

61,087.—RETURN GRACE HOOP.—Francis Munson, Cincinnati, Ohio, assignor to himself and J. W. Layman.

I claim the combination of the grace hoop, A, with the elastic thongs, B, C, for the purpose herein described and set forth.

61,088.—HOOP SKIRT.—Cesar Neumann, New York City.

First, I claim a hoop skirt with its upper wires closed by means of a spring clasp substantially as described and represented.

Second, A hoop skirt, with its upper opening wires arranged in sections and provided with spring catches for the purpose described.

61,089.—MAGNETIC BRAKE FOR CARS.—Joseph Olmsted, Knoxville, Ill.

First, I claim the arrangement of the magnet, D, armature, E, lever, F, with the shaft, G, clutches, H, J, and gear wheel, I, operating substantially as and for the purpose described.

Second, I claim the combination and arrangement of the shaft, G, clutches, H, J, gear wheel, I, and spur wheel, K, with the axle substantially as shown and described.

61,090.—CONSTRUCTING LATCH BOLT.—Solomon Oppenheimer, Peru, Ind.

I claim the peculiar manner and means by which the two several parts are connected and held together, namely, the additional prongs, A, A', and the raised flanges, C, C', on the same forming clamps for holding the shank firm and steady. I also claim affixing side flanges, A', and beads or projections, B, to the shank for the purpose as stated, also the grooves in the clamps for the said beads or projections to fit into.

61,091.—CULTIVATOR.—R. B. Parks and J. R. Parks, Neponset, Ill.

First, We claim the angular bars, H, pivoted to bar, I, and connected with the treadles, J, by link, C, in combination with the beams, D, and operating substantially as described for the purpose specified.

Second, The pivoted bars, L, in combination with the plows, K, and stand, A, B, and set screw, G, substantially as described for the purpose specified.

61,092.—LAMP CHIMNEY CLEANER.—Richard Pattin, Marietta, Ohio.

First, I claim forming the rings or eyes by which the two wires are connected out of the body of the wires, instead of additional pieces, in the manner set forth.

Second, The wires, H and K, arranged to move freely one upon the other, in combination with the elastic metallic strips, G, substantially as described.

61,093.—DAMPER.—W. W. Paxson, Point Pleasant, Pa.

I claim the new article of manufacture herein described being a section of stove pipe with snaged deflector, a, cleats, b, and slide, B, as and for the purpose set forth.

61,094.—ARTIFICIAL TRIPOLI FOR POLISHING.—Thomas J. Platt, Newark, N. J.

I claim a polishing material composed of the substances herein named and described, substantially as and for the purposes set forth.

61,095.—GRAIN BIN.—Orin J. Porter, Hudson, Ohio.

I claim the rib, C, groove, D, rollers, E, and bin, B, in combination with the counter or its equivalent, for the purpose and in the manner as set forth.

61,096.—FLY TRAP.—Henry H. Potter, Carthage, N. Y.

First, I claim the vessel, C, in combination with the two pans, A, A', for receiving the remains of the entrapped flies, when the pans are opened, substantially as herein shown and described.

Second, The hook wires, A, and their upper arms supporting the pans, A, A', and their lower end interlocking and holding the pans open until released by the detent, F, as and for the purpose specified.

61,097.—WRENCH.—Thomas Pratt, Valparaiso, Ind.

I claim a wrench in which the jaw, A, is formed by a solid extension of the handle, and the movable jaw, B, is connected therewith by the stem, C, passing through a mortice at the base of the jaw, A, being retained in place by the pressure of the spring, D, upon the side thereof, substantially as set forth.

61,098.—DISTILLING APPARATUS.—Lyman Pray, Charlestown, Mass.

I claim the arrangement of one or more shelves, d, e, in the fire chamber, B, of a still to operate in combination with the still, A, flues, f, g, h, and dampers, f', g', h', substantially as and for the purpose set forth.

61,099.—EYE GLASS.—James Prentice, New York City.

I claim the nose pieces, a, a', on the eye glasses, A, A', extending from a point below the center of the glass to a point above said center, with gradually increasing width, in order to conform to anatomy of the nose, as herein shown and described, and for the purpose specified.

61,100.—PAPER COLLAR.—Geo. W. Ray (assignor to Ray & Taylor), Springfield, Mass.

I claim paper, whether plain or enameled, embossed, either before or after its construction into articles of wearing apparel, by means of a woven fabric applied under pressure, substantially as herein described and for the purpose set forth.

61,101.—(A.)—SEWING MACHINE.—Geo. Rehfuss, Philadelphia, Pa., assignor to the American Button-hole, Cording, Braiding and Machine Co., New York City.

I claim the combination of a stationary sewing machine and two inclined rails which are traversed by a truck or carrier adapted for the reception and retention of a fabric to be sewed, when the required traversing motion is imparted to the said truck by the operation of the feed device of the machine, substantially as described.

61,102.—(B.)—SEWING MACHINE.—Geo. Rehfuss, Philadelphia, Pa., assignor to American Buttonhole, Cording, Braiding and Machine Co., New York City.

I claim, First, A hook, y, in combination with a reciprocating eye-pointed needle bent near its lower end and with the within-described operating devices or their equivalents, the whole being constructed and arranged for joint operation substantially as set forth.

Second, The lever, i, constructed for the retention, removal and replacement of the loop-carrying bars, J, J', substantially as described.

Third, The said lever, i, and its loop-carrying bar, J, or J', in combination with the within-described devices or their equivalents, whereby the said bar can be readily adjusted to act in conjunction with the needle for forming the edge binding or for making the ordinary loop stitch.

61,103.—(C.)—SEWING MACHINE.—G. Rehfuss (assignor to the American Buttonhole Sewing Machine Co.), Philadelphia, Pa.

I claim, First, The adjustable jaws, k, k', with their ribs or flanges, s, t, constructed and adapted for attachment to a sewing machine, substantially as and for the purpose described.

Second, The plate, i, applied to a feeding device and combined with a slotted presser foot in the slot in which the plate projects, when above the work plate, substantially as and for the purpose described.

Third, The adjustable plate, k, with its inclined projection, r, constructed and adapted for attachment to a sewing machine, substantially as and for the purpose set forth.

61,104.—SPINNING MACHINE.—John Rich, Worcester, Mass., assignor to himself, D. Ruggles, J. E. Bacon, Worcester, Mass., and A. Daniels, Franklin.

I claim opening and closing the fingers on the twisting tubes by the motion of the bar or the equivalent thereof, substantially as and for the purpose specified.

And I also claim delivering the roving by the rolling of the periphery of the roll of roving on the spool against the surface of the delivery plate, operated substantially as and for the purpose described.

61,105.—STEAM-ENGINE SLIDE VALVE.—W. B. Robinson, Detroit, Mich.

I claim, First, Making packing rings or packing strips of differential surfaces and with the necks, B, substantially as described.

Second, I claim the holes, b, through the flange, g, in combination with the packing ring, or strips, substantially as set forth.

61,106.—CURTAIN FIXTURE.—Chas. Rose, Allentown, Pa.

I claim the arrangement of the toothed nut, H, the lever, I, and spring, L, with the disk, F, shaft, B, and roller, G, the several parts being constructed and used as and for the purpose specified.

61,107.—FRUIT AND ICE HOUSE COMBINED.—J. S. Ross, Hiram, Ohio.

I claim, First, The special arrangement of the fruit and ice rooms, when constructed and combined with a suitable building, as and for the purpose described.

Second, The mold or frame, E, with adjustable tapering sides or ends, in combination with the pan or vat, H, substantially as and for the purpose described.

61,108.—BRICK MACHINE.—Wm. A. Shepard (assignor to himself and John M. Morehead, New York City).

First, I claim the combination of the hopper, F, rollers, G and H, and screw, E, with each other and with the revolving horizontal wheel, V, substantially as herein shown and described.

Second, The combination of the pitman, R, arm, S, hub, T, pawl, P, with each other and with the ratchet wheel, H, of the wheel, V, for the purpose of revolving the said wheel intermittently, substantially as herein shown and described.

Third, Operating the plungers for the double purpose of pressing the brick and delivering them from the molds by toggle bars, when constructed as herein shown and described.

Fourth, The combination of one or more sets of toggle bars, Z, and sliding blocks, X, with each other and with the plungers, W, and wheel, V, substantially as herein shown and described.

Fifth, The combination of the pitman, A', and arm, B', with the toggle bars, Z and X, and with the hub, T, substantially as herein shown and described.

Sixth, The combination of the plate, L', and arm, K', with the pitman, R, arm, S, and wheel, V, substantially as herein shown and described and for the purpose set forth.

Seventh, The sliding bar, D', in combination with the toggle bar acting upon the follower.

60,109.—LUBRICATING JOURNALS.—Nelson S. Snedeker, Philadelphia, Pa.

I claim a lubricator composed of woolen plush interwoven with a wire warp and united to metallic back with rivets or their equivalents.

61,110.—STUMP EXCAVATOR.—David Stauffer, Spring Hills, Ohio.

I claim an inverted frame B and C, set upon runners, A, A', combined with the levers, D, B, working in C, and operated by moving the fulcrum bolts, b, b', in the holes, a, a', and alternately lifting and depressing the levers, for the gradual extraction of stumps, constructed and arranged to work substantially as herein described.

61,111.—WOOD LATHE FOR TURNING KNOBS.—J. Stevens and J. A. Way (assignors to John H. Session), Bristol, Conn.

First, We claim the cylinder, C, in combination with the notch wheel, Q, ratchet bar, R, lock bar, R', bolt, S, and actuating pin can, T, for the purpose of giving periodical movement to said cylinder, C, substantially as described.

Second, We claim the tool stocks, 1, 2, 3, 4, 5, 6, 7, in combination with the cams, J, arranged upon the plate, K, lever, U, with its connecting arms actuated by the cam, T, substantially as and for the purpose described.

Third, We claim the clearer clutch, M, in combination with the lever, O, and cam, P, vibrating spindle, N, substantially as and for the purpose described.

Fourth, We claim organizing in one machine the above enumerated successive operations for turning, finishing, and clearing the knobs from the machine, as described, when arranged substantially as set forth.

61,112.—EVAPORATOR.—Joseph J. Stout, Greensburg, Ind.

First, I claim constructing the pan of an evaporator with inclined longitudinal partitions forming compartments arranged one higher than the other, and with laterally disposed openings, so that the juice shall flow from the central and highest part through the length of all the partitions, substantially as and for the purpose set forth.

Second, I claim the rod, F, and bars, E, E', in combination with the set screw, I, and valve, D, substantially as and for the purpose set forth.

Third, Constructing the bottoms of evaporators with corrugations or other irregularities of surface, substantially as and for the purpose set forth.

Fourth, I claim the arrangement of the grate bars, B, and grated guards, B', substantially as and for the purpose set forth.

61,113.—BIT STOCK.—A. W. Streeter, Shelburne Falls, Mass.

I claim the combination of two gripping jaws, an undivided socket to control the end of the shank of a tool and a locking ring turning concentrically around the socket to close and uncloze the gripping jaws upon the tool all being and acting in combination, substantially as specified.

61,114.—DITCHING MACHINE.—Geo. Sullivan, West Liberty, Ohio.

I claim a ditching machine constructed, arranged and operating as herein shown and described.

I claim the windlass and crane in combination with the inclined guide frames, substantially as described.

61,115.—GATE.—W. W. Sutliff, Town Line, Pa.

I claim the lever, C, the weight, D, and the rod, A, constructed and arranged substantially as herein shown and described, in combination with a gate or door, as and for the purposes set forth.

61,116.—TARIFF INDICATOR FOR TELEGRAPHS.—Edward De Loss Sweet, Chicago, Ill.

I claim in combination with a map, M, the arrangement of a tape or its equivalent, divided into spaces or divisions numbered as shown, said spaces being in proportion to the distance indicated upon said map, the said tape adapted for varying distances, substantially as herein described and shown.

61,117.—ALLOY FOR SABOTS OF PROJECTILES.—Thomas Taylor, Washington, D. C.

I claim an alloy for a composition for metallic sabots of projectiles, within the limits or proportions described, and for the purpose set forth.

61,118.—BELT COUPLING.—Eli Thayer, New York.

I claim the key as shown in Fig. 2, in combination with the clasp and belt, as shown in Figs. 1 and 3.

61,119.—BOOTS AND SHOES.—Eli Thayer, New York.

I claim the making the tap-soles of boots and shoes in several transverse sections of leather, substantially as set forth.

61,120.—DISTILLING PETROLEUM.—Alexis Thirault, New York.

First, I claim the apparatus constructed as above described, the object of which is, to secure a continuous distillation by one single operation, being a combination of boilers, A, B, C, and the tar-cock, F, with the hot-air chamber, U, and all the pipes and other parts composing the said apparatus.

Second, I claim separately as my invention, the still composed of boilers, A, B, C, in their form and combination, for the use and purpose above described.

Third, I claim separately as my invention, the tar-cock, F, as to its construction, the object being to clear the still of all residuum without retarding the distillation.

61,121.—BORING TOOLS.—Nathan Thompson, St. John Wood, England.

First, I claim the construction of a tool of a thin cylinder and axis, for cutting a hollow cylinder out of wood, substantially as herein shown and described, and

Second, I claim the employment of thin steel cylinders, a, and short tubes or cylinders, c, for cutting a series of hollow cylinders out of wood, in the manner and for the purpose substantially as herein shown and described.

61,122.—COFFEE POT.—Howard Tilden, Boston, Mass.

I claim the use of the strainer, E, in form as shown when provided with the rim, F, and the air chamber, D, in combination with the cylinder, C, the tube, G, and the body of the pot, A, and B, the whole constructed substantially as described and for the purpose set forth.

61,123.—PORTABLE FENCE.—Daniel Unthank, Spiceland, Ind.

I claim a portable fence having its posts formed of two upright bars or posts, A, A', connected by pins, B, B', in combination with the braces, C, F, either on both, and the notched bars, D, D', fitted on the pins, B, B', substantially as and for the purpose set forth.

I also claim the bars, D', in connection with the blocks or supports, F, between the bars, D', and the bars, D, below them, substantially as and for the purpose set forth.

I further claim the supplemental vertical strips, a, attached to the bars, D, of the end panel at the angle of the fence, in combination with the notched bars, D', of the panel which forms the other side of the angle, substantially as and for the purpose set forth.

61,124.—APPARATUS FOR WASHING ORES.—Richard Uren, Houghton, Mich.

I claim washing ores or minerals by causing the same to flow across a revolving belt, substantially as and for the purposes described.

61,125.—REFINING PETROLEUM AND LUBRICATING OILS.—P. H. Vander Weyde, M. D., Philadelphia, Pa.

First, I claim the heating of the heavy petroleum in a steam coil in the manner described, the pressure being kept up in the filter, and in the same time saving and condensing the vapors arising, namely, gasoline, naphtha and benzine.

Second, The combination of this continuous heating apparatus with a percolator or filter, substantially as described.

Third, The rapid draining, cleaning and partial drying of the exhausted filtering or percolated material, by placing it in the elongated boxes described, and submitting it to the action of a centrifugal machine.

Fourth, The manner of refining, distillation in a retort, the filtering material, producing in the same time a quantity of kerosene for illuminating purposes.

61,126.—INVALID CHAIR.—James B. Wallace (assignor to himself, R. Walling, and Joseph Crook), Franklin, Ohio.

First, I claim the leg-support, K, hinged to the chair-rests, F, and pivoted to the bottom, C, below its juncture with the arm-rests, by the plate, H, in the manner described, and for the purpose specified.

Second, The bottom, C, in combination with the standard, B, cyms reversed springs, a, a', and legs, A, substantially as herein set forth, and for the purpose specified.

61,127.—WATCH CASES.—Benjamin J. Warner, Brooklyn, N. Y.

I claim the hinged ring, e, applied between the lid, c, and body, a, and fitted for the reception of pictures, and provided with catches, substantially as and for the purpose set forth.

I also claim the ring, e, snapping outside of the flange of the opening, receiving the glass or crystal, and securing the same in place as shown.

61,128.—BLACKING-BOX HOLDER.—Amos Wilder, Calais, Me.

I claim as a new article of manufacture the holder, consisting of the bent wire, A, B, formed of one piece as herein described, and having a ferrule, D, as herein set forth and for the purpose specified.

61,129.—FRUIT STEP-LADDER.—James F. Winchell (assignor to himself and George C. Steele), Springfield, Ohio.

First, I claim the combination of the ladders, A and B, when constructed and arranged to operate substantially as shown and described.

Second, The circular brace, C, when arranged as shown for locking the part, B, in position.

Third, I claim pivoting the ladder, B, by means of the hinge, D, made to embrace the bars, A, as shown and described.

61,130.—FRUIT-DRYING HOUSE.—James F. Winchell, assignor to himself and George C. Steele, Springfield, Ohio.

I claim a dry-house constructed substantially as described, and having the pipe, H, with its valve, m, and the return flue, E, combined and arranged for joint operation, as herein described.

I claim the removable bottoms, p, constructed of wire gauze or its equivalent, arranged to be used in connection with the drawers, D, substantially as herein set forth.

I claim providing the drawers, D, with the guide pieces, t, as shown and described.

61,131.—MODE OF BURNING HYDRO-CARBON LIQUIDS AS FUEL.—A. J. Works, Fair Haven, Conn.

First, I claim the combustion of naphtha, crude petroleum, or any other liquid hydrocarbon, on an open surface or receiver, connected or surrounded with a jacket, in connection with ignited hydrogen gas, the flames of both uniting while in a state of combustion, substantially as and for the purpose set forth.

Second, I also claim the arrangement of a series of receivers, two or more, in combination with each other, and with a suitable supply pipe, constructed and operating substantially as and for the purpose described.

Third, I also claim the section of receiver, B, in combination with the main receiver, A, substantially as and for the purpose described.

Fourth, I also claim the central air channel, c, and annular air channel, d, as and for the purpose described.

Fifth, I also claim the decomposer, F, provided with jet openings, f, near its bottom, in combination with the jacket, E, receiver, A, B, and air channels, c, d, all constructed and operating substantially as and for the purposes set forth.

Sixth, I also claim the hood, G, in combination with the jacket, E, decomposer, F, receiver, A, B, and air channels, c, d, all constructed and operating substantially as set forth.

61,132.—MACHINE FOR ROUNDING LEATHER.—Josiah Yeager, Berksburg, Pa.

I claim the employment of the tubular cutter, arranged and operating substantially as and for the purpose described.

I also claim the arrangement of the guide or perforation in relation to the tubular cutter, substantially as and for the purpose described.

I also claim the employment of a series of cutters and guides, mounted upon the drum, c, or its equivalent, substantially as and for the purpose described.

I also claim making the cutter adjustable upon the drum or cylinder by means of the wedge and set screw, or equivalent devices, substantially as described.

I also claim the drum or cylinder, mounted in the uprights or standards in such manner as to be free to turn in bearings therein, in combination with a means for setting or holding the said drum, together with the cutters, in any desired or convenient working position, substantially as described.

RE-ISSUES.

2,447.—HAND PEGGING MACHINE.—William N. Ely, Stratford, Conn., assignee of E. M. Stevens, Patented Aug. 6, 1861.

I claim, First, Feeding the machine forward upon the work by means of theawl, or a piercing instrument, substantially as described.

Second, Graduating the spaces between the peg holes by regulating the throw of theawl substantially as described.

Third, Making theawl and peg-driver in two pieces, and uniting them in a plunger, so that whilst both rise and descend together, one of them shall have a lateral motion for the purpose of feeding the machine to the work substantially as described.

Fourth, Feeding forward the peg-wood by means of the action of the plunger in combination with the device, I, or its equivalent, substantially as described.

2,448.—NECK-TIE HOLDER.—J. Albert Eshleman, Philadelphia, Pa., Patented Jan. 31, 1865.

I claim, First, A plate or holder, A, secured in front of a collar, so as to be detachable from the same, and adapted for the reception and retention of a detachable ribbon or tie, substantially as described.

Second, In combination with a plate or holder, I claim the elastic loop, c, composed of wire parts of which are rendered elastic by being coiled, and the transverse portion d which is plain, so as to readily fit over the stud or button.

2,449.—COTTON-BALE TIE.—John C. Lee, Gonzales, Texas, assignee of Z. W. Lee, Patented Oct. 16, 1866.

I claim the metallic band, B, having the bend, b, at one end, and applied substantially in the manner and for the purpose described.

2,450.—EGG PAN AND CAKE BAKER.—The Russell & Irwin Manufacturing Company, New Britain, Conn., assignees of Nathaniel Waterman, Patented April 5, 1859, Re-issue June 19, 1866.

We claim a baking pan composed of a series of distinct cups or baking compartments, all connected together, cast in one piece, and forming one utensil, but perforated with intermediate open spaces, C, for the distribution of currents of heated air among the several compartments, the whole article being substantially such as specified.

DESIGNS.

2,542.—PICTURE FRAME.—John H. Bellamy, (assignor to himself and D. A. Titcomb), Charleston, Mass.

2,543.—BRACKET.—John H. Bellamy (assignor to himself and D. A. Titcomb), Charleston, Mass.

2,544.—MEDAL.—David K. Hitchcock, Newton, Mass.

2,545.—MEDAL.—David K. Hitchcock, Newton, Mass.

2,546.—FLOOR OIL CLOTH.—Charles T. Meyer, Bergen, N. J., assignor to Edward C. Sampson, New York City.

2,547.—ORNAMENT OF AMERICAN JOCKEY CLUB.—C. L. Tiffany, New York City.

THE MARKETS.

PRINT CLOTHS.—We have received from Mr. T. J. Abbott, print cloth broker, Providence, a circular containing tabulated statements of monthly sales of print cloths, in that market, for the year ending with December. The total sales and re-sales amounted to 2,953,000, against 4,112,700 in 1865. These goods have been almost entirely used for printing purposes, fewer having been sold for gray shirtings or bleaching purposes than for the previous two years. The present stock in the hands of the manufacturers and merchants is very small, but the increased production of the large number of spindles now in process of erection will materially increase the supply during the coming year. The highest price reached in the past twelve months was 20 cents; this was early in the year, then a gradual decline took place, until in May the sales were at 10½ cents. During the active season the ruling price was 14 cents, but the year closed with dull sales at 12 cents. Less of speculation has been noted than for several years past, sales having been more direct from manufacturers to printers.

For years past the foreign trade of this country has been gradually centering at New York, until now fully two thirds of the imports and exports are made through this port. It is for this reason that the following statements, culled from the annual tables published by the commercial papers of the city, have such significance. We learn from these statistics that the total foreign imports at the port of New York have reached the enormous sum of \$306,613,184 in foreign gold value. If the freight and duty is added, and the whole is reckoned in its relative value in paper currency, we have a total but little less than \$600,000,000, an amount without precedent in the history of this port. Without enlarging on the degree of national extravagance, shown by this excessive importation, we turn to the statement of shipments from this to foreign ports. The entire exports during the year, reckoned as before in currency value, amounts to \$254,886,254. These figures tell their own story, and show how heavily the balance of our foreign trade is against us.

The annual produce statements show a decrease in imports from the receipts of last year, in flour, wheat, oats, cotton, and most articles of provisions; and an increase in corn, barley, naval stores, cheese and petroleum. The exports show a decrease as compared with 1865, in ashes, flour, wheat, tobacco and provisions; and a gain in corn, cotton, naval stores, lard and petroleum. The changes, as compared with other previous years, are still more unfavorable.

The highest point reached by the fluctuations in gold during the past year was 167½ on January 18; the lowest point was reached April 24, when it stood at 124½. The year closed with a steady decline.

COAL.—The Philadelphia Ledger foots up the amount of coal supplied from the Pennsylvania mines at 12,285,963-17 tons. This is a large increase in the product during the past year as compared with the supply in 1865, which amounted to 9,531,685-08.

COTTON.—The total exports from Jan. 1 to Dec. 31, in 1865, was 249,369 bales; for the past twelve months, 429,981 bales. For the week ending Jan. 8, 9,059 bales were exported, against 8,612 during the corresponding time in 1866.

TIN.—The imports of 1866 at Boston and New York amounted to 15,000 slabs Banca, 70,000 slabs Straits, and 22,560 slabs (750 tons) English, making a total of 107,560 slabs, against 80,550 in 1865. The market for Spelter remains dull. Imports for the past year were

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In operation the hammer is raised by the crank, and when at the proper height the lever, D, is operated which disengages a clutch, that in winding connects the crank and roller, and the hammer, which is of hard wood, iron bound, and weighs about a hundred pounds, falls with great force on the head of the post. A very few blows will suffice to drive a post sufficiently deep into the hardest soil. It is easily built and kept in repair.

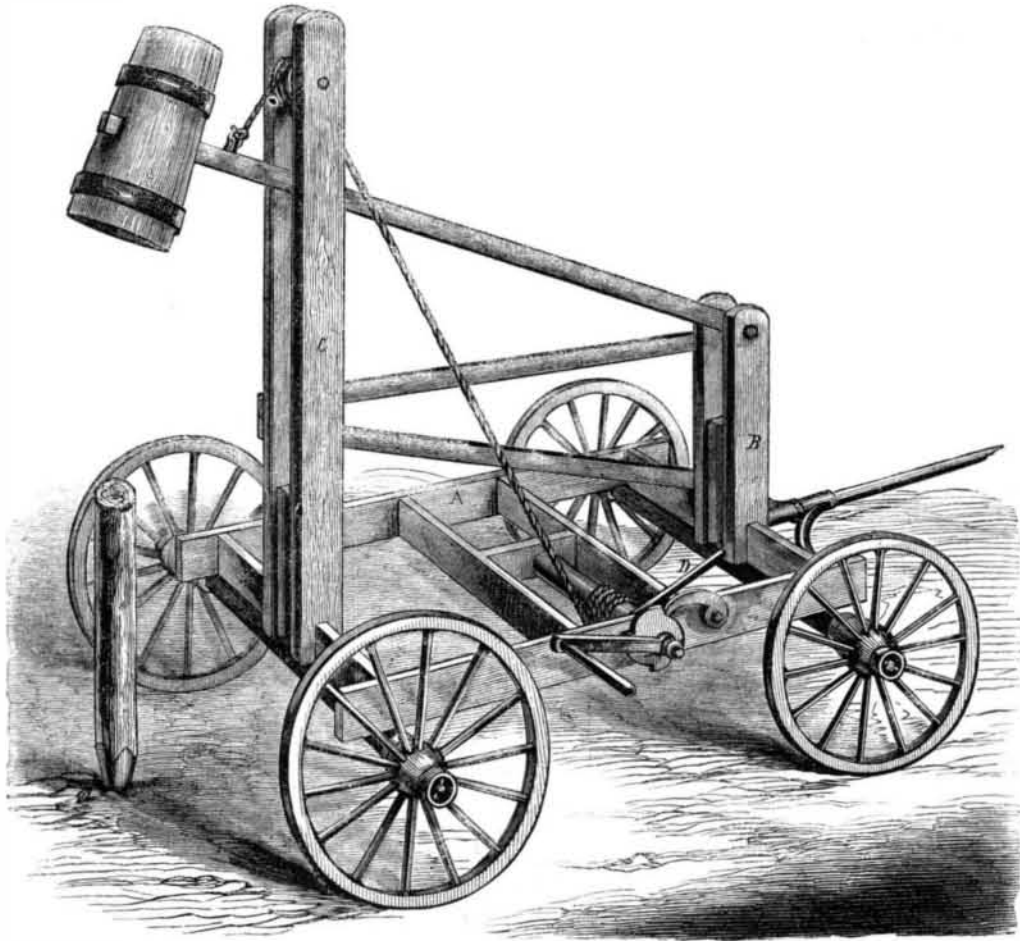
It was patented by John Anderson through the Scientific American Patent Agency, February 27, 1866, whom address at Waukesha, Wis., for further particulars.

The Polar Telegraph.

An extremely delicate yet simple instrument has been perfected by Mr. George Little, an English inventor, with the aid of Mr. E. S. Hidden of this city, for indicating the faintest currents of electricity, with their continuance, and thus spelling the characters of the Morse alphabet to the eye. It consists of a

glass needle with a hollow bulb at its center, poised and floating erect on the surface of alcohol which partly fills an upright tube of glass, the ends of which are hermetically sealed. Around the bulb is a little band of cop-

per, and around the tube a corresponding band a very little lower down. The lower part of the tube is surrounded by a coil of fine copper wire. By communicating a current through the coil to the band on the cylinder, the latter is magnetized, and attracts downward the band on the needle or indicator, which is thus inclined to the north or south according to the character of the current, and retained in that position precisely until the current is



ANDERSON'S DEVICE FOR DRIVING FENCE POSTS.

per, and around the tube a corresponding band a very little lower down. The lower part of the tube is surrounded by a coil of fine copper wire. By communicating a current through the coil to the band on the cylinder, the latter is magnetized, and attracts downward the band on the needle or indicator, which is thus inclined to the north or south according to the character of the current, and retained in that position precisely until the current is

agined, is afforded in the transmission of distinct signals through several hundred miles of wire, from the miniature galvanic battery composed by placing the tongue between a bit of copper and another of zinc. A successful experiment has been made through the submarine cable between England and France. The importance in submarine telegraphy, of an indicator so obedient to the faintest currents, need not be pointed out.

ent for the same invention to any other person, without giving notice to the Caveator, who is then allowed three months time to file in an application for a patent. A caveat, to be of any value, should contain a clear and concise description of the invention, so far as it has been completed, illustrated by drawings when the subject admits. A caveat consists of the Petition, Oath, Specification, and Drawings. The Government fee for filing a caveat is \$10, and our ordinary charge to prepare the documents and attend to the whole business from \$10 to \$15. In order to file a caveat the inventor needs only to send us a letter containing a sketch of the invention, with a description in his own words, and fees, \$25 in full. Address MUNN & CO., 37 Park Row, N. Y.

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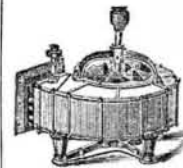
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The model should be neatly made of any suitable materials, strongly fastened, without glue, varnish or painted upon it. When the invention consists of an improvement upon some other machine, a full working model of the whole machine will not be necessary. But the model must be sufficiently perfect to show, with clearness, the nature and operation of the improvement.

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