

Bridging the Connecticut River.

The subject of bridging rivers for railways purposes is still agitated. It is proposed to bridge the Connecticut River at Lyme and at Middletown, and the Connecticut Legislature has authorized the construction of the bridges. The matter has been carried before Congress for confirmation. It is claimed that by bridging the river at Middletown the distance by rail from New York to Boston will be shorter twenty-six miles.

Connecticut interests oppose the interference of Congress and the building of the bridges, for the reason, among others, that they will obstruct the navigation of the river. There is apparently a big "lobby" on both sides. We predict that in the end the bridges will be built.

Editorial Summary.

MR. GEORGE W. BLUNT has issued a notice cautioning masters of vessels passing Hell Gate of the danger of collision with the vessel at work removing the obstructions at that point. He says: "It is a settled fact that masters and owners of vessels colliding with the contractor's tug and machinery at work over Frying Pan must make full indemnity for the damage done. It is also important, for public reasons of humanity, that collisions should be avoided, as large quantities of nitro-glycerin must be kept constantly on the spot, and liable to be exploded by the shock of percussion, which would be highly destructive to human life in case of collision." Mr. Shelbourne, the contractor, particularly requests the pilots of the Sound steamers to slow their engines in passing the point of his operations. Regular work on Frying Pan commenced on Monday, January 11.

SOCIAL SCIENCE ASSOCIATION.—The annual meeting of the American Social Science Association will be held in Albany in February, under the direction of the District Committee, among whom are General John Meredith Read, Jr., Chairman; Thos. W. Olcott, Treasurer; Charles E. Smith, Secretary; John V. L. Pruyn, William Cassidy, Jas. Hall, Erastus Corning, Hon. Ira Harris, S. B. Woodworth, John H. Reynolds, the Hon. Amasa J. Parker, J. H. Armsby, Benjamin Nott, Dr. S. O. Vanderpoel, William A. Rice, Dr. James McNaughton, R. L. Banks, Orlando Meads, John H. Van Antwerp, Geo. Dawson, Hamilton Harris, John F. Rathbone, and William H. De Witt. Papers will be read by General Garfield, John Stanton Gould, Professor Goldwin Smith, President Samuel Eliot, and other distinguished gentlemen.

THE New York "Journal of Medicine" says that Dr. N. Hickman, Demonstrator of Anatomy in the University of Pennsylvania, has met with a case of complete transposition of the internal organs in the dissecting room of the university. The apex of the heart is on the right side; in fact every organ occupies exactly the opposite side from what is natural. This may be cited as a good case of total (physical) depravity.

MELTING SNOW WITH SALT.—Persons are in the habit of sprinkling salt upon snow before their doors. They could not do a more silly or injudicious thing. The result is to change dry snow or ice at the temperature of 30° to brine at 0. The injurious effect of damp upon the feet at this excessive degree of cold is likely to be extreme. The practice is prohibited in this city.

ORANGES were frozen solid on the trees, at Augustine, Fla. on Christmas day. The weather was the coldest known in that locality since 1865. The thermometer at daylight stood at 20° above zero. It afterward touched 17°. In a climate where even white frosts are unusual, this was very severe. Last year, at the same time, the Florida ladies were dressed in lawns.

It is said that the Sutro Tunnel has been considered by the Committee on Mines and Mining since the opening of the session, and a favorable report is expected. The plan has been somewhat modified. It now contemplates the guarantee of bonds by the Government to the amount \$5,000,000, and the raising upon this basis \$12,000,000 in Europe.

POLISHED PLATE GLASS.—A correspondent writes to know why polished plate glass is not manufactured in the United States.

Ans. Want of good material, cheap skilled labor, and capitalists to invest in a business involving a good deal of risk.

THE recent thaws have broken up the ice, and produced a disastrous freshet at Albany. Large quantities of grain have been lost, and the piers along the river front so undermined, that the buildings resting on them are insecure. Some have already fallen.

A CONVENTION has been held at Peoria, Ill., to consider the improvement on the Illinois river. It is proposed to seek aid from the State in addition to the appropriations made by the general Government to carry on the work.

A BOSTON paper asserts that a Portland mechanic has made a fine cambric needle which can be unscrewed, and contains in a hollow within another smaller one. This is a delicate piece of work, but by no means without precedent.

SIEMENS' FURNACE.—We are having inquiries about the above furnace which we are unable to answer. Parties interested will do well to advertise in our paper.

THE new suspension bridge at Niagara has been opened to public traffic. It is said to have the longest span of any bridge on the Continent.

Recent American and Foreign Patents.

Under this heading we shall publish weekly notes of some of the more prominent home and foreign patents.

GAGE FOR SEWING MACHINES.—Mrs. Anna P. Rogers, Quincy, Ill.—This invention consists of an adjustable gage plate having a recess in its front edge, in which a presser pad, having inclined serrated grooves on its lower face, is arranged and connected to the said gage plate by an adjustable spring which governs the pressure of the pad upon the cloth.

RAILROAD CAR OIL BOX.—John C. Creed, Omaha, Neb.—This invention consists of an improved form in which the box and its cover are cast, whereby when the one is hinged to the other by a single pivot, a close-fitting joint is obtained without the expense of other finishing.

WATER ELEVATOR FOR STOCK.—D. J. Keller, Kane, Ill.—The nature of this invention relates to the elevation of water for the purpose of supplying stock. The general features of the invention consist of a hinged platform upon which the animal steps to approach the trough, and the weight of the former causes the platform, through the interposition of proper mechanism, to compress a water bellows which forces the water into the said trough.

EXTENSION TABLE.—G. S. Manning, Danville, Ill.—This invention relates to a new and useful improvement in extension tables, whereby the table is rendered much more convenient and useful than extension tables of ordinary construction. The invention further consists in so forming the table that the parts may be separated and a number of separate tables formed thereby.

OVEN.—Charles H. Finn, Syracuse, N. Y.—The object of this invention is to provide means for determining at all times the temperature of baking ovens, cooking stoves, and ovens in other situations; and it consists in attaching to the doors of such ovens a thermometer, in such a manner that the bulb of the thermometer shall be inside the oven, while the scale and tube shall be on the outside of the door or visible to the eye.

COTTON GIN.—A. A. Porter, Griffin, Ga., has just patented a new and improved cotton gin, which is said to be an important improvement. The invention consists in an improved arrangement of means for causing the cotton being fed into the gin to have a to-and-fro movement in a lateral direction, for bringing it more perfectly into contact with the saws, thereby more thoroughly separating the seed, and, at the same time, working the fiber evenly. Mr. Porter is desirous that planters should investigate and test the merits of his machine confident that his invention will be a benefit to them.

SMOKING PIPE MOUTHPIECE ATTACHMENT.—J. P. Courtney and William H. Kelagher, Brooklyn, N. Y.—This invention relates to improvements in smoking pipes whereby the saliva or liquid from the mouth of the smoker is prevented from entering the stem or tube of the pipe.

CARTRIDGE BOX.—John I. Pittman, New York city.—This invention relates to a new and improved cartridge box, designed more especially for holding metallic cartridges. The object of the invention is to obtain a simple and economical means whereby the cartridges may be firmly retained in proper position in the box, readily withdrawn from the latter as required for use, and the proper or usual number allowed to put into the box.

JOINTS OR CONNECTIONS FOR RAILWAY RAILS.—Charles H. Crosby, Boston, Mass.—This invention relates to a new and useful improvement in that class of joints and connections for railway rails, in which screw bolts pass transversely through plates placed at both sides of the rails and also through the rails.

STALK CUTTER.—R. B. Parks and J. R. Parks, Neponset, Ill.—This invention relates to a new and improved machine for cutting the standing stalks of Indian corn or maize into short lengths, so that they may be left upon the ground and plowed under, and cause no difficulty or trouble in the cultivation of succeeding crops.

FENCE.—J. J. Reicherts, Delaware, Ohio.—This invention relates to a new and useful improvement in fences for door yards and for all other purposes to which the same may be applicable.

GATE LATCH.—J. A. Martin, Strasburg, Pa.—The object of this invention is to provide a simple and effective gatelatch which is not liable to get out of repair, and which supports part of the weight of the gate.

BLIND FASTENER.—Simon F. Stanton, Manchester, N. H.—This invention relates to an improvement in fastening window blinds (either closed or open), and it consists in attaching a semi-circular notched bar permanently to the window frame, and a spring bolt to the blind, whereby the blind is securely held entirely closed, or in any desired position when open.

PRESS.—J. Berkeley, Washington, Texas.—The filling and pressing chamber is divided into two parts, one of which is fixed to the wagon frame near the front end in a permanent manner, the other part to which the material is supplied to be passed, and which is provided with the follower, is arranged upon trunnions near the rear end of the wagon and is turned on the same with the rear end down to be filled; when filled it is restored to the level of the frame, and communicates with the fixed portion into which the material is forced by the follower, which is operated by a windlass and cords working over pulleys properly arranged. The sides of the fixed portion are arranged to open to discharge the bale.

DERRICK.—Angus Campbell, Downieville, Cal.—This invention relates to various improvements on derricks, whereby the operation of loading and unloading articles from and into ships, and other receptacles, can be greatly facilitated. It also consists in the use of a truck which slides on the boom, also in the application of an endless rope for bracing the boom without interfering with the motion of the truck, and without overstraining the topping lift.

COMPOSITION FOR THE CURE OF HOG CHOLERA.—W. B. Robuck, Oxford, Miss.—The object of this invention is to provide for public use a cheap specific for hog cholera.

GOBLET.—Thomas Leach, Taunton, Mass.—In this invention the bowl of the goblet is of glass and the standard of silver, or other metal, the two parts being connected by a screw joint, so that they can readily be taken apart, in order that, if the bowl should get broken, another may be inserted in its place, and thus a new goblet be produced at a comparatively slight expense.

GANG PLOW.—Wm. Mason, Independence, Oregon.—The object of this invention is to construct a simple and strong gang plow which can be more easily and conveniently operated than those now in use.

HAY AND COTTON PRESS.—Elias Evans, Montgomery, Ala.—This invention relates to that class of hay and cotton presses in which the bale is formed at the top of the press box, and consists in an improved apparatus by which the cover of the box can be swung out of or into place with greater convenience and dispatch than heretofore.

EVAPORATING APPARATUS.—Elijah Chitister, Chatham, Iowa.—This invention consists of a furnace arranged in three or more sections and provided with ways for sliding the pans transversely over the furnace, and provided also with suitable pans, which, after being charged with the liquid to be evaporated, are placed on the furnace and transferred from one section to another, where fires of varying intensity are maintained, in the order calculated to produce the best results.

PROCESS FOR BLEACHING IVORY, BONE, AND OTHER SIMILAR ARTICLES.—D. K. Tuttle, New York city.—This invention relates to improvements in the process of bleaching ivory, bone, and other similar articles, and has for its object to cheapen the cost and improve the quality of the articles bleached, and it consists in exposing the said articles to the action of light in a bath of spirits of turpentine.

HARNES COCK EYE.—S. D. Bingham, Maumee City, Ohio.—This invention has for its object to furnish an improved harness cock eye, simple in construction, durable, easily adjusted, and which will diminish the cost of the construction of the harness very materially.

SEED PLANTER.—John S. Robb and Samuel P. Allison, New Cumberland, W. Va.—This invention has for its object to furnish an improved machine, designed especially for planting potatoes, but which shall be equally applicable for planting all other seed requiring to be planted in hills or drills, and which shall be simple in construction and accurate in operation.

BURGLAR ALARM.—M. Pierson and M. D. Manville, Adams, N. Y.—This invention has for its object to furnish an improved alarm for attachment to doors, windows, drawers, etc., which shall be so constructed and arranged that it shall be impossible to open the door, window, or drawer to which it is attached without a continuous ringing of the alarm.

PLOW.—Samuel Prentiss and George Flint, De Soto, Mo.—This invention has for its object to furnish an improved plow, simple and durable, which may be used with equal facility for breaking up new ground, for plowing old or cultivated ground, or for subsoiling, and which can be run at a greater depth, with less draft than is possible with the ordinary plows.

LAND ROLLERS.—Neal S. McLay, Olathe, Kansas.—This invention has for its object to furnish an improved land roller, which shall be so constructed and arranged that the rollers may adapt themselves to rough or uneven ground, so that the entire surface of said ground may be suitably rolled.

CULTIVATORS.—John G. B. Gill, Chester Court House, S. C.—This invention has for its object to improve the construction of the cultivator known as the "Buckeye Sulky Cultivator," so as to make it more durable and more convenient.

IRON FRAME GATE.—W. F. Whitney, Milwaukee, Wis.—This invention has for its object to furnish an improved gate, which shall be light, strong, durable, simple in construction, and adapted to any situation.

WEIGHING SCALE.—S. S. Hamilton, Taylor's Falls, Minn.—The object of this invention is to provide a weighing scale which is simple, durable, compact, and not liable to get out of repair, and which will indicate with delicacy and accuracy the weight of the article weighed.

HYDRANTS.—Louis W. Werner, St. Louis, Mo.—The object of this invention is to provide a hydrant which is simple, effective in its operation, and easily taken up to repair or clean out when occasion requires.

THRESHING KNIFE.—Henry Spaulding, Fletcher, Vt.—The nature of this invention relates to the form of the threshing knife usually affixed in the concave of threshing machines. It consists in forming the said knives with two cutting edges, and affixing the same to the concave in such a manner that the knives may be reversed to present a new edge when the other has become dulled from use, thereby enabling the machine to be run twice as long as when knives with only one edge are employed.

ORE CONCENTRATION BY CENTRIFUGAL FORCE.—S. F. Pearce, 32 Dey street, New York city.—The concentration of ores by a mechanical process, without the use of water or currents of air, has been successfully accomplished by the application of centrifugal force, acting on the ore (previously crushed dry by any method), and by which it is caused to fly off from a central point and fall freely into a series of annular receivers, by which means it is separated according to its gravity, the heavier particles falling further from, and the lighter nearer to the center. A sketch of the apparatus, with a description, will be given in a future number of this paper. Patent dated August 11, 1868.

FURNACE FOR ROASTING AND CALCINING ORES.—Ernst Westman, of Stockholm, Sweden.—This invention relates to a new furnace for roasting and calcining ores by means of gases that are produced by the combustion of suitable fuel; and the invention consists in such an arrangement of parts, that ore of suitable quality can be perfectly freed from impurities, and that the process can be quickly and conveniently carried on.

SAFETY ATTACHMENT TO CARRIAGES.—Claude Ducreux, New York city.—This invention consists in so connecting the operating lever with the brake and detaching apparatus, that either the brake alone, or both the brake and the detaching apparatus can, by one move of the lever, be operated. The object is to allow the same lever to apply the brakes of the carriage or wagon moves down hill or is drawn too quick, without necessitating at the same time the detaching of the horses.

SECTIONAL BUREAU.—Elias Gill, New York city.—This invention relates to a new bureau, which is so constructed that it can be readily packed together into a small compass when to be transported from one place to another. The invention consists in constructing the bureau of a series of sections or boxes, of which the upper ones are made smaller than the lower, so that each box or section can be packed into that immediately below. Each box has sliding or other doors in front or side, to allow access to its contents. The lower section is provided with a removable back or cover to allow the insertion of the upper boxes, while each of the upper ones may be entirely opened at the bottom.

METHOD OF TEMPERING STEEL.—G. Davis, Elizabethport, N. J.—This invention relates to a new manner of tempering already completed steel or other tools and articles, and consists of a mixture of sand or other neutral substance, and water, which mixture is placed into a barrel or other suitable receptacle. The sand and water are mixed in such proportions that the required temper may be produced. The tool is heated to a red heat, and is then immersed in the mixture.

WATER ELEVATOR.—G. M. Atherton, Friendsville, Ill.—This invention relates to a new water elevator, which is so arranged that the crank handle can be turned continually in one direction, and will still operate to alternately hoist up one bucket and to lower the other; and which is further more so arranged that the little water remaining in a bucket cannot freeze the valve to its seat, and so that the buckets will be kept separated, and will be emptied in a certain desired place, and in one certain position.

KILN FOR BURNING FIRE-BRICK TILES AND OTHER ANALOGOUS ARTICLE OF MANUFACTURE.—Jas. Green, St. Louis, Mo.—The object of this invention is to provide a permanent kiln for burning fire brick tiles and the like with economy and facility, and consists in the arrangement of flues, fire passages, draft passages, stacks with other parts perfecting the whole.

SEWING MACHINE ATTACHMENT.—Mrs. Anna Rogers, Quincy, Ill.—This invention consists of an improved method of actuating an adjustable vibrating tuck creasing device and in the combination therewith in one attachment of an improved tucking gage.

COMPOUND LEVERS.—John Simpson, Marietta, Ga.—This invention has for its object to furnish an improved device for converting rectilinear into circular motion which shall be convenient and effective, and less liable to become set upon the dead point than the ordinary means for this purpose.

HYDROCARBON BURNER.—Louis Verstraet, Paris, France.—This invention refers to an apparatus for the direct combustion of any petroleum and other mineral oils, for the purpose of heating steam-boilers and other industrial and domestic fireplaces, and is intended to provide a special apparatus for burning the oils in a single jet by spreading them in a sheet on a furnace.

Business and Personal.

The Charge for Insertion under this head is One Dollar a Line. If the Notices exceed Four Lines, an Extra Charge will be made.

Garrett & Brown, Manchester, Tenn., wish to correspond with a first-class miller, who can get permanent employment.

Wanted to purchase—the best machinery for manufacturing oat meal, pearl barley, farina, etc. Any person manufacturing this kind of machinery will do well to send circular and price lists to F. Van Seggera, Louisville, Ky.

Brass goods for plumbers, pipe fitters, and machinists. Phillips and Cluleys, Pittsburgh, Pa.

Manufacturers of reapers wanting the best grain dropper invented by a farmer, address the inventor, E. Myers, Creagerstown, Frederick Co., Md.

Cotton gin.—The latest improvement in cotton gins, patented Dec. 23, 1868, is offered for sale. For particulars address A. A. Porter, Griffin, Ga.

For paying investment see "screw wrench" in personals, No. 2, Vol. 20.

Wanted—a set of pulley patterns, diameter 12 in. to 48 in. Ordinary widths of face. Modern style. Napanoch Ax and Iron Co., Napanoch, N. Y.