

TREATISES AND INVENTIONS DESIRED IN FRANCE.

We find in the last number of *l'Invention* a list of the prizes offered by the Industrial Society of Amiens, and though it is too late for competition from this country, the list may be interesting; we accordingly present a brief translation.

First—Memoir on the fabrication and sale of bricks in the department of the Somme. Silver medal.

Second—Memoir on the construction of the buildings and the arrangement of the machines for the manufacture of linen, cotton and wool cloth. Gold medal.

Third—Memoir, with designs on machines, for raising the materials in constructing buildings. Silver medal.

Fourth—Prize for the invention of a pyrometer for measuring the temperature of the gases escaping from the furnaces of steam boilers. Silver medal.

Fifth—Prize for the best heaters of steam boilers in the department of the Somme. \$100.

Sixth—Prize for the invention and application of a good meter for measuring the water fed to steam boilers. Gold medal.

Seventh—Prize to be distributed to a certain number of workmen of the department, remarkable for their conduct, labor, morality and devotedness.

Eighth—Construction of a power loom in which the feed and take-up shall proceed regularly without requiring any manual adjustment from the beginning to the end of the work. Gold medal.

Ninth—Construction of an automatic knitting loom making the return stitch. Gold medal.

Tenth—Construction of an automatic knitting loom, making the return stitch and narrowing. Gold medal and \$20.

Eleventh—Prize for the best description of a spinning of wool mixed in all its parts. \$60 given by M. Vayson.

Twelfth—Prize for the best description of a dye-house for dyeing woolen yarn in the skin; the heating to be done by steam, which must also supply a small engine. \$40 given by M. Vayson.

Thirteenth—Prize for the invention of a good dressing or facing for linen cloth. \$20 given by M. Bourdard.

Fourteenth—Memoir on the improvement of lands. Silver medal.

Fifteenth—What will be the advantages of the cultivation of tobacco in the department of the Somme. Silver medal.

Sixteenth—Indicate new means for the preservation of grains in store. Gold medal.

Seventeenth—Present the finest and richest collection of woods of the country, worked and in the rough. Silver medal.

Eighteenth—To find for the velvets of Utrecht, a dressing filing the following conditions:—1st, To be without odor; 2d, Not to alter, either in color, softness or brilliancy; 3d, To preserve the softness of the tissue; 4th, Adapted to any length of nap. Gold medal and prize of \$20.

Nineteenth—To find the means of producing the bitartrate of potassa, otherwise than by deposit from wines. \$200.

Twentieth—For a composition which in dyeing woollens will replace with a notable economy tartar in colors requiring the employment of the salts of tin. \$200 and a gold medal.

Twenty-first—To find the means of giving immediately and with economy to the decoctions of Campeachy the tinctorial force which they acquire only by age. Silver medal.

Twenty-second—To find for dressing cotton velvet a preparation which will replace animal glue, at the same time giving suppleness to the tissue, and preserving to it the strength necessary for sale. The mullage must be economical, without odor, and without action on the colors. Gold medal.

Twenty-third—For specimens of cotton velvet having the qualities of English velvet in color and solidity. Gold medal.

Twenty-fourth—For an easy means of detecting the adulteration of oils. Gold medal.

Twenty-fifth—For a better means of bleaching cotton velvet, cut and not cut. Silver medal.

Twenty-sixth—For a lubricating oil. Gold medal.

Twenty-seventh—The invention of a machine to

measure in a practical manner the lubricating qualities of oils.

Twenty-eighth—A means of applying in a practical manner hydrate of alumina to the filtration of sugars.

Twenty-ninth—A memoir on the use of trade marks, and the means of rendering them practically efficacious.

Thirtieth—To set forth the advantages and the inconveniences which result, in both a moral and material point of view, from an increase of the working population in the great manufacturing centers, in consequence of the development of industry. Gold medal.

Thirty-first—Study on the industrial arts in the department of the Somme, and on their progress or decline from the thirteenth century to the present time. Gold medal.

Thirty-second—Study on the habitual maladies of the workmen of the department of the Somme, following their diverse professions. What are the hygienic measures to be employed for each class of workmen? Gold medal.

"Cannel Coal."

About a century ago the celebrated Duke of Bridgewater was the proprietor of a large estate situated at a place called Worsley, seven miles from Manchester. This estate contained numberless valuable coal seams, easily to be got at, but nevertheless comparatively worthless, in consequence of the great expense and difficulty of transporting the coal to market. The Duke, being a singularly enterprising individual, determined, if possible, to remedy this defect, and by one of those happy coincidences which so frequently reward a praiseworthy effort, he found, in the self-instructed genius James Brindley, the very man to contrive the means for securing the desired end. Suffice it to say that Brindley constructed an excellent profit-paying canal between Liverpool, Manchester, Worsley, and the Great Wigan district. This canal appears to have been finished about the year 1766, and store-houses were built at various points at its course, where the Duke's coal was deposited, for the purpose of supplying the immediate neighborhood. At this time the word "kannel" or "kannel" was generally employed in Lancashire and Cheshire to designate an artificial watercourse; and even Brindley himself, in some of his letters, speaks of a new undertaking as "the Duke's kannel." It is not, therefore, surprising that the Duke's coal should have received the name of "kannel coal," being, so to say, kannel borne; and this name would be peculiarly applicable at Liverpool, where sea-borne coal from Whitehaven, in Cumberland, had long been in use, and was, moreover, an article differing in many of its qualities from the Duke's coal. That this is the true origin of the name now applied to this kind of coal is further established by the fact that the eminent geologist Werner, who visited the coal districts of England not long after the above period, has adopted the very word, and in speaking of the Wigan coal calls it "kannel kohle." This word has indeed been lately written "cannel" in this country, and some ingenious persons, finding themselves quite at a loss to discover the source of such a name, come to the conclusion that it is derived from the word "candle," and to support this they have asserted that slips of this kind of coal will burn like a candle; an assertion which we need hardly say is altogether fabulous.—*Newton's Journal of Arts.*

SPECIAL NOTICES.

JAMES WARREN, of Springfield, Mass., has petitioned for the extension of a patent granted to him on the 15th day of July, 1851, for an improvement in revolving breech-loading fire-arms.

LEWIS LILLIE, of Troy, N. Y., has petitioned for the extension of a patent granted to him on the 15th day of July, 1851, for an improvement in fire-proof safes.

Parties wishing to oppose the above extensions must appear and show cause on the 26th day of June next, at 12 o'clock, M., when the petition will be heard.

WHITE-WASHED walls which are to be papered should be well brushed over with strong vinegar previously, or the paste will not adhere.

It is asserted that the disbandment of Lee's army has reduced the expenses of Government \$1,000,000 a day.



ISSUED FROM THE UNITED STATES PATENT-OFFICE FOR THE WEEK ENDING APRIL 25, 1865.

Reported Officially for the Scientific American.

47 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.

47,374.—Slide for Extension Table.—Erastus P. Allyn, North Canaan, Conn.:

I claim a slide for extension tables manufactured of malleable cast-iron or other metal, with its parts fitted together by the dovetail projections and recesses, and provided with stops, substantially as herein described.

[This invention consists in having a series of slides of malleable cast-iron, and fitted together by means of dovetail projections and grooves, and provided with stops, whereby a very economical and desirable slide for the purpose specified is obtained, and the annoyances and embarrassments occasioned by the shrinking, swelling and warping of the ordinary wooden slides are avoided.]

47,375.—Coffin Handle.—Ira Almy, Farmer, N. Y.:

I claim a detachable coffin handle, secured to a coffin through the medium of a plate applied in the manner substantially as shown and described.

[The object of this invention is to obtain a handle which may be readily applied to a coffin, and detached from it in a moment of time, and without the aid of any mechanical tools, whereby a set of handles may be applied to an indefinite number of coffins, the former being applied to a coffin when the body is placed in it, and removed when the coffin is to be encased or deposited in its final place.]

47,376.—Paper Bag.—James Arkell, Benj. Smith and Adam Smith, Canajoharie, N. Y.:

We claim as a new article of manufacture a quadrangular paper bag, with a double bottom produced by folding and pasting in the particular manner herein described.

[This invention consists in making or preparing paper bags in such a way as to give to them at their upper ends a flexible character, so that when properly filled with flour or other substances the sides of the bags at their upper ends will come together after the manner of the sides of a cloth bag.]

47,377.—Steam Engine.—John Baird, New York City:

I claim, First, A horizontal engine, provided with a box framing near and attached to the cylinder, and containing vertical pumps, substantially as described, said framing also constituting the condenser, or the channel ways thereof.

Second, I claim a horizontal engine, having a box framing, containing pumps and an independent pillow block framing, when the latter is combined with the former by wrought-iron rods, substantially as described and for the purpose specified.

Third, I claim an engine, having the characteristics set forth in the second claim, on opposite sides of a shaft, when such engines have openings through the framing for the passage of a propeller shaft or shafts, substantially as hereinbefore described.

47,378.—Table and Desk.—Cyrus Baldwin, Manchester, N. H.:

I claim the combination of the table and writing desk, when arranged to operate substantially as set forth.

47,379.—Hay Rack.—Goldsmith Baldwin, Bluffton, Ind.:

I claim the binder, B and C, or their equivalent, for the purposes set forth.

47,380.—Cultivator.—Lester B. Barton, Metamora, Ill.:

I claim the hinged or jointed frame, E, placed within the main frame, A, as shown, in combination with the laterally-swinging shovel or plow standards, G, G, levers, J, J, with stirrups, K, K, attached, and the curved or bow-shaped bar, M, all arranged to operate substantially as and for the purpose herein set forth.

[This invention relates to an improved cultivator, of that class in which the plows or shovels have a lateral adjustable movement, in order that they may be made to conform to the sinuosities of the rows of plants, and cast the earth up to the same or cast it there from, without the liability of plowing out the plants or injuring the roots thereof.]

47,381.—Coal-oil Burner.—W. W. Batchelder, New York City:

I claim the employment, in combination with a tubular wick holder and vapor or gas-generating and air-mixing chamber, of a perforated plate, or the equivalent thereof, together with a metallic or other heat conductor or conductors projecting downwards and dipping into the wick, substantially in the manner herein described, for operation as herein set forth.

47,382.—Microscope.—J. J. Bausch (assignor to Bausch & Lomb), Rochester, N. Y.:

I claim the combination of the object piece, A, eye piece, B, and spring, C, substantially as and for the purpose herein set forth.

47,483.—Churn.—Charles F. Baylor, Clinton, N. J.:

I claim the combination of the belt and rollers, substantially as described, with the slides, S and T, attached to the dasher shafts, and the block or attachment, J, deriving its motions from the hand crank and its connections, as described and represented.

47,384.—Shaking and Rocking Table for Amalgamating Gold, Etc.—Adolph Behr and Wm. James Ward, Black Hawk, Colorado:

We claim a shaking or rocking table, with amalgamated copper or brass riffles or grooves, which may be charged with more or less additional quicksilver, alone or in connection with one or more wooden riffles or grooves, in the shape and manner above described, or constructed in any manner, substantially the same, which will impart to substances suspended in water both the stirring and splashing motion which throws and forces the particles in contact with the amalgamated surface of the copper or brass riffles or grooves.

47,385.—Manufacture of Soap.—Jacob B. Bennett and James S. Gibbs, Buffalo, N. Y.:

We claim the agitation and commingling by any suitable machinery of the ingredients used for making soap in a closed vessel while under heat and pressure sufficient to insure the desired new combinations, and produce cheaply and quickly a uniform good quality of soap.

47,386.—Straw Cutter and Feed Mixer Combined.—E. F. Bishop, Burton, Ohio:

I claim the special arrangement of the hopper, H, mixer, F, shaft,

churn with leaves set vertically upon their upper faces, substantially as described.

Second, The combination of the twisted shank of the dasher with a dasher constructed of vertical and horizontal leaves and blades, substantially as described.

47,436.—Gear-cutting Rules.—C. B. Long, Worcester, Mass.: I claim a gear-cutting rule upon which is marked in figures the numbers of cogs of a given pitch which can be cut upon a given diameter of a wheel, substantially as and for the purposes described.

47,437.—Hay Spreader.—David Lyman, Middlefield, Conn.: First, I claim in combination with the teeth for scattering the hay of a spring attachment so arranged as to allow the teeth to yield upward in accordance with the irregularities of the ground, substantially in the manner herein set forth.

47,438.—Photographic Name Plate.—James E. Mackerley, Paint, Ohio: I claim an improved article of manufacture, an adjustable photographic name plate, made substantially as herein shown and described.

47,439.—Cultivator.—Roswell Marsh, Steubenville, Ohio: I claim the combination of the rotating cylinder with the digging forks and the clearer, substantially as described and for the purpose set forth.

47,440.—Railroad Car Brake.—A. F. McCrone, Elliott's Mills, Md.: I claim the coupling and brake-operating bars, extending through the length of the train and operated by the steam from the engine to rotate the joints to whose shafts are attached the crossbars which connect by suitable rods and levers with the rubber bars, the whole described arrangement being constructed and operated substantially as described.

47,441.—Oil Press.—Wm. V. McKenzie, Jersey City, N. J.: I claim, first, The combination of the separate slides, D, D', and mortises, g, g', with the sides, B, of the press boxes, when constructed and arranged as herein specified.

47,442.—Beer Faucet.—John Miller, Buffalo, N. Y.: I claim the combination with the plunger, C, of the valve nozzle, F, discharge nozzle, D, operating for the purposes and in the manner described.

47,443.—Hot-air Furnace.—Joseph A. Miller, New York City: I claim, first, Forming a heat reservoir between or within the tubes of a hot-air furnace by means of lamps or pieces, L, L', of brick or other material which is a poor conductor of heat, so applied that the flame and heated gaseous products of combustion may circulate through interstices between the said lumps or pieces, substantially as herein specified.

47,444.—Oil Ejector.—Geo. E. Mills, New York City: I claim, first, The use of corrugated metal for tubing oil wells, the same being supported on a perforated bulb, and cone-pointed base, substantially as herein described.

47,445.—Washing Machine.—Jurvis T. Mudge, Cleveland, Ohio: I claim the plunger, C, moving in a vertical plane upon the pivot or hinges, c', and operated by a system of levers, substantially as herein described.

47,446.—Ratchet Brace.—L. H. Olmstead, Newark, N. J.: I claim, first, The combination of the frame, B, and handle, S, of the ratchet brace, constructed and arranged substantially as set forth.

47,447.—Mannual Power.—I. E. Overpeck, Overpeck's Station, Ohio: I claim the arrangement of the connecting rods, c, c', at an angle to a vertical line drawn through the center of the crank shaft of wheel, b, to operate in combination with levers, d and e, of my manual power sawing machine, substantially as described for the purposes specified.

47,448.—Chimney.—C. C. Phelps, Janesville, Wis.: I claim the construction of chimney, of cast iron or its equivalent, in sections substantially as described and for the purpose specified.

47,449.—Shingle Sawing Machine.—C. L. Pierce, Buffalo, N. Y.: I claim the combination of two pair of "dog" C C', with the reciprocating table, said dogs being so arranged as to clamp the block above and below upon each side of the saw kerf, in a manner to prevent the block from pinching or binding the saw, when constructed and operating substantially as set forth.

47,450.—Bread Cutter.—John T. Plass, New York City: I claim the knife, D, and bar, E, in combination with the automatically moving gage, J, all arranged to operate in the manner substantially as and for the purpose specified.

47,451.—Coal-oil Lamp.—A. H. Platt, Yellow Springs, Ohio: I claim the combination of the downwardly convex perforated basilar partition, B, and the perforated cap, C, having a degree of convexity downward less than the former, substantially as and for the purpose herein specified.

47,452.—Pump.—Alex. F. Porter, Philadelphia, Pa.: I claim, first, Constructing and arranging a cylindrical double-acting pump, having inlet through and exit passages, substantially as herein described, and adapting the same to the raising of oil or other liquids from deep wells, as set forth and explained.

47,453.—Balanced Slide Valve.—James Rankin, Detroit, Mich.: I claim the lever, D, rocker, E, link, F, and lever, G, in combination with the piston, H, and slide valve, B, constructed and operating substantially as and for the purpose set forth.

47,454.—Printing Press.—Henry Redlich, Chicago, Ill.: I claim the peculiar manner of constructing the type cylinder, C, to wit, by means of the metal heads, F, wooden heads, e, e', nuts, G, G', wooden segments, f, and removable types, h, substantially as herein described.

47,455.—Car Coupling.—John H. Reed, New Haven, Conn.: I claim the combination of the bar, B, with the lever, E E', and catch, b, when constructed, arranged and fitted to produce the required result, substantially as herein set forth and described.

47,456.—Horse Power.—J. Wyatt Reid, New York City: I claim the combination of the master wheel, F, arms, a, a', stationary tubular spindle, A, platform, G, shaft, C, and one or more horizontal shafts, H, when constructed and arranged to operate as herein specified.

47,457.—Manufacture of Hard Rubber Articles.—George Samuel Rice, New York City: I claim as a new article of manufacture, first, Watch cases or lockets made of hard rubber or vulcanite, in the manner hereinbefore set forth.

47,458.—Exploding Torpedoes in Artesian Wells.—Edward A. L. Roberts, New York City: I claim, first, The priming chamber, b, in combination with the flask plug and nipple, substantially as described.

47,459.—Vibrating Piston Engine.—John B. Root, New York City: I claim the combination of a cylinder, A, of a form substantially as herein specified, and two vibrating pistons, D D', occupying reversed positions within the said cylinder, and both connected with the same crank shaft, to operate substantially as herein set forth.

47,460.—Coffee Settler.—Wm. F. Rossman, Hudson, N. Y.: I claim the hollow cone, A, with open base, having funnel, B, attached in combination with the perforated cup, C, all constructed substantially in the manner and for the purpose set forth.

47,461.—Street-sweeping Machine.—Daniel Sargent, New York City: I claim the adjustable scoop, E, and box, I, in combination with the three-armed hangers, F, adjustable brush, H, rock shafts, t, hand levers, t, movable pinion, c, and wheel, B, constructed and operating substantially in the manner and for the purpose herein set forth.

47,462.—Adjustable Tension Device for Sewing-machine Shuttle.—Frederika Schenkl, Boston, Mass.: I claim the arrangement of the tube, v, or its equivalent, composed of india-rubber or other similar material, with the guard, d, and bolt, e, substantially as described, in combination with the flask.

47,463.—Ships of War.—Charles Slater, Brooklyn, N. Y.: First, I claim the hinged adjustable keel, C, applied in combination with the main keel, B, of a vessel, and with the vertically-adjustable rods, f, and ropes, c, all constructed, arranged and operating substantially as and for the purposes specified.

47,464.—Coffee Settler.—Wm. F. Rossman, Hudson, N. Y.: I claim the hollow cone, A, with open base, having funnel, B, attached in combination with the perforated cup, C, all constructed substantially in the manner and for the purpose set forth.

47,465.—Barrel-rolling Device.—Henry W. Stephenson, Cincinnati, Ohio: I claim the frames, A, crossed and pivoted at c, in combination with the disks, B, B', the whole constructed and arranged so as to be capable of being applied to a barrel, substantially as and for the purpose described.

47,466.—Coffee Pot.—James H. Swing, Cleveland, Ohio: First, I claim the cup, d, and flange, b, in combination with the rim, l, annular chamber and section, A, as and for the purpose set forth.

47,467.—Forge.—Charles N. Taylor and Elijah J. Holmes, Upton, Dedham, Mass.: We claim the improved org hereinafter described with its removable plates, for the purpose of adapting it to the size and shape of the article to be heated.

47,468.—Corn Planter.—James C. Thomas, Redpoint, Md.: I claim, first, The forked seed box, B, in combination with the wheel A, and the hollow tooth, C, when constructed substantially as and for the purpose specified.

47,469.—Reclining Chair.—Hopkins Thompson, New York City: I claim in combination with a clamp fastened on the stationary part of a reclining chair, a hinged brace bar joined to one of the movable parts of a jointed reclining chair, substantially as described, whereby the movable parts may be clamped and braced rigidly to the stationary parts, substantially as set forth.

47,470.—Lock.—Benj. M. VanDerkerck, Clyde, N. Y.: I claim the traverse or key dog, with its bolt, operated by the key in locking and unlocking the lock, together with the spring catch in the head of the key, which holds the dog in its linear or central position after having accomplished its mission.

47,471.—Pulley Block.—S. Van Hennick and T. Allen, New York City: We claim the combination in a single pulley block of the small sheave, a', for carrying the rope or chain, B, to which the weight is attached, and the larger sheave, a'', attached rigidly to the first two, and carrying the rope or chain, D, to which the power is applied, all the parts being constructed and arranged to operate as herein specified.

47,472.—Feed Rack.—John M. Van Nest, Claytown, Iowa: I claim the combination of the sliding trough with the granary, the latter being provided with a spout or opening to discharge the feed into the trough, which moves beneath it, substantially as described.

47,473.—Vehicle.—Zalmon B. Wakeman, Rockford, Ill.: I claim, in combination with the tongue C, the swiveled box or bearing, F, having an eye or aperture increasing in size from front to back, and equipped to receive and support the end of the brace rod, E, substantially in the manner and for the purpose explained.

47,474.—Stove.—George W. Walker, Boston, Mass.: I claim a stove constructed with a sub-base separated from the main base by an air chamber or passage, and operating in the manner and for the purpose substantially as described.

47,475.—Rolling Mill.—Edwin Wassell, Pittsburgh, Pa.: I claim the use of a flanged guide roller, placed in front of a pair of rolls, when such roller is tapered between the flanges, for the purpose of causing the iron bar to slide sideways when it drops out from one pass between the rolls to the proper position in front of the next adjoining pass, substantially as described.

47,476.—Apparatus for Separating Ores.—James Watson, Cliff Mine, Mich.: I claim, first, The hopper, A, provided with the deflecting board, C, chute or trough, D, and the opening, a, at its bottom, substantially as and for the purpose set forth.

47,477.—India-rubber Packing Former.—Wm. Webster, Middletown, Ohio: I claim the cylindrical packing former, A, for preparing India rubber annular packings for sealing fruit cans, in the manner described and represented in the accompanying drawings.

47,478.—Machine for Making Lanterns.—Wm. Westlake, Chicago, Ill.: I claim the former or device constructed substantially as described upon which to make lantern guards.

47,479.—Machine for Making Lanterns.—Wm. Westlake, Chicago, Ill.: I claim the former or device constructed substantially as described upon which to make lantern guards.

