THE ATLANTIC CABLE.

A correspondence has just been published by F. N. Gisborne, in relation to the origin of the Atlantic Cable, the conception of which, he states, was his, as well as a great part of the labor required before capitalists would even take the matter into consideration. We think the statement of Mr. Gisborne is very likely correct, but the credit due to Mr. Field is, that mainly through his perseverance the enterprise became a success.

It is announced that a submarine cable is to be laid next year, connecting the coast of France with this country. It is in the hands of Mr. Erlanger, the celebrated banker, and Mr. Reuter, who enjoys considerable notoriety for his sensation telegrams.

PLANCHETTE.

We have received a large number of readable communications, claiming to explain the mysteries of Planchette—fair examples of which have already appeared in our columns. The whole discussion, thus far, is chiefly speculative, always tending to religious and spiritualistic notions.

We fail to discover any substantial benefit to be gained from a continued discussion of this subject. We therefore drop it until some more reasonable explanation is put forth. We never did believe very much in the operations of ghosts and spirits, therefore it is hard for us to conclude that the little three-legged stool, provided with a pencil, and called "Planchette," has anything whatever to do with spirits. It is simply an amusing plaything.

OFFICIAL REPORT OF PATENTS AND CLAIMS

Issued by the United States Patent Office.

FOR THE WEEK ENDING JULY 28, 1868.

Reported Officially for the Scientific American.

PATENTS ARE GRANTED FOR SEVENTEEN YEARS, the following being a schedule of fees:—

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On filing each application for a Patent, except for a design	$15
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In addition to which there are some small revenue-stamp taxes. Residents of Canada and Nova Scotia pay $500 on application.

☞ *Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, 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.*

80,264.—NEEDLE FOR KNITTING MACHINES.—Ransom Allen, Salem, Mich.

I claim the movable shank, b, attached to the body of a knitting machine needle, and operated substantially as and for the purpose herein described.

80,265.—STEAM GENERATOR.—Jonathan Amory, West Roxbury, Mass.

I claim, 1st, The combination of the heating curve and its pipe or pipes for receiving air, with the fire box of the boiler, arranged and operating substantially as described.

2d, The combination of the heating curve and its pipe or pipes for receiving air, with an air chamber, K, arranged and operating substantially as described.

80,266.—SHUTTER AND WINDOW FASTENING.—Wm. L. Barnes, Irvington, N. Y. Antedated July 11, 1868.

I claim the bolt, F, constructed as described, and secured to the innerside of the sash, A, arranged in relation with the blind hasp, a, and staple the blind being held closed when the sash is raised, and locked by the bolt, F, passing through the staple above the hasp, a, when the sash is lowered, which movement also locks the sash, as herein shown and described.

80,267.—MANUFACTURE OF CARRIAGE SHAFT COUPLINGS.—Henry M. Beecher (assignor to H. D. Smith & Co.), Plantsville, Conn.

I claim the above described process or method of making the shaft connection blank, the same consisting in forming it with the head part, A, and the shank, B, and subsequently cutting it through on the lines, e e, and finally bending the portions, f f, around into right or nearly right angles with the shank part, B.

Also, the machine, substantially as described, for creasing or cutting the blank, and bending the portions, f f, of it around into or nearly into right angles with the shank, such machine being composed of the bed plate and standard, the two levers, the follower, and the two pairs of creasers or cutters, the whole being arranged for use in manner as specified.

80,268.—APPARATUS FOR CARBURETING GAS AND AIR.—Alonzo T. Boon and Albert D. Perry, Galesburg, Ill.

We claim the emery receptacle, F, when combined and arranged with float h, screw rod, H valve, m, pipe, N, wood pipe, a, substantially in the manner and for the purpose as herein shown and described.

80,269.—TUCK CREASER FOR SEWING MACHINES.—Edward Bostock, Albany, N. Y.

I claim, 1st, A tuck creasing device constructed substantially as described, in combination with the plate, A, and gage plate, D, both constructed and arranged substantially as described, and the plate, D, serving to confine A to the bed plate, as set forth.

2d, A gage plate or guide for a sewing machine, when provided with an adjustable piece, I, having a slot, as and for the purpose set forth.

3d, The gage plate, H, slide, I, and creasing device combined, to admit of adjusting the apparatus in any desired position relatively to the needle and feeding device of different machines by means of a single screw.

4th, The tuck creaser and gage plate, for use with or without a sewing machine, when the whole is constructed as described.

80,270.—TUCK CREASER FOR SEWING MACHINES.—Edward Bostock, Albany, N. Y.

I claim, 1st, the combination with the tuck creasing devices, of a sliding wedge, eccentric, or a slide and fixed inclined plane, on the base plate, substantially as and for the purposes shown and described.

2d, In combination, the spring arm, and its creasing and pressure adjusting devices, and the fixed stand or yoke, E, substantially as and for the purpose set forth.

3d, The tuck creaser and its gage plate, constructed with their coinciding slots at an angle to the creasing arm and line of stitching, as described, so that, when affixed to a machine by means of the thumb screw and screw hole, and moved in a slanting direction for adjustment, the parallelism of the line of creasing with the line of feed may always be preserved.

4th, The devices herein described, the same constituting the tuck creaser, constructed as specified.

80,271.—CAR COUPLING.—C. T. Burchardt, New York city.

I claim, 1st, The car coupling composed of the hook, E, bearing piece, H, links, G, and the spring frame, B, when connected with the main spring, C, all substantially as herein described and for the purposes specified.

2d, The beveled or double inclined bearings, a2 a3, arranged relatively to the main spring, C, and spring frame, B, and its connections, as and for the purposes herein specified.

80,272.—HARVESTER.—H. K. Burnett, Poughkeepsie, N. Y.

I claim, 1st, The cams, D D rotated by the gearing, B C, in combination with the arm, U, roller, E, and jointed pitman, G, connecting the arm, U, to the cutter bar, h, substantially as set forth.

2d, The bar, K, at the end of the finger bar, H, and jointed at Q, to the shoe, R', and arm, X, as and for the purposes set forth.

3d, The shoe, R', jointed to the arm, X, in combination with the slotted brace, l, finger bar, H, and cutters, i, arranged and operating as and for the purposes set forth.

80,273.—BOOT SOLING MACHINE.—Thomas Cabourg, Paris, France.

I claim, 1st, The construction and use of the pulley, A, on which is wound the wire to be tapped, substantially as herein described.

2d, The construction of the tapping plate, substantially as described.

3d, The construction, disposition, and simultaneous action of the knives, substantially as described, and more fully shown in the drawings.

80,274.—FISHING SEINE.—John Collines, Ecorse, Mich. Antedated July 18, 1868.

I claim the application of the braces marked A A, as above, to a seine or net, substantially as and for the purposes herein described.

80,275.—COAL STOVE.—John Cooper, Dublin, assignor to himself and Bennett F. De Witt, Indianapolis, Ind.

I claim the addition, D, separated from the fire chamber by the partition, G, and subdivided into compartments, H J, by the partition, I, as set forth, and, in combination therewith, the induction pipe, E, eduction pipe, F, and chamber, L, arranged substantially as set forth.

80,276.—MACHINE FOR UNLOADING RAILROAD CARS.—John Doble, Chicago, Ill.

I claim, 1st, A swing frame of a car unloading machine, provided with head plates, B B, having convex surfaces presented to the sides of pulleys, C C, which are perforated and otherwise constructed substantially as described.

2d, Projections, h, adapted to serve as guards or fenders for pulleys applied to the swinging frame of an unloading machine, substantially as described.

3d, Perforated guards, h, perforated pulleys, C C, and convex surface bead plates, B B, applied to the swing frame of an unloading machine, substantially as described.

80,277.—HOP HOOK.—Elon Denio, Baldwinsville, and Elon C. Denio, New Hartford, N. Y.

We claim, 1st, The hop cultivator formed of the hoe or hook, combined with the knife, substantially as and for the purposes specified.

2d, The ferrule, with the raised projections or ears, and slot, or their equivalents, for securing the knife in place, in combination with the hoe or hook, of one or more tines, substantially as and for the purpose set forth.

80,278.—STOPS FOR FORE-AND-AFT SAILS.—Jacob Edson Boston, Mass.

I claim the arrangement and combination of the saddle, D, with the springs, H H, their rods, A, and the sliders, b' F, connected with the ring, E.

Also, the arrangement and combination of the arched and annular links, G G b b, and the arms, a' a', with the ring, E, and the sliders, F, and springs, H, applied to the rod or bar, A, extending between them and from abutments, B B, as set forth.

80,279.—FURNACE FOR TREATING ORES.—Samuel H. Folsom, Winchester, Mass.

I claim a series of two or more revolving tables placed within a furnace, A, and operating substantially as described, for the purpose herein set forth.

Also, the revolving cylinders, m n o, with their inclined guides, in combination with the flue, G, operating substantially as described, for the purpose set forth.

Also, a central deflector, O, applied to a table, C or D, for the purpose of more thoroughly distributing the flame over its surface, substantially as set forth.

Also, the inclined stationary stirrers, a' b', in combination with a revolving table, C or D, substantially as described.

Also, the scrapers, f', on the under surface of a table, C or D, in combination with a projecting edge or shelf, e', beneath the table, substantially as and for the purpose set forth.

80,280.—STOVE AND FURNACE GRATE.—Bartholomew Gommenginger and Chas. W. Trotter, Rochester, N. Y.

We claim, 1st, The grate, a, when constructed and operated in the manner and for the purpose specified

2d, In combination with the grate, a, the sliding ring, e, when constructed and operated in the manner and for the purpose specified.

80,281.—LAMP BURNER.—Richard Gorsline, Rochester, N.Y.

I claim the combination of the open frame, D, and transparent bottom plate, G, when arranged in connection with the removable cone, H, and fixed rim, C, the whole as herein set forth.

80,282.—LAMP CHIMNEY.—John Gracie, Pittsburg, and Robert H. Boyd, Hulton Station, Pa.

We claim, 1st, Providing a lamp chimney with an elliptic flange, substantially as herein described.

2d, In combination with the above, a lamp top provided with a flange, portions of which project inward for the purpose of catching, grasping, and holding the chimney in position, the contour of said flange corresponding to the form of the flange of the lamp chimney, substantially as herein described and for the purpose set forth.

80,283.—MACHINE FOR PRODUCING A RECIPROCATING MOTION IN KNITTING MACHINES, ETC.—Septimus Haslam, Jr., New Britain, Conn., assignor to himself and John B. Talcott.

I claim, 1st, The combination with the shaft, b, of the sleeve, d, carrying the clutch and wheels, f f', and the collar, k, and collar, i, on the shaft, and clutch, m, or its equivalent, substantially as described.

2d, The gears, f f', arranged upon the sleeve, d, in combination with the clutch, e, plate, q, upon the shipper, p, and spring, s, or their mechanical equivalents, with the gears, 3 4 5 1, and chain, v, for the purpose substantially as described.

80,284.—CIGAR.—Frederick L. Hilbright, Newark, N. J., assignor to himself and Chas. E. Woodman, Boston, Mass.

I claim the combination and arrangement of the foraminous ferrule or cap with a cigar, the same being substantially as explained and represented.

80,285.—ADDRESS PRINTING MACHINE.—Henri Julien, Ottawa, Canada.

I claim, 1st, The combination with the vertically sliding press, A, of the rack, B, pinion, C, shaft, D, spring, p, and the mechanism for operating the shaft, D, substantially as and for the purpose described.

2d, The combination with the pawl, P, and connecting rod, E, of the mechanism for connecting them and disconnecting them with the parts to which they communicate motion, substantially as and for the purpose described.

80,286.—MACHINES FOR DRESSING STONES.—Francis L. King, Worcester, Mass.

I claim, 1st, The peculiar construction of the self-adjusting frame, with its shaft, gears, grooved racks, and set screw, B, when constructed and operating substantially as and for the purpose specified.

2d, The carriage, A, spindle, B, or its equivalent, apron, H, constructed and operating substantially as and for the purpose specified.

3d, The tucks, C C, disk, E, and curb, I, constructed and operating substantially as and for the purpose specified.

4th, Gears, F and L, shaft, K, constructed and operating substantially as and for the purpose specified.

5th, The peculiar relative position or adjustment of the carriage, A, and grinders, M, upon different centers, whereby the irregular or eccentric motion is produced, arranged and operating substantially as and for the purpose specified.

6th, the combination of the hopper, R, hollow shaft, N, the grinder box, M, with the carriage, A, with its various bearings, constructed and operating substantially as and for the purpose specified.

80,287.—MANUFACTURE OF CIGARS.—William C. Kneeland, Brooklyn, N. Y.

I claim as a new article of manufacture a cigar made with a cut-tobacco filler, substantially as described.

80,288.—FRUIT PICKER.—John A. Knight, Durham, Me.

I claim the fruit gatherer as described, combining the removable head, a, edge or teeth, c, handle or pole, a', jointed conductor, i, attached as described to the pole, and having the peculiarly formed chucks, p, as and for the purposes described.

80,289.—TABLES, BENCHES, ETC.—David S. Leavitt, Grand Rapids, Mich.

I claim the combination of the dovetail fastening, B, hinged legs, C, wedges or pins, and rods, when applied and used in the manner and for the purposes shown and described.

80,290.—CAR BRAKE.—Samuel M. Lee, New London, Iowa.

I claim, in combination with an independent piston, d, the arrangement of a forked bar, b, with the binder, and a single bar, c, with the car, for operating said bar, c, at either end, substantially as and for the purpose described.

80,291.—TEETH FOR GEAR WHEELS.—John Letskus, Allegheny City, Pa., assignor to himself and Richard Brown, Youngstown, Ohio.

I claim curved gear teeth for wheels and pinions, the upper and lower edges of which are arcs of curves of equal radius, having their centers in the same right line, constructed substantially as and for the purpose hereinbefore described.

80,292.—ROSE ENGINE LATHE.—Thomas Lippiatt, New York city. Antedated July 11, 1868.

I claim, 1st, The arrangement of the swinging frame, H, carrying a tracing pin, e, or an equivalent device, the vertically sliding die or pattern, J, mandrel, K, and engraving tool, d, operating substantially as herein specified.

2d, The arrangement of the revolving die or pattern, N, the swinging frame O, and tool box, F, operating substantially as herein described.

3d, The combination of the screw rod, S, and shaft, L, with the sleeve, M, and die, N, substantially as herein specified, for giving a lateral progressive movement to the said die, N.

4th, The arrangement of the revolving die or pattern, P, on the mandrel shaft, i, the swinging frame, H, and tool box, F, operating substantially as herein specified.

80,293.—TELEGRAPH INSTRUMENT.—George Little, Hudson City, N. J.

I claim, 1st, The combination of a pen with a reservoir.

2d, The combination of a pen, reservoir, and coil.

3d, The combination of a pen, reservoir, and coil, with paper properly actuated.

4th, The combination of a pen, reservoir, and properly moved paper.

5th, The combination of a pen, float, and reservoir, and all of these in combination with coil, and all of these also in combination with properly actuated paper.

6th, The combination of a pen and a reservoir, having an opening therein for the protrusion of the pen, with a regulating tube, and all of these in combination, first, with a float, second, with a coil, and third, with properly actuated paper.

7th, The combination of a pen with a reservoir of fluid and a permanent magnet properly located, and all of these in combination, first, with a float, and second, with a coil, and thirdly, with both a coil and float.

8th, The combination of a pen, a reservoir, and a coil, when the reservoir is vertical and provided with an opening at the bottom thereof, and the pen passes through the opening, and the coil surrounds the vertical reservoir, and these parts thus relatively arranged in combination with a regulating tube.

9th, The combination of a pen, a vertical reservoir, open at bottom, a coil surrounding the reservoir, and a permanent magnet, located above the reservoir, and all these parts thus relatively arranged, in combination with a permanent magnet, located below the reservoir and pen.

10th, The combination of the following parts, viz, a pen, a float, a reservoir of fluid, a regulating tube, a coil, a paper properly actuated, and these in combination with a permanent magnet, so located as to influence the pen, all these combinations, and the parts or elements making up the combinations, being substantially such as herein specified and set forth.

80,294.—STILL FOR HYDROCARBON.—Charles Lockhart and John Gracie, Pittsburg, Pa.

I claim, 1st, The chimney, D, combined with a series of fire chambers, z, and smoke chamber, m', constructed, arranged and operating substantially as herein described, and for the purpose set forth.

2d, Making the chimney, D, the axis of the wheel, 7, used for rotating the scrapers, in the manner substantially as herein described, and for the purpose set forth.

3d, The arrangement of the column, e, pipes, g and f3, openings, 10, and valve, z2, constructed, arranged, and operating substantially as herein described, and for the purpose set forth.

4th, Providing a still for hydrocarbons with a valve, which will act from an internal or external pressure, substantially as herein described and for the purpose set forth.

80,295.—BOLT.—Benjamin F. Lotridge, New York city.

I claim, in combination with the slotted case, B, the bolt, C, tongue piece, G, set screw, H, and spring, D, when the same shall be constructed and operated substantially as described for the purposes specified.

80,296.—FRUIT JAR.—W. W. Lyman, West Meriden, Conn.

I claim, 1st, The combination of flange cap, f, having incline or wedge elevations upon its outer edge, g, with a gasket seat, d, gasket, c, yoke, h, and ring, b, substantially as and for the purpose described.

2d, The combination of the flange cap, f, elevations, g, yoke and pin, h i, with the gasket and seat, e d, substantially as and for the purpose described.

80,297.—BUTTER DISH.—William W. Lyman (assignor to Meriden Britannia Company), West Meriden, Conn.

I claim the right and left hand screw actuating fulcrum, in combination with the cover, a'', and body, a, constructed and operating substantially as and for the purpose described.

80,298.—MACHINERY FOR MAKING PAPER BAGS.—George H. Mallary, New York city.

I claim, 1st, The clamp, formed of the bar, L, the shaft, K with its lags, t, when combined with the supporting bars, u, substantially as set forth.

2d, The clamp, formed of the sides, W and Y, and the jaw, 31, when combined with the folders, 6 6' and the cains, 5 5', substantially as described.

3d, The cross head, Z, the folding blade, 15, and the pasting roller, 13, when combined and arranged substantially as described.

4th, The levers, D and E, the crank, e c, the clamp formed of the bar, L, and the shaft, K, with its lags, t, and the clamp formed of the slides, W and Y, and the jaw, 31, all combined and operating substantially as described.

90,299.—MANUFACTURE OF ARTICLES OF SOFT RUBBER.—George W. Martin, (assignor to himself and J. W. Haskins) Boston, Mass.

I claim an elastic screw thread, substantially as described.

80,300.—CANE SEAT.—George W. Martin (assignor to himself and J. W. Haskins), Boston, Mass.

I claim a movable cane seat, having sunken bearings, g, as specified, and so constructed as to be reversible, and present each side to the front, substantially as and for the purpose described.

80,301.—PORTABLE ROOFS FOR HAY STACKS, ETC.—Thaddeus Munson, Canandaigua, N. Y.

I claim the combination with the sections, A A', connected by hooks, a a1 a2, of the bracing cleats, c c, at the top, and the cords, g g, at the bottom, passing loosely through the rings, d d, and attached to the bars, f f, and stakes, h, the whole arranged as described, and operating in the manner and for the purpose set forth.

80,302.—LAMP.—Person Noyes, Lowell, Mass. Antedated July 11, 1868.

I claim the use or application of a cap or stopple, a, to the top end of the wick tube of a lamp which has an outer jacket, sleeve, or other similar or analogous device, when said cap or stopple is constructed and arranged to operate substantially as and for the purpose set forth.

80,303.—CULINARY APPARATUS.—William W. S. Orbeton, Bradford, Mass.

I claim the improved brazier as connected with the main air supply openings, a a, etc., the auxiliary inducts, B B, etc., and the eauction openings, e e, arranged and combined together substantially in the manner and so as to operate as set forth.

Also, in combination therewith, the annular register supporting plate, C, as and for the purposes described.

Also, the combination of the main and auxiliary air inducts, a B, the discharge openings, c the fire pot cover, D, the annular register supporting plate, C, the latter having a dome or cover applied to it in the manner and for the purpose as explained.

Also, the combination of the hoop or band, F, with a brazier or cooking apparatus constructed in other respects substantially as set forth, the same being for the purposes explained.

80,304.—MACHINE FOR MAKING KNITTING MACHINE NEEDLE SHANKS.—Jesse S. Perkins, Lake Village, N. H.

I claim the combination of the friction jaws, d e, or the equivalent thereof, and the dies and cutters, f g n o p, arranged and provided with mechanism substantially as described, for operating them in the manner and for the purpose as specified.

80,305.—HANGING FOR GATES.—Peter Rasar and D. J. Mayes, Illiopolis, Ill.

We claim the rollers, d d', plate, c, and yoke, k, of a self-closing gate, when arranged in relation to each other and the rest of the gate, substantially as and for the purpose specified.

30,306.—SMUT MILL.—Richard Redfield and James H. Redfield, Salem, Ind.

We claim, 1st, The arrangement of the horizontal fan, J', blast spout, B B6, branch spout, B1, partition, S', vibrating trough, C g, and horizontal spirally slotted case, E y, and horizontal beater, F J, substantially as and for the purpose described.

2d, The relative arrangement of the blast spout, B B1 B6 S', hopper, A, box, d d', vibrating roughened surfaced trough, C, openings, f f', spout, D, hopper, P, horizontal case, E y, horizontal beater, F J, passage, T, inclined spout, T1, vertical spout, T2, cap, H, and inclined receiver, H', substantially as described.

80,307.—MEASURING FAUCET.—Thaddeus S. Reeve, Chicago, Ill.

I claim a measuring faucet, consisting of screw, A, stop, B, gate, D, cylinder, E, piston, F, and gage, H, arranged substantially as described.

80,308.—HORSE POWER.—M. A. Richardson, Sherman, N. Y.

I claim, 1st, The friction brake, D, and nut, d, applied to the operating parts of a horse power, substantially as and for the purpose set forth.

2d, The combination and arrangement of the driving wheel, 1, with the friction device, D d, in such a manner as to be removable from the bed, either separately or together, by the removal of the nut, d, as explained.

80,309.—PEAT MACHINE.—Marvin S. Roberts, Racine, Wis. Antedated July 14, 1868.

I claim, 1st, The digging apparatus, D, consisting of box, E, plunger, F, and endless chain, G, with buckets, H H, combined and operating as described, and the whole secured to the boat, A, and provided with continuous automatic movement along the semi-circular curve, A', by means substantially as described, or other equivalent means.

2d, The mode of automatically regulating the semi circular to-and-fro movement of the digging apparatus, D, along the curve, A', by means of double wheel, m, lever, P', and stops, Q, substantially as herein set forth and specified.

3d, The perforated bucket, H, provided with the hinged bottom, F', and spring catch, c', in combination with the guides, h'', when arranged to operate as described.

4th, The segment gear, A' and A'', arranged as described, in combination with the digging apparatus, and the mechanism for operating the same, substantially as herein described.

5th, The cutting flange, T, of the outer pulley, S, of the flange, F, to cut peat in the bed, and to thus facilitate the operation of the buckets, substantially as set forth.

6th, The grinder, Z, consisting of revolving toothed and furrowed plate, B', provided with spurs, D' D', and constructed as described, and of stationary furrowed concave, C', provided with toothed arms, o' o', and operating by means of set screws, p' p', the whole arranged and operating substantially as set forth, for the purpose of crushing, working up, and pulping peat, as described and specified.

7th, In combination with the grinder, Z, the partially revolving hoop, E', provided with bag, F'', constructed as described and secured to the great conveyer, G'.

8th, The boat, A, constructed as described, in combination with digging apparatus, D, and grinder, Z, to be used on watery peat bogs, substantially as herein described.

80,310.—THILL COUPLING.—Clark Robinson, Fox Lake, Wis.

I claim the socket, D D in combination with the pivot, K having a notch, M, the strap, A, and stop, E, substantially as set forth and shown.

80,311.—SAD IRON HOLDER.—G. H. Roth, Boston, Mass.

I claim the guard, as made with the lateral passages, e e, arranged in it, and with latches, D D, to embrace the parts, d d, of the handle, and cover the passages, e e.

Also, the combination and arrangement of the movable covers, G G, with the guard, made with the slots, e e, and provided with latches thereto, as set thereto.

80,312.—BED BOTTOM.—Isaac N. Sheets, West Jefferson, Ohio.

I claim the combination of the coiled springs, G, the tension rubber springs, N and the hinged levers 1, substantially as set forth.

80,313.—BOILER FLUE PLUG.—William M. Sinclair, Baltimore, Md.

I claim the flanged tubular plug, C, constructed with a longitudinal slot or slots, f, between the lugs, e, at its inner end, and a circumferential slot or slots, g, about in line with the end of the slots, f, for use in combination with the wedge or wedges, d, substantially as and for the purpose set forth.

80,314.—PLOW.—Daniel Smith, Cedar Falls, Iowa.

I claim, 1st, A mold board for plows, which is made entirely of glass, substantially as described.

2d, The combination of a glass mold board and a metal share, substantially as described.

3d, Securing a glass mold board to a plow frame, by means of clamps, a b, or their equivalents, substantially as described.

4th, The construction of the side clamps, a b, with curved overhanging lips, a' b', substantially as described.

80,315.—CULINARY APPARATUS.—Volney M. Thomas, Brandon, Vt.

I claim the arrangement and combination of the steam chamber, A, conducting pipe, D, and grate, G, when constructed and operating substantially as and for the purposes herein set forth.

80,316.—CLOTHES DRIER.—L. B. Waterman, Chicago, Ill.

I claim a detachable clothes drier consisting of the hinged bands, A, having the bars, B, pivoted thereto, and arranged to be secured to a stove pipe by means of the brace or pawl, b, and the ratchet, or its equivalent of rubber, as herein described.

80,317.—COFFEE MILL.—Edwin Watrous, Mystic River, Conn

I claim, 1st, The grinding mill, in which the flange or attaching device is placed at an inclination to the axis of the mill, for the purposes and substantially as set forth.

2d, The hollow clamping washer, 7, in combination with the lug, 8, on the flange, h, for attaching the mill when the parts are slipped behind the screw heads, substantially as shown.

3d, The flanges, 1 2 and 3, constructed and applied, as shown, to the shell, b c, in combination with the hopper for attaching the latter, in the manner herein set forth.

80,318.—FOUNDATION FOR FENCES.—Thomas W. Welch and George B. Starbird, Mechanicsburg, Pa.

We claim the part, A A, the parts, B B, the parts, C C, the octagonal or