

RECENT AMERICAN PATENTS.

The following are some of the most important improvements for which Letters Patent were issued from the United States Patent Office last week. The claims may be found in the official list:—

Wind Wheel.—This invention consists, first, in attaching the wind wheel and vane to a frame placed on a circular way and arranged in such a manner that it will rotate under the action of the wind so that the wheel will always be made to face the wind. This arrangement is designed to supersede the revolving head on a fixed post, the usual plan for allowing the wheel to be adjusted to the wind. The invention consists, secondly, in a novel construction and arrangement of the several parts of the wheel, whereby the same is rendered capable of being readily taken apart for repairs or for other purposes. It consists, third, in a novel and improved mechanism for stopping and starting the wheel, and also in an improved governor or regulator for controlling the speed of the wheel, and rendering it uniform under variable velocities of the wind. H. S. Wentworth, of Norvell, Mich., is the inventor of this improvement.

Marine Clock.—This invention is more especially designed for clocks to be used in the engineer rooms of steam vessels. One object is to provide for the winding and the daily setting of the hands, which is necessary at sea, without the greasing and soiling of the dial and inside of the glass, which is almost unavoidable when the winding and setting are performed in front of the dial in the usual way; another object is to obviate the difficulty which sometimes arises at sea from the loss of the ordinary winding key which is difficult to keep in place. And a third object is to avoid the bending or straining of the hands, which so often occurs in setting the clock by taking hold of the hands themselves. The invention consists in certain improved means of winding and setting the hands applied in combination with a hinged dial, whereby the above results are obtained. Victor Giroud, of New York city, is the inventor of the above improvement, and further information may be obtained from Messrs. Davison, Dickinson & Co., 220 Broadway, New York city.

Sewing machine Guide.—This invention consists in the attachment to a sewing-machine guide of a roller having a smooth periphery composed of india-rubber or other gum or soft material of a similar nature, of sufficient length to press the whole width of a tuck, hem or plait, for the purpose of keeping it smooth and preventing it from puckering, and at the same time preventing it from slipping away from the gage. It also consists in the construction of two plates the nippers of which is flexible and elastic, and between which the work passes with a two-edged lip on the lower plate projecting upward and arranged obliquely to the guide, and with a single-edged lip in the upper one projecting downward between the two edges of the lower lip, for the purpose of drawing the work toward the gage; the two-edged lip also serving, by the greater friction which it produces on the lower thickness of a tuck, fold or plait, to prevent the feeder from moving that thickness faster than the upper one, and so drawing the work and rendering it uneven. W. L. Fish, of Newark, N. J., is the inventor of this improvement.

Boring Machine.—This invention relates to an improvement in that class of boring machines in which the spindle is fitted so as to rotate and also slide longitudinally in boxes terminating at the outer ends of two arms which project from one side of an upright or pillar. The invention consists in the arrangement of an adjustable frame forming the bearings for the shaft imparting motion to the bore spindle, and attached to the arms which form the bearings of said bore spindle, in such a manner that by raising or lowering said frame, different sized wheels can be introduced, and the speed of the bore spindle can be accommodated to the size of the drill and to the nature of the article to be drilled. The invention consists also in a treadle with pawl for feeding and bent lever click for arresting and releasing the vertical spring, and which connects with the arms forming the bearings of the bore spindle, in such a manner that by repeatedly depressing said treadle, the drill is gradually fed to the work, and by raising the treadle the spring rod is released and the drill

carried back to its original position. G. S. Corwin, of Riverhead, L. I., is the inventor of this machine.

Deck Light.—The ordinary deck lights for iron-clad vessels are hinged at the lower end of a tubular case which is fitted in the planking of the deck, and as the latter is necessarily quite thick in order to support the iron plating and effectually resist shot, there is a large chamber formed by the case above the light, which catches and holds water at every storm, or when the vessel ships a sea. This water has hitherto been removed by stopping up the same by means of a cloth or sponge, which consumes considerable time. It cannot be removed by opening the light from below, on account of the water being discharged upon the floor of the cabin or apartment underneath. This invention consists in applying a faucet to the lower part of the tubular case, in such a manner that the water may, with the greatest facility be drawn off from the tubular case into a perfect receptacle below the light and within the apartment beneath the deck. E. S. Hidden, corner of avenue C and Twelfth street, New York city, is the inventor of this deck light.

Thread oiler for Sewing Machines.—This invention consists in a box of cylindrical or other suitable form provided with an opening for the reception of a sponge or its equivalent, an oil hole for the introduction of oil or other lubricating matter without removing the sponge, and a narrow slot into which the thread may be slipped to cause it to work through or in contact with the lubricated sponge, and from which it may be slipped when desired without unthreading the needle, such box to be attached to the needle arm or other convenient part of a sewing machine between the spool and the needle. It also consists in providing the so constructed box with a clasp by which it may be readily attached to the needle arm or needle operating lever, or other suitable part of a sewing machine, without the aid of screws or other separate fastenings. And it further consists in so arranging the opening for the reception of the sponge that it may be closed to confine the sponge in the box by the attachment of the box to the machine. O. R. Hyde, East Cleveland, Ohio, is the inventor of this improvement.

Fluid Meter.—This invention consists in the employment of a movable weight guided by an oscillating slide which connects with one of two valves that are balanced on a suitable working beam to change the current of the fluid, and moved by the action of the fluid on a flexible or movable diaphragm, in such a manner that, by the motion of the weight produced by the action of the fluid on the diaphragm, the valves are alternately closed and opened, and the current of the fluid changed to act alternately on one and then on the other side of the diaphragm, and the quantity of fluid admitted to either side of the diaphragm is registered by the motion of the working beam from which the valves are suspended, said motion being transmitted by suitable mechanism to a registering apparatus, so that the quantity of fluid passing or having passed through the meter can be ascertained at any moment. John Sheffield, of Pultneyville, N. Y., is the inventor of this improvement.

Paper File.—This invention consists in the arrangement of two round, square or polygonal rods, one being provided with springs which press against the surface of the other, or against one or more papers placed between the two rods or rollers, and firmly connected to two arms, each provided with a series of holes to form the bearings for the second rod or roller, in such a manner that by adjusting the movable rod or roller in the corresponding sockets of the arms, a larger or smaller quantity of papers can be secured between the two rods or rollers, and the papers thus secured can be read or handled with the greatest ease and convenience; the invention consists also in the arrangement of a movable longitudinally sliding spring gudgeon in one end of the movable roller, in such a manner that by subjecting said roller to a strain or pressure in a longitudinal direction, said spring gudgeon is caused to recede, and the roller is allowed to be taken out or put into the several sockets of the arms with ease and facility. Samuel Thompson, of San Pedro, Cal., is the inventor of this paper file.

At Mechanic's Falls, Me., paper is made from a mixture of rye straw and corn shucks.



ISSUED FROM THE UNITED STATES PATENT-OFFICE

FOR THE WEEK ENDING NOVEMBER 3, 1863.

Reported Officially for the Scientific American.

* * * 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.

40,451.—The Preparation of Yeast.—J. T. Alden, Cincinnati, Ohio. Antedated Oct. 20, 1863:

I claim the process herein described of making or preparing granulated yeast, wherein the substance is reduced, while in a plastic condition to a finely divided or granulated state, and in that form is dried and preserved for use, substantially as set forth.

40,452.—Car Springs.—T. F. Allen, Canandaigua, N. Y.:

I claim the construction of a metallic coiled car spring, with spiral coils, B, which have bearing surfaces and given spaces between them which close and open, and by means of closing and opening the spiral coils are protected and the spring is gradually, substantially as described in my specification, and for the purpose set forth.

40,453.—Shield for Ordnance.—Peter Andrew, Cincinnati, Ohio:

I claim the elliptic, funnel-shaped, protecting shield, substantially in the manner and for the purpose herein set forth.

40,454.—Sugar Mold Carriage.—Thaddeus Beach, New York City:

I claim the combination with jaws, D, D', set in the same horizontal plane of bars, C, C', for communicating simultaneous motion to the respective jaws, racks, a, a', attached to the said bars, and the pinion, E, for imparting motion thereto, when all the said parts are constructed and arranged in the manner and for the purpose herein specified.

[This invention relates to a new and useful improvement in sugar mold carriages, such as are employed for conveying filled sugar molds to the drying department in sugar refineries. The invention consists in a novel and improved means for grasping or holding the tops of the molds in the carriage, whereby the carriage-way can, with the greatest facility, be adapted for holding different sized molds.]

40,455.—Paddle Wheel.—A. T. Boon, Galesburg, Ill.:

I claim the combination of the double-sided buckets, A, A, with the arms, B, B, of my improved paddle wheel, by means of the metallic side plate, C, C, embracing loops, G, G, and wedged elastic strips, E, E, or their equivalents, substantially in the manner and for the purpose herein set forth.

I also claim in combination with the above feathering automatically the pivoted sides, b, b, of my improved paddle buckets, A, A, in the revolution of the wheel by means of projecting rods or pins, m, m, upon said pivoted sides, and a suitable curved bearing surface, G, upon the side of the wheel, substantially in the manner and for the purpose herein set forth.

40,456.—Tile Machine.—John Braislin, Burlington, N. J.:

I claim, first, The reciprocating plunger, M, space, N, and forming plate, P, in combination with a mixing reservoir, and the opening, m, at the bottom of the same, the whole being arranged and operating substantially as and for the purpose herein set forth.

Second, The mixing reservoir, C, and vertical shaft, F, with its plate, k, in combination with the said opening, m.

Third, The vertical cranked shaft, F, rod, H, lever, I, rod, K, and plunger, M, the whole being arranged for joint action, substantially as set forth.

Fourth, The opening, x, at the rear of the plate, P, in combination with the bar, Q, and block, Y, or other equivalent, movable cover for the said opening.

40,457.—Dish-washing Machine.—A. M. and J. I. D. Bristol, Detroit, Mich.:

We claim, first, The reciprocating plates, K, K, arranged substantially as shown, within a suitable box or reservoir, G, and provided with brushes, L, substantially as and for the purposes herein set forth.

Second, Providing the brush plates, K, K, with openings, d, having beveled edges, e, substantially as shown for the purpose of throwing the water upon the dish by the action of the plates as specified, and freeing the hair of the brushes from grease.

Third, The rotary brush disks or wheels, T, T, arranged as shown within the box, C, and provided with plates or arms, n, having beveled edges to operate as and for the purpose set forth.

Fourth, The plates, M, V, placed respectively between the brush plates, K, K, and brush disks, or wheels, T, T, and connected substantially as shown, with the levers, P, P, for the purpose herein described.

[This invention consists in the employment and use of reciprocating brush plates and rotary brush disks, placed within suitable boxes, and arranged to operate in such a manner as to perform the work of washing dishes, such as plates and similar flat dishes, with great rapidity and in a thorough and efficient manner.]

40,458.—Cars for Petroleum.—John Clark, Canandaigua, N. Y.:

I claim the application of a tank, D, under the platform, A, of a railroad car, substantially as and for the purpose specified.

[This invention consists in the application of a tank of sheet metal or other suitable material under the platform of an ordinary railroad car, in such a manner that a large quantity of petroleum can be carried in bulk, and at the same time the car can be used in its ordinary capacity as a package or dirt car.]

40,459.—Boring Machine.—G. S. Corwin, Riverhead, N. Y.:

I claim, first, The vertically adjustable frame, H, in combination with the bevel gear, E, F, and bore spindle, D, constructed and operating as and for the purpose specified.

Second, The combination of the treadle, o, pawl, p, bent lever click, r, s, ratchet wheel, q, and vertically sliding rod, L, with the bore spindle, D, all constructed and operating in the manner and for the purpose substantially as shown and described.

40,460.—Pans for Evaporating Sugar, &c.—C. B. Darrow, Orland, Ind.:

I claim a sugar pan provided with cavities, c, a, or under the alternating ends of the partitions, a, substantially as shown and described.

[This invention consists in the arrangement of cavities on the opposite side of the pan, and under the several partitions alternately at one end then at the opposite end, in such a manner that the scum rising in one compartment or groove is not allowed to pass into the next compartment without interrupting the current of the juice from one end of the pan to the other, and at the same time the sediment forming at the bottom of the passages between the compartments is