Recent American and Loreign Latents.

Inder this heading we shall publish weekly notes of some of the more promi nent home and foreign patents

STAVE EQUALIZER .- Elijah P. Spaulding, of Murfreesborough, Tenn.-A pair of circular saws, preferably mounted on the same arbor, are placed as far apart as the required length of the staves to be cut. A pair of disks mounted on a horizontal shaft, parallel with the shaft in front of it, work between the saws by lapping them back to a place where the attendant who supplies them to the carrier may take them away. The table is capable of swinging up and down to adjust it to the said carrier for having the right required inclination. Preferably, there will be two pins in each disk, so that they take two staves at each revolution. If the staves are to be sawn off square at the ends, the two disks will be of the same size; but if they are to be beveled for tapered casks, one disk will be larger than the other, se as to present the staves obliquely, and the difference in the size of the two disks will vary as the taper of the cask varies. When the disks are of different sizes, their faces will be correspondingly beveled. Interchangeable disks of the different kinds required will be used for adapting the machine to cut the staves to any required bevel.

WARPING MILL.-John W. Fries, of Salem, N.C.-This invention has for its object to so arrange the heck of a warping mill that the yarn wound upon the warp cylinder will not become entangled while being dyed or pre-pared after its removal from the mill. The invention consists in applying to the hook a vibratory motion, whereby the threads are laid diagonally, so that the threads of the same layers will not be quite parallel and those of overlying thicknesses will cross each other and not be parallel, thus pre venting their becoming entangled.

ROTATING READING TABLE.-Thomas Cartwright, of New York city. This invention has for its object to furnish an improved rotating reading table or book support for attachment to circular and octagonal tables that are supported upon a pedestal, and it consists in the rotating arm, adjust able rod, and gas pipe provided with plugs or stopcocks at its ends, stationary or jointed gas burners, and an adjustable book rest, in combination with each other and the pedestal of a table.

HAND CORN SHELLER.-Julius O. Fraizer, of Worthington, Ind.-This invention has for its object to furnish an improved hand corn sheller. The base of the sheller is a board, plank, or block, six inches, more or less, in length and breadth, and one inch, more or less, in thickness. To the ends of a U-shaped steel spring, the middle part of which is bolted to the base, are bolted two semi-tubular jaws, having teeth formed upon their inner or concave sides, so that when the ear is forced through the space between the said jaws, the teeth may remove the kernels from the cob, the said jaws being held forward upon the ear by the elasticity of the spring, which elas ticity also enables the jaws to adjust themselves to and operate effectively upon ears of different sizes.

WOOD SCREW.-John S. Armstrong, of St. John, Canada.-This invention consists in a screw provided with a nick widening from the center toward the circumference, to allow the edge of driver to be pressed up and wedged tightly near the center.

COTTON PLANTER.—Henry A. Ridley, Jacksonport, Ark.—This invention has for its object to furnish an improved seed planter, designed especially for planting cotton seed. To the rear end of the beam is attached the body of the planter, which is made somewhat in the shape of the hull of a ship, to adapt it to press open the furrow to receive the seed. Just in front of the body is attached a plow, to open the furrow. Suitable mechanism gives a faster or slower feed as desired, and also keeps the seed stirred up so that it will not clog, and so that it will pass out freely.

WASHING FLUID.-Martha A. Sanderson, Fremont, Mich.-The object of this invention is to provide efficient means for lessening the labor of washing clothes, and it consists in a fluid composed of alcohol, camphor gum, aqua ammonia; and a second mixture of hot rain water, sal-nitre, borax and saleratus. When the above two mixtures have stood twelve hours, they are mixed together with rain water in a glass or stone vessel, and kept tightly

RUDDER.-Richard H. Thomas, Kid's Grove, near Stoke-on-Trent, England -This invention consists of a rudder of two blades, arranged side by side, one on each side of the axis, and distant from each other so as to allow a solid flow of water between them, being connected at top by a horizontal bar or disk to the axis or shaft. They are also connected in like manner at the bottom to a pivot stepped in the projecting end of the keel, and also divided at or near the middle vertically, and similarly connected by disks or bars to a journal fitted in a block in which the projecting end of the propeller shaft is also journaled, so as to strengthen the rudder and support the propeller shaft.

APPARATUS FOR CHARGING BLAST FURNACES .- William A. Miles, Salis bury, Conn.-This invention relates to improvements in the mechanism for charging blast furnaces, and more particularly to the charger for which the United States letters patent No.130,652 were granted, the 20th day of August 1872. The present invention consists, principally, in making the sliding bottom plates of the charger inclined on their upper faces, and also in making the stationary upper and lower guides of these plates, or either of them hollow to admit water or air circulation, and prevent the heat of the furnace from burning them. Finally, the invention consists in the use of friction rollers above and below the sliding plates to facilitate their movement.

RAILROAD RAIL JOINTS.-John McLean Staughton, Riverton, Kv.-This invention has for its object to furnish an improved rail joint, which shall be so constructed as to hold the ends of the adjacent rails level, so that one cannot rise above the other, so that the two ends cannot sink down at an angle with the body of the rails, and which will give the joint greater strength and equal flexibility with the other parts of the rails. It consists in the fish plates made with the fish bellycurve upon themiddle partof their lower edges, and in the adjacent ends of the rails having their flanges cut away for a less distance then the length of the fish plates.

NAIL MACHINE.—Henry Reese, Baltimore, Md.—The invention consists in drawing the end of a heated rod into a round pointed blank between two surfaces that move in reverse directions and with the same velocity; in then shaping said blank with dies; and in a peculiar mode of applying the For which Letters Patent of the United States brushes, shockspring and raised edges on the drawing faces.

Hose Protector.—Isaac P. Maxwell, Baltimore, Md.—The invention consists in forming a hose jumper in three readily detachable sections.

STAVE JOINTER AND CROZING MACHINE .- John McGrew, Raven West Va.-The invention consists in arranging one or more pairs of angle shaped knives to reciprocate over a bearing roll upon which the hoop is feed intermittently, for the purpose of notching the hoop and allowing it to take the bulge necessary in barrels. Secondly, the invention consists in a peculiar mode of intermittently moving the roll, feeding forward the hoop, and then holding it while the said notches are cut.

COMBINED LADDER AND SCAFFOLD.-Robert L. Upchurch, Pana, Ill.-The invention consists in constructing an article adapted to use by painters, carpenters, and others as a scaffold, and to be employed at the sides of walls and corners to serve as an ordinary step ladder when folded, and as a fruit ladder when reversed.

TURBINE REACTION WATER WHEEL .- John McGrew, Ravenswood, West Va.—The invention consists in combining with the inner chute of a turbine wheel a series of peculiarly constructed buckets that by their relation to the discharge apertures utilize all the pressure of the water. Secondly, it consists also in providing the chutering with a vertical circular flange by which great steadiness and uniformity of motion is secured to the wheel. Thirdly, it consists also in placing a gate on the inside of the chute and adjusting it by a reciprocating slide on the outside, whereby the quantity of water admitted may be nicely and easily graduated.

KNIFE SCOURER.-Frank O. Harvey, Kansas City, Mo.-The invention consists in making a knife scourer of a trough, a stationary pad block, and a hinged and handled pad block; whereby the labor of scouring is sensibly essened, while the rapidity of its performance is greatly increased.

PIPE MOLDING MACHINE.—Dennis Long, Louisville, Ky.—The invention Bake pan, R. D. McDonald.... consists in the application to molding machines of a movable table resting on a foundation plate and provided with one or more seats for the flask and patterns; in the peculiar form of pattern, which is enlarged at both ends as compared with the turned off intermediate portion; and in the construction of movable seats for the end of pattern and flask. The lower ends of pattern exercise a pressure upon the sides of mold as it is withdrawn, which compacts and condenses the sand.

SPARK ARRESTER AND SMOKE CONSUMER FOR PASSENGER LOCOMOTIVES. Wm. Martier, Baltimore, Md.-The invention consists in arresting the smoke, sparks, and cinders at the top of smoke stack and forcing them by an air draft from front of locomotive down a tube, and into a chamber where the cinders are stopped, while the smoke is carried around and emptied into fire box.

SPARK ARRESTER AND SMOKE CONSUMER FOR FREIGHT LOCOMOTIVES. Wm. Martien, Baltimore, Md.—The invention relates to that special class of locomotives which are used for freight cars, and consists in combining with a hooded smoke stack a bibranched pipe through which are forced the cinders, sparks and smoke, the two former into cinder boxes prepared to receive them and the latter into the fire box. It also consists in utilizing the dinders to create friction on the track by transferring them to sand boxwherefrom they are distributed, upon the track and in front of drive wheels, at the will of the engineer.

Driving Glove.-Edwin V. Whitaker, Gloversville, N. Y.-The invention relates to a new article of manufacture, which is to be used in driving or riding horses or other animals, and which consists of a mitt having the four fingers covered in pairs so that one of the reins will pass as usual between said pairs, while two fingers being in each pocket or envelope will coöperate in keeping one another warm. It also consists in the pattern which is preferably employed for cutting out said mitt.

AUTOMATIC FEEDING LAMP.-Dr. Samuel K. Jackson, Norfolk, Va.-The invention consists in automatically maintaining the desired oil level in a beacon lamp by means of hydrostatic pressure applied so as to take advan-tage of the different specific gravities of oil and water, and so as to cause the water to feed itself and take up the space gradually vacated by the oil This lamp furnishes a continuous light by night and day for a long period without requiring any attendant to trim or replenish it, and supplies a want which has been long felt by the commercial public. It would seem that this invention must greatly facilitate transit through our bays and harbors since safety will be equally secured for navigation by day or by night and even with comparatively inexpert mariners. The pilotage also, which has hitherto been regarded as such an onerous burden upon certain classes of essels, it is calculated, will be sensibly lessened.

BUTTON.-Spencer B. Lane, Waterbury, Conn.-The invention consists in orming the perforated head of a button with lips and the shank with a bifurcation, by which they may be connected. The upper end of the shank is forked, to enter with its prongs two apertures in the head of the button or stud. These apertures are formed in said head by punching, but so that no material is removed; consequently, the material between the apertures is turned up to form two lips. After the prongs of the shank are passed through the holes of the head, said prongs are bent apart and clinched upon the button, the pressure upon them also bending the lips over the prongs. The lips serve thus to hold the prongs down upon the head and steady the entire connection of parts.

WASHING MACHINE.—Edmund E. Flint, Tonawanda, N. Y.—This invention relates to a washing machine. The suds box of the washing machine is of semi-cylindrical shape, of wood or other material, and supported on stand ards. The rubber is segmental, the rubbing surface being formed by diamond shaped slats or rods. This rubber is attached to the lower ends of vertical slotted bars, whose upper ends are connected by a transverse handle. A shaft serves as the pivot of the rubber when the same is vibrated. A roller bottom is put within the suds box beneath the rubber. In operation the rubber is vibrated by hand, and moves over the roller bottom, the articles to be cleaned being between the rollers and slats. A wash board fastened to the top of the rubber can be used for hand washing by placing the rubber against one end of the suds box.

PITMAN CONNECTION FOR HARVESTERS.-William Ferris, Pleasant Plain Ohio.—This invention has for its object to furnish an improved device for onnecting the sickle bar and pitman in reapers and mowers, taking up the play beneath the knife bar and pitman, enabling the wear to be conveniently taken up, and which will greatly diminish the wear and lessen the draft of the machine. It consists in the tapering hole formed through the eye of the sickle bar and the branched ends of the pitman, having a screw thread cut in the said hole in one or both of said branches and the wooden pin, to form a connection between the sickle bar and pitman of a harvester or mower.

FLY TRAP.—Addison M. Chapel and James G. Hubbard, Pittsfield, Mass. This invention has for its object to furnish an improved fly trap. It consists of a cylinder caused to revolve by clockwork mechanism, and which is cov ered with fly bait. On alighting thereon, the flies are carried into a semicircular cavity, from which they are by suitable means prevented from escaping. A scraper brushes them off the cylinder into a passage through which they emerge into the cage.

INDIA INE SLAB.-Julius Speyer, Terre Haute, Ind.-This invention has for its object to furnish an improved slab, designed chiefly for the use of draftsmen in grinding India ink sticks, and for holding the liquid ink and preserving it from evaporation. It consists in forming a grinding surface and an ink well in the upper side of the slab or block, and a chamber in the under side of the same, in which the stick may be deposited when not

BOTTLE PACKER.-Robert T. Penick, St. Joseph, Mo.-This invention has for its object to furnish an improved device for packing bottles and packages of bottles in sawdust, short shavings, rice husks, etc., and which shall correctly and uniformly regulate thespace between the bottles, and between the bottles and the sides of the box in which the bottles are to be packed.

[OFFICIAL.]

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were granted.

FOR THE WEEK ENDING NOVEMBER 27, 1872, AND EACH BEARING THAT DATE.

SCHEDULE OF PATENT FEES: On issuing each original Patent......\$20 On application for Reissue. \$30 On application for Extension of Patent. \$50 On an application for Design (seven years). \$15 On an application for Design (fourteen years). \$30 Automatic hatchway protector, Waring and Wilson...... 133,345 Axle boxes, machine for forming linings for, H. Kellogg...... 183,450

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