Cultivators.

There were two cases decided before Judge Nelson, at Cooperstown, on the 12th ult., which, to our farmers, are of no small importance. They were motions for preliminary injunctions, 1st by S. R. Tracy, against R. S. Torrey and H. Torrey, for infringing the patent of N. Ide, of Shelby, Orleans Co., N. Y., in cultivators, the plaintiff being the assignee for three counties. The defendants were selling cultivators within the county lines owned by Tracy, viz., Yates, Seneca, and Ontario. The defendants were selling cultivators owned by the plaintiff.

2nd, motion for injunction by E. Chamberlain and others, against J. F. P. Root, and others, for infringing the same patent, the plaintiffs being owners of the patent for the town of Sweden, Brockport, in Monroe Co. Injunctions were granted. We shall notice these cases more at length next week, for the result verifies the advice given by us to certain parties in relation to this affair some time ago.