

[OFFICIAL.]

Index of Inventions

For which Letters Patent of the United States were granted.

FOR THE WEEK ENDING OCTOBER 29, 1872, AND EACH BEARING THAT DATE.

SCHEDULE OF PATENT FEES:

Table listing patent fees: On each caveat \$10, On each Trade-Mark \$25, On filing each application for a Patent (seventeen years) \$15, etc.

Main index table listing inventions and their patent numbers, including: Annealing and hardening metals, Auger, earth, J. Wilson, Awning, slide, J. Boyle, etc.

Continuation of the main index table listing inventions and their patent numbers, including: Pavements, laying wood, E. P. Morong, Pavements, form for laying brick, S. C. Brewer, etc.

APPLICATIONS FOR EXTENSIONS.

Applications have been duly filed and are now pending for the extension of the following Letters Patent. Hearings upon the respective applications are appointed for the days hereinafter named.

EXTENSIONS GRANTED.

13,897.—GIMLET.—C. C. Tolman. 16,814.—CIRCULAR SAWING MACHINE.—C. P. S. Wardwell. 21,828.—FURNACE FOR TEMPERING STEEL.—P. G. Gardiner.

DISCLAIMER.

16,814.—CIRCULAR SAW MACHINE.—C. P. S. Wardwell. 1872.

DESIGNS PATENTED.

6,220 & 6,221.—CARPETS.—T. Barclay, Lowell, Mass. 6,222 to 6,225.—CARPETS.—R. R. Campbell, Lowell, Mass. 6,226.—CARPETS.—J. M. Christie, Brooklyn, N. Y.

TRADEMARKS REGISTERED.

1,040.—MEDICINE.—J. S. Coleman, San Francisco, Cal. 1,041.—SMOKING TOBACCO.—C. R. Messenger, Toledo, O. 1,042.—PREPARED PLUMBAGO.—Morse Brothers, Canton, Mass.

POCKET FOR TRAVELING BAG.—Daniel Read, of New York city.—This invention has for its object to furnish traveling bags provided with an improved outside pocket, designed especially for small traveling or belt bags for ladies' use, but which may be applied with advantage to other styles of bags, and which will add greatly to the beauty of the bag; and it consists in the outside pocket provided with an elastic mouth applied to the outer surface of the bag.

DRIP PIPE TRAP FOR REFRIGERATORS.—Charles Durant, of Jersey City, N. J.—This invention has for its object to furnish an improved trap for the drip or drain pipe of a refrigerator, which shall be so constructed that it may be tilted to clear it of any sediment or other matter that may collect in it, and unless removed obstruct it; and it consists in the combination of a tilting trap with the drain pipe; in the construction of the trap; in the combination, with the drain pipe, of a U-shaped supporting and stop bar; in the combination with the trap of a cross bar or plate; in the combination of a trip rod with the tilting trap; and in the combination of hook hinges with the trap and its supporting bar.

STEAM HEATER.—James J. Smith and Samuel R. Wood, of Cleveland, O.—This invention has for its object to improve the construction of steam heaters. It consists in rectangular cast iron boxes, into which the steam is introduced, and by contact with which the air is heated. In the lower part of the opposite sides of the boxes, near one end, are formed holes, in which are inserted short pipes having a screw thread cut in their inner surfaces. Any desired number of the boxes are placed side by side and at a short distance apart, and are connected together by short pipes, which are screwed into the small first mentioned pipes of two adjacent boxes. The space between each two boxes is inclosed with a case, which has an opening in its bottom near the pipes for the entrance of the air, and an opening in its top, directly over the other orifice, for the escape of the air. A horizontal partition extends longitudinally through the middle part of the space between each two boxes, from the end of the case at or near which the openings are formed nearly to the other end of said box, thus forming a flue and compelling the air to pass twice along the sides of the steam boxes before it escapes. The heater should be surrounded with a box or case fitting closely to it at the sides and ends, but leaving spaces or compartments at the bottom and top. The steam is introduced into the pipe at one side of the boxes, and it and the water of condensation escape through the pipe at the other side.

BACK LASH SPRING FOR MACHINERY.—Hiram W. Bachman, of McLean, Ill.—This invention consists in the employment of two back lash springs for connecting the spindle and pinion of mill gearing or other gearing. The said springs are connected to the collar on the spindle and to the pinion on opposite sides, so as to equalize the bearing of the collar and pinion on the spindle. They thus prevent the wearing of the parts in the localities where the bearings come when one spring is used, which very soon makes such looseness as to cause the pinion and collar to wobble, thus creating back lash even with a spring connection, and making it necessary to frequently re-fit the spindle pinion and collar.

MODE OF LUBRICATING MACHINERY.—Alexander P. Gross, of Vallejo, Cal.—This invention relates to the application of the principle of the hydrostatic press in the lubrication of journal or shaft bearings of every description. A suction and force pump of ordinary or suitable construction, is connected with the bearings, and its piston rod is curved inward at its outer end so as to enter and work in a cam groove in a circular collar, which is secured on the shaft. The lubricant is contained in a chamber, from which a pipe leads to the pump. To operate the apparatus, the chamber is supplied with oil or other preferred lubricant and the shaft set in motion, which causes the reciprocation of the pump piston through the medium of the grooved collar and the piston rod. By this means the oil is received into the pump cylinder and forced out, whence it spreads laterally beneath the shaft into grooves and returns to the reservoir or passes directly into the said reservoir, according as the shaft is horizontal or vertical.

METHOD OF FORMING SHEET METAL MEASURES.—Jacob Coover, of Chambersburg, Pa.—This invention relates to a "new way" of constructing dies so as to graduate the form of a standard measure, not only to an aggregate cubical quantity, but also to aliquot parts thereof, and it consists in a conical male die, having a lower section of a cone, the solid contents of which equal one gill; then a horizontal projecting shoulder formed by another sectional cone resting thereon, whose solid contents also equal one gill, but together with the preceding are equal to one half pint; the next section of a cone is equal in solid contents to one pint; and so on, according to the desired aggregate size of the vessel. A female die, correspondingly constructed, allows it to fit nicely therein. A conical tube is then formed of suitable size, placed the female die, and staved up. The bottom is then applied thereto and the top finished in the usual manner.

WASTE PIPE TRAP.—Thomas Smith, New York city.—This invention is an improvement on the waste pipe trap for which a patent was granted to the above inventor June 18, 1872, No. 128,077, which said trap consists of a box with a hinged valve or gate in it, introduced between two sections of the pipe, so that the waste passes under the free end of the valve to the escape pipe, the said valve being to stop the wind gusts which sometimes blow up from the sewers and blow the water out of the water traps above, so that the gases from the sewers escape into the houses. The said trap is designed to be used as auxiliary to the water trap. The inventor now proposes by having the waste pipe leading into the trap enter at the bottom instead of the top, as heretofore, so that its mouth will always be submerged, which was not so before, to make this a water trap, also to effectually shut off the gases from the sewers, as well as a gate or valve trap, to stop the aforesaid wind blasts, which gases leak or escape through the joints of the valve above the water in the trap.

WROUGHT IRON PIER FOR BRIDGES.—Theodore B. Mills, Iola, Kansas.—This invention consists in the construction of piers, columns, or abutments of iron for bridge supports, etc., of four double T bars stepped in metal pockets or foot rests on the foundation, at suitable distances apart at the bottom, and converging upward toward a common center for bracing properly with a metal cap, to which all are connected at the top; said cap being also a seat for the bridge shoe, to which cap the posts or bars are connected in a novel manner. They are also braced at suitable intervals between the top and bottom with horizontal and diagonal braces. The posts are arranged with their greatest transverse diameter in lines radiating from the center, toward which they converge in the upper part for having the greatest strength in the direction of the greatest pressure. Two of these columns or piers are used for one abutment, being placed side by side at a suitable distance for supporting the sides of the bridge, and connected together at the top. The sides are covered with planks extending horizontally between the posts or bars, fitted into the grooves between the longitudinally, and secured binding plates or bars running lengthwise of the posts and bolts.

CASTER FOR TABLES.—Henry A. Hiestand, Hellam, Pa.—This invention consists of a pair of bars for each side of the table or other article, on which two of the casters with long shanks are mounted, so as to have an ascending and descending motion. The bars have hooks with adjusting nuts, so arranged as to be readily detachably connected to the legs of the table. On the upper bar a pair of levers is pivoted and arranged for lifting the table by bearing on the caster spindles at one end when the other end is raised. The latter ends of each pair are connected with a yoke, pivoted to a crank or eccentric disk on a shaft mounted on the under side of the table top and extending from one side to the other for operating the levers at both sides at once. When the table is raised off its legs and thrown on the casters, the point of connection of the yoke with the disk passes beyond the vertical line of the axis of the shaft and brings the yoke to bear against the shaft in such manner as to be self fastening. The table is thus held on the casters, so that no time or labor is lost in fastening and unfastening the apparatus.

SHEARS.—Charles Gudehus, of Hoboken, N. J.—This invention consists of a lever and spring combined with a shears in such manner that, as the blades close in cutting and the point of resistance shifts toward the points of the blades and increases by moving from the fulcrum, the force will be transmitted from the handle directly to or nearly to the point of the upper blade through the said lever and spring, so as to greatly lessen the labor of cutting through several layers of cloth. The arrangement is also such that, as soon as the force of the hand by the blades are forced together is relaxed at the handles, the spring will throw the blades open again, and thus greatly relieve the hand of the operator of a difficult part of the labor.