

RECENT AMERICAN INVENTIONS.

Cork Cutter.—This invention consists in the arrangement of a reciprocating sliding knife in combination with a vibrating gage plate, and with a stationary rest in such a manner that the blocks of cork can be cut into slices or sticks of the desired thickness, and that said sticks, after being cut, are caused to drop freely from under the knife by the action of the vibrating gage, thereby enabling the operator to proceed with his work without interruption and without danger of choking the machine; it consists also in the employment of an automatic tilting table in combination with a series of revolving cutters for the purpose of cutting the sticks into pieces of suitable length for the corks to be manufactured. Invented by Edward Conroy, of Boston, Mass.

Budding Knife.—The object of this invention, by Edward D. Gird, of Cedar Lake, New York, and R. Gird, of Healdsburg, California is to obtain an implement by which trees may be budded or inoculated with far greater facility and with much greater success than hitherto. The invention consists in the employment or use of a blade or cutter provided with curved portions for the purpose of cutting the buds from the limb, and also in the employment or use of a T-shaped cutter for the purpose of making the incision in the stock to receive the bud.

Bridge Girder.—This invention consists in the employment, in combination with a catenary series of links, of a chord, posts, diagonal tension braces and joint blocks, so arranged and applied as to truss the links in the catenary line and make a very simple, light and strong girder. Patented to A. McGuffie, of Rochester, N. Y.

Anemometer.—This invention, the merits of which are due to G. R. Stuntz, of Superior, Wis., consists in a certain system of pencils or other marking instruments connected with a vane, and applied in combination with a sheet of paper or other material moved at a regular speed by a clock movement, for the purpose of indicating and recording the direction and changes of direction of the wind through a considerable period of time. It also consists in certain improved means operating in combination with the vane and movable sheet of paper, or other material, for the purpose of indicating and recording the force or velocity of the wind during a period of time.

Manufacture of Cube Sugar.—One of the obstacles which has heretofore presented itself in the manufacture of cube sugar has been the want of suitable machinery by which to form the sugar into cubes with an economical application of power. The object of this invention is to overcome the above obstacle and to dispense, as far as possible, with manual labor in the manufacture, and to this end it consists in the formation of the cubes from the granular sugar by means of machinery composed of an endless or rotating series of molds fitted with compressing and discharging pistons, and having applied, in combination with them, a cam or cams, or their equivalent, for operating the pistons one or more at a time in regular succession, throughout the whole of the series, whereby, so long as a supply of granular sugar is supplied to the molds, and the machinery is kept in motion, a continuous delivery of compactly compressed cubes is effected. This invention is by Gustavus Finken, of Brooklyn, N. Y.

A Remedy for Sleeplessness.

How to get sleep is to many persons a matter of great importance. Nervous persons, who are troubled with wakefulness and excitability, usually have a tendency of blood on the brain, with cold extremities. The pressure of blood the brain keeps it in a stimulated or wakeful state, and the pulsations in the head are often painful. Let such rise and chafe the body and extremities with a brush or towel, or rub smartly with the hands, to promote circulation, and withdraw the excessive amount of blood from the brain, and they will fall asleep in a few minutes. A cold bath, or a sponge bath and rubbing, or a good run, or a rapid walk in the open air, or going up or down stairs a few times just before retiring, will aid in equalizing circulation and promoting sleep. These rules are simple and easy of application in castle or cabin, mansion or cottage, and may minister to the comfort of thousands who would freely expend money for an anodyne to promote "Nature's sweet restorer, balmy sleep."



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* * Pamphlets giving full particulars of the mode of applying for patents, under the new law which went into force March 2, 1861, specifying size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

34,286.—S. F. Ambler, of Brooklyn, N. Y., for Improved Amalgamator :

I claim, first, Giving to the pan, D, the shaking and vibratory motions for the purpose described.

Second, The combination of the agitating board, H, constructed as shown, with the pan, D, for the purpose specified.

Third, Placing the discharge openings, O, upon the side of the pan, D, for the purpose set forth.

34,287.—E. D. Baker, of Claremont, N. H., for Improvement in the Construction of Ordnance :

I claim, first, The flanges projecting from the body of the gun near the breech, in combination with the external screw or straining rods, substantially as and for the purpose described.

I also claim, in combination with the flanges, the wire wrappings or said flanges furnishing both a support for and the means of securing the ends of the wires, substantially as described.

34,288.—F. H. Bartholomew, of New York City, for Improvement in Valve Regulators :

I claim the combination of an open vessel from which water may be removed, with a valve that controls the discharge of the water under pressure, into an open vessel by means of a mechanism, substantially as described, so that the weight of water in the open vessel determines the closing of the valve.

I also claim the combination of the handle by which the valve is opened with the mechanism described, with the open vessel, and with the valve, in such manner that the said handle is made available both to open the valve and to adjust the said mechanism, substantially as described.

34,289.—T. L. Birch and J. C. Noble, of Washington, Pa., for Improvement in Car Couplings :

We claim the combination of the similarly-formed double-hooked bars, C' c', springs, F, and levers, G', when the parts are so constructed and arranged as to adapt the hooks to lock together whichever is uppermost, substantially as explained.

[The object of this invention is an automatic coupler adapted to secure the cars when the latter are run together, without necessitating an accurate adjustment of the parts or the setting of them at specific relative heights.]

34,290.—S. A. Clemens, of Rockford, Ill., for Improvement in Construction of Walls of Buildings :

I claim the method of constructing the walls of buildings, and other structures, of lath or any narrow strips of wood put in two or more parallel tiers or rows with cross ties of the same secured between the lath by mortar or nails to be finished by plastering, when combined either with the vacant space or spaces between the tiers or rows of lath, or with filling of mortar or other material in the said space or spaces, whether the entire skeleton wall be constructed of the lath work, or it be combined with parts of a frame, substantially as described and for the purposes specified.

34,291.—Edward Conroy, of Boston, Mass., for Improvement in Machines for Cutting Corks :

I claim, first, The arrangement of the vibrating gage plate, H, and stationary rest, G, in combination with the reciprocating knife, B, constructed and operating substantially in the manner and for the purpose shown and described.

Second, The arrangement of the tilting table, C, in combination with one or more rotary cutters, L, constructed and operating substantially as and for the purpose set forth.

34,292.—Sammel and L. A. Davis, of Providence, R. I., for Improved Washing Machine :

We claim the combination of the two suds boxes, A, B, the latter being fitted within the former, perforated at its sides and bottom and provided with a perforated reciprocating plunger, C, substantially as and for the purpose set forth.

We further claim the two levers, F, G, when arranged and connected together as shown and with the plunger, C, and used in connection with the boxes, A, B, as and for the purposes set forth.

[The object of this invention is to obtain a clothes washing machine which will effectually cleanse the clothes from dirt without subjecting them to the usual friction by rubbing, an operation which has a tendency to injure as well as to divest them of buttons.]

34,293.—E. P. Dickie, of Fishkill Landing, N. Y., for Improved Chimney for Lamps :

I claim, in glass chimneys for illuminating purposes, the transparent partition or partial partition, d, when made part of and of the same piece as the chimney, substantially as and so as to realize the advantage set forth.

34,294.—John Dickson, of New Castle, Pa., for Improvement in Manufacture of Sheet Iron :

I claim the use of an enamel or preparation for giving a highly glazed and durable surface to sheet iron, composed of an oxide or oxides of lead and carbon, and prussian blue, pulverized and mixed with drying oil, and a solution of beeswax in oil of turpentine, or its equivalent, with or without the addition of a small proportion of acid, and in connection therewith, the reviving of metallic lead in the enamel on the surface of the iron during the annealing process, in the manner and for the purpose described.

34,295.—Watson Duchemin, of Charlottetown, Prince Edward Island, for Improved Anti-friction Bearing of Hoisting Blocks :

I claim the sleeve, g, operating in combination with the box, a, and friction rollers, h, substantially as described.

34,296.—J. H. Ellis, of Brooklyn, Pa., for Improvement in Mills for Crushing Apples, Sugar Cane, &c. :

I claim the fluted rollers, B, B', in combination with the rotary cleaners, E, E', when said parts are provided respectively with flutes, a, of semi-cylindrical form and with hawk-bill projections, c, and all arranged to operate as and for the purpose set forth.

[This invention consists in the combination of a pair of fluted crushing rollers and rotary cleaners so constructed and arranged that the crushed substance is thoroughly cleaned out of the cavities in the rollers, and the latter thereby enabled always to work in a most efficient manner.]

34,297.—William Fulton, of Elizabeth City, N. J., for Improvement in Cooking Apparatus :

I claim the combination of the lamp, A, with the reservoir or boiler, B, jacket, C, and extinguisher, D, when the whole are arranged, constructed and operated in the manner specified and for the purpose set forth.

34,298.—Benjamin Garvey, of Ashland, N. Y., for Improvement in Ascertaining Position and Direction on Land and Sea :

I claim the application of rotating bodies for the purpose of preserving normal or base lines or planes, whereby the direction and changes

of direction of other planes and lines can be ascertained; for the purposes and in the manner set forth substantially in my specification.

34,299.—A. P. Griffing, of East Cambridge, Mass., for Ink stand :

I claim my improved inkstand as made with its cap, screws and holes arranged in the parts, A, B, substantially in manner and to operate as specified.

34,300.—C. H. Guard, of Troy, N. Y., for Improved Machine for Making Carriage Wheels :

I claim so proportioning and arranging certain of the parts of said machine that I am enabled, by the auxiliary use of a lathe rest, R, and a chuck, L, to temporarily convert the same into a turning lathe of suitable proportions for shaping wheel hubs, previous to mortising the same in said machine, all substantially as set forth.

34,301.—C. T. Holloway, of Baltimore, Md., for Improvement in Branding and Stamping Irons :

I claim a branding or stamping iron consisting of a stock, B, false bottom, D, movable types, E, and wedges, F, or screws in lieu thereof; but otherwise constructed and arranged as shown and described.

[This invention consists in an improved device for readily securing and releasing movable dies for branding, stamping or printing.]

34,302.—G. C. Jones, of Alma, Maine, for Improvement in Shells for Ordnance :

I claim, first, A projectile flattened on opposite sides or at its poles, when its equatorial belt or larger diameter only is perforated with holes or bores perpendicular to the axis of the projectile, for the reception of bullets, substantially in the manner and for the purpose described.

Second, The removable plug or block, D, by means of which, in combination with the enlarged chamber or cavity, I am enabled to use my projectile, either as a shot or shell, substantially as set forth.

34,303.—A. S. King, of Commerce, Mich., for Improvement in Gas Retorts :

I claim, first, The employment of a movable cup, B, provided with a hollow cone, b, as its bottom, in combination with a retort, A, provided with a conical protuberance, a, at its bottom and with a movable cap, C, substantially in the manner and for the purpose shown and described.

Second, The arrangement of the annular belt, E, in combination with the outer retort, A, and with the inner retort, D, as and for the purpose specified.

[This invention consists in the employment of a movable cup provided with a hollow cone at its bottom to fit over a conical protuberance projecting from the bottom of the retort, for the purpose of increasing the heating surface and spreading the material of which the gas is manufactured over a greater surface than can be done on a plain bottom, and also for retaining the residuum from the material used, so that said residuum may be readily removed from the retort by simply removing the cap, this operation being facilitated by having the cap or cover of the retort movable. It consists further in the arrangement of an annular chamber or belt in connection with the inner retort, for the purpose of preventing a draft of the gas in any one direction from the lower part of the retort, thereby allowing sufficient time for the perfect transformation of the material used into gas, and preventing the escape of the material in the form of vapor.]

34,304.—C. W. Krebs, of Baltimore, Md., for Improved Sash Supporter and Fastener :

I claim the obliquely-grooved slide, E, in the described combination with the bolts, C, c, springs, D, and a knob or handle, F, the latter being employed to move the slide, E, and likewise the sash itself, in either direction, all as explained.

[This invention is especially applicable to the windows of cars and carriages. The sash is secured at any point at which it may be placed, and by the application of the hand to the proper point to raise or lower it, is automatically released so that it may be freely moved.]

34,305.—L. B. Lathrop, of San Jose, Cal., for Improvement in Apparatus for Shrinking Tires :

I claim a tire-shrinking device composed of a block, A, provided with a concave, E, curved shoulder, B, guides, d, d, movable jaws, H, B, and wedges, D, D, all combined and operating as shown and described for the purpose set forth.

[This invention relates to a simple and efficient device for contracting or shrinking the tires of wheels for vehicles without cutting and welding. The object of the invention is to effect the result without the employment of levers and complex arrangements for compressing the heated part of the tire, as heretofore practiced.]

34,306.—Jones Laubenstein, of Minersville, Pa., for Improvement in Coal Screens :

I claim an improved manufacture of screens for the screening and preparing of anthracite coal, or other coals and hard substances, similarly handled and prepared, substantially as described.

34,307.—Ira Leonard, of Lowell, Mass., for Improvement in Railroad Chairs :

I claim a rail-connecting chair composed of a continuous sheet of wrought iron bent into such a shape that it is enabled to embrace the base and the sides of the abutting ends of two rails while it is rendered laterally elastic and vertically stiff by means of a hollow rib or fin immediately beneath the embracing jaws of said chair, all substantially as represented.

In connection with my said improved rail-connecting chair, I also claim the use of the wooden cushion, E, or the equivalent thereof, in the manner and for the purpose set forth.

34,308.—J. Y. Leslie, of Brooklyn, N. Y., for Improvement in Tobacco Holders :

I claim the combination and arrangement of the stopple, 1, charger, 2, gate, 3, spring, 4, matchbox, 10, cover, 11, pipe cleaner, 6, the receptacles 7 and 9, with the case, 8, or their equivalents, for the purposes set forth and described.

34,309.—T. J. Mayall, of Roxbury, Mass, for Improvement in Restoring Waste Rubber :

I claim the combining or incorporating of waste vulcanized metallic or hermetized rubber with vegetable tar or pine oils, for the purpose and substantially in the manner as set forth.

34,310.—G. B. McClinch, of Hallowell, Maine, for Improved Valve for Hydraulic Engines :

I claim the arrangement, substantially as described, of two opposite port faces of the valve as well as those of its seat.

I also claim the connection piece, f, and its passage, e, in combination with the two valve plates, their seat and chest, when the two opposite port faces of the valve, and those of the seat thereof, are arranged in manner substantially as described.

34,311.—A. McGuffie, of Rochester, N. Y., for Improvement in Truss Girders for Bridges :

I claim the combination with the catenary series of links, A, A, of a cord, C, joint blocks, B, B, posts, E, E, and diagonal braces, f, f, the whole arranged substantially as specified.

I also claim the joint blocks, B, B, serving the three purposes of connecting the links, A, A, supporting the joints of the chord and connecting the diagonal braces, f, f, with the chain of links substantially as specified.

34,312.—Charles Monson, of New Haven, Conn., for Improved Writing Desk :

I claim the application of the cover, B, to the drawer holder or box, A, in manner and so as to operate therewith, substantially as specified.

I also claim the improved drawer, as made, with the elevating bottom and mechanism combined with the said bottom and the drawer frame, the whole being arranged substantially in manner and to operate as specified.

34,313.—Charles Monson, of New Haven, Conn., for Improvement in Ladders and Staging for Artisans :

I claim the combination of the two sets of parallel bars or ladders, a, a, base or foot connection and a leg stand or pair of stands, or the mechanical equivalent thereof, the whole constituting a ladder or artisan's stage, substantially as described.