

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 nuclage 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 Canan, 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 enclosed 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,