ENGINEERING INVENTIONS.

Mr. Daniel O'Connor, of Little Rock, Ark. has patented a device for changing the position of the target used for signaling purposes. The invention consists in a novel arrangement of a base or stand, a vertical crank shaft carrying the target, a sleeve, a latch, and a lever, whereby several advantages are obtained.

Mr. Orlando H. Jadwin, of Brooklyn, N.Y. has patented improvements in the system of cable trac tion for street railways, which consist, first, in the improved construction of grip monnted on the car which serves to cintch the traveling cable; and, secondly, in the improved construction of channel way for the traveling cable and means for arranging the guide pulleys therein.

Mr. Aaron C. Vaughan, of Shane's Crossing, O., has patented an improvement in T-shaped railroad rails, whereby great saving of steel in the mannfacture of the rail is attained without decreasing the strength of the rail, and better joints formed between the rails and fish plates, thus relieving the tension on the bolts which secure the fish plates to the rails; and the invention consists in first cutting away, by a change of the angles, a part of the lower faces of the T-head of an ordinary T-rail, and adding a less amount of metal to the upper faces of the base of the T-rail, and forming curved indentations in the opposite inclined underfaces of the rail head and in the opposite upper inclined faces of the base, or in the under face of the head alone. This construction will require less metal than the ordinary rail, and will form, also, much better joints with the fish plates to prevent them from slipping than the ordinary construction.

Mr. Joseph W. Putnam, of New Orleans, La., has patented an improvement in piles, such as are used as a substructure for bridges, etc. It is applicable bridge above the water, the depth of the water, and the necessary penetration of the pile into the mud or clay to get a solid support is such that it is not practicable to get piles from single trees of sufficient length and sufficient diameter to give them requisite strength to resist the current. This invention consists in a pile composed of two tree sections, having their larger or butt ends sawed off square and abutting against each other. in combination with two semi tubular metal clamp sections of a slightly smaller diameter than the pile ends. The semi-tubular sections have flanged edges, which, when bolted together, draw the splice sections together, compressing the ends of the piles and covering the joint.

MECHANICAL INVENTIONS.

Mr. Albert Slagle, of London, O., has pa tented an improved cork extractor having a base or foot provided with a horseshoe-shaped frame or standard, a corkscrew provided with bevel gear wheels for rotating it, and supported by a frame which slides between the branches of the horseshoe frame, and a lever for raising and lowering the frame.

An improved screw conveyer has been patented by Mr. William Walter Hewitt, of Swanscombe, County of Kent, England. This improvement relates to conveyers for carrying cement, grain, shingles, ballast, or other granular substances; and it consists in a Ushaped trough having the hangers with their upper ends resting thereon, and converging at their lower ends to support the conveyer shaft boxes or bearings centrally

An improved car coupling has been patented by Mr. Daniel W. Deal, of Todd ville, Ia. In this improved car coupling, each drawbar has a bevel head with shoulders behind it for being engaged by bevelended hook carches, of which two are attached to each drawbar, so that when the drawheads of two cars come together, four hook catches automatically engage with the shoulders of the heads, said catches being arranged on pivots and suitably provided with springs for enabling them to so engage, and each drawbar is provided with means for disengaging the four catches

Mr. Charles Drauly, of Carrizo Springs, Tex., has patented an improved wheel composed of sections which can conveniently be taken apart for transportation and united for use. The hub is formed of a tube provided with an annular shoulder, and having its outer end threaded, on which threaded end a nut is screwed, between the wider inner end of which nut and the shoulder of the tube the inner ends of the spokes are clamped, cushion bands and rings and metal | Mr. Jesse C. Boyd, of Rushville, Ind. The invention bands and rings being interposed between the ends and sides of the spokes and the tube, its shoulder, and the inner end of the nut.

An improvement in sewing machines has been patented by Mr. Thomas J. Le Count, of New York The invention consists in a sewing machine in which the power is transmitted from the treadle shaft to the needle bar, shuttle lever, and feed directly by means of shafts and gearing, thereby avoiding the use of belts and pulleys, which rods and gearing are partly contained in an arm hinged on the top plate, which arm arm, the vertical drive rod is provided with a universal hold music sheets of any size, also music books. It is joint, and the part below the joint is squared, and slides in a sleeve with a squared aperture.

An apparatus for coiling wire for making spiral wire springs, or for making coils to be used in manufacturing mattresses or for any other purpose, whereby the coils may be made more easily and rapidly than here tofore, has been patented by Mr. Joseph A. Coultaus, of Brooklyn, N Y. In carrying out this invention two blocks of cast iron are employed, each formed with corresponding semi-cylindrical grooves, and adapted to be bolted together upon a table, so that the grooves will form a cylindrical passage, one of the blocks being formed with an orifice in its front, intersecting the cylindrical passage at about right angles thereto, and at or near its upper side, in combination with suitable rollers placed near the orifice for forcing the wire into the orifice and cylindrical passage.

AGRICULTURAL INVENTIONS.

An improvement in hedge trimmers has been patented by Mr. William F. Throckmorton, of Adalr, sued under date of July 9, 1878, No. 8,326.

III. This improvement relates to hedge trimmers of the class shown in Letters Patent granted to the same inventor June 27, 1882, No. 260,255, in which machine a cutter bar is attached to a bandle and fitted for operation by a crank. The present invention consists in the means for attaching and holding the entter bar with the object to allow of its adjustment for trimming either the top or the sides of the hedge, and also in an improvement in the stirrup or clevis uniting the handle and the adjustable bar carrying the support for the machine.

A combined sulky plow, harrow, seeder, and roller has been patented by Mr. Daniel C. Beaty, of Olympia, Washington Ter. The invention consists of a machine having attachments contrived to perform all the operations at once without allowing the horse to step on the plowed ground.

An improved self-dropping check rower and marking attachment for corn planters has been patented by Mr. David McCansland, of Marshalltown, Ia. In this machine the seed slide is vibrated by means of tappets and cams.

Mr. James D. Patterson, of Competition, Mo. has patented improvements in that class of wheel plows in which the plows are alternately drawn forward by the truck. By these improvements the plow is rendered efficient, and its construction is simplified.

An improved check row planter has been patented by Mr. George W. North, of Burlington, Kan. The invention belongs to the class of planters in which the grain to be planted and the dropping mechanism, which includes an oscillating cup, are located in chambers formed within the wheels.

An improved corn planter, check rower, and drill has been patented by Mr. Simeon Smith, of for building high bridges over deep streams of running Graymont, Ill. This invention relates to the construcwater. In such places the proper elevation of the tion and arrangement of the mechanism of a combined corn planter or drill, and check rower, the object of which is to simplify the construction and operation of such machines and improve their efficiency.

Mr. Lucien B. Beaumont, of Alexandria, O. has patented a plow or cultivator attachment composed of a single rod or bar coiled to form a fender, and having a portion thereof extended forward for an attaching arm, and the end turned back upon itself to adapt it to he clamped to the beam; the object being to allow fine soil to pass freely around plants, while preventing clods and stones from being thrown against the plants.

Mr. James D. Watters, of Belair, Md., has patented an improved fastening and releasing device for cattle stalls. This invention relates to that class of devices which are adapted to permit the fastening and uufastening individually of any one animal, and also the releasing simultaneously of the entire number, when desired; and it consists mainly in the combination of a sliding locking-bar with a sliding releasing-bar, and the crossbar of a chain.

Mr. John R. Owen of Pulaski, Tenn., has patented a combined cotton planter and fertilizer distributer constructed with an opening plow connected with the seed box by a grooved and slotted bar, which serves as a bottom to the seed box. The seed box is supported upon wheels, and is provided with three cylinders having radial arms and with pulleys connected by an endless belt, whereby the cylinders will be operated and the fertilizer and cotton seed removed from the box by the advance of the machine. The machine is provided with a coverer, which also serves as a fastener to keep the seed box and slotted bar in connection.

MISCELLANEOUS INVENTIONS.

Mr. George W. Comee, of Waseca, Minn., has patented an improved burial case corner. The improvement consists in the method of securing the sheet metal in the ends or edges of the side and end pieces of

Messrs. Timothy Kehoe and Joseph A. Bourke, of New York city, have patented a pool bottle constructed with two pins placed at such a distance apart as to receive a ball between them, and operated by a lever and a spring.

An improved fruit washer has been patented by Mr. Charles E. Marshall, of Lockport, N. Y. This invention consists of a vessel having a perforated false bottom, a filler, and a spout, and of a device adapted to regulate the opening of the cover of the vessel.

An improved sulky has been patented by consists in a seat provided with arms connected to the holder of the stereoscopic lenses. shafts by clips, and having C-springs interposed between the seat and axle.

An improved ditching and tile laying machiue has been patented by Mr. Andrew S. Hughes, of Eldora, Ia. The implement has a cylindrical and pointed opener, diverging blades, and a colter for making the ditch, an inclined chute for receiving the tiles, and

A novel music holder for pianos and organs has been patented by Mr. Charles P. Byuon, of Yonkers, can be tilted to facilitate fastening the needle and other N. Y. This appliance is to be used in connection with sewing attachments. In order to permit tilting this the common piano and melodeon music rack, and will compact and convenient.

An improvement in the suspender ends for attaching the suspender bands or straps to pants, has been patented by Augusta Netzper, of New York city. The suspender end is formed of crossed bands held together at the crossings by rings which pass over one part or strand of the band and under the other part or strand.

An improved opera chair has been patented by Mr. Bernhard H. Koechling, of New York city. The object of this invention is to provide opera chairs constructed in such a manner that the seats, when not in use, will turn up laterally against the side frames aud the backs will swing forward against the seats, leaving a clear space.

An improved bee smoking apparatus has been patented by Mr. Tracy F. Bingham, of Abronia, Mich. This invention relates to improvements on the apparatus for which Letters Patent were granted to the same inventor January 29, 1878, No. 199,611, and reis-

Mr. James P. Winter, of Greenup, Ky., has patented a heat regulating and reflecting attachmen for open fire places, calculated to control the draught, lessen the escape of the heat np the chimney, and increase the reflection of the heat into the room, so as to effect a large economy of fuel in open fire heaters.

Mr. Theodore Berteling, of New York city, has patented an improvement in flutes, which consists in novel arrangements of the key valves, whereby the F's can be produced by means of forkfingering, and can consequently be played much more easily and more distinctly and rapidly than in a flute of the usual con struction. The volumes of the F tones and nearly all the other tones are greatly angmented.

An improved folding umbrella has been atented by Mr. Patritins F. McGuire, of New Yorkcity. This invention consists of a stick or staff having runners, braces, jointed ribs having sleeves and bands, a nut screwed upon said staff or upon a sleeve fitted on the latter, a cover adapted to be detachably connected to the ribs, and a cap nut fitting upon the umbrella and

An improved watch case has been patented by Messrs. Gustav Speckhart and Bernhard Vogel, of Nuremberg, Germany. The invention consists in a watch case formed of a crystal or front and back held together by an open ring provided at the ends with halfpendants which are held together by a screw, so that the ring when closed surrounds the edges of the front and back, which are thus held in place.

An improvement in tricycles has been pa tented by Mr. John A. Edmonds, of Camden, Del. This invention relates to tricvoles and other vehicles designed to be propelled by hand or feet; and it consists in a loose arrangement of the driving wheels on their axle. in combination with pawl and ratchet wheel connections to provide for either separate or joint rotation of the wbeels on opposite sides of the vehicle

An improved mode of manufacturing bracelets has been patented by Mr. Alonzo Lambert, of Corona, N. Y. The invention consists in pressing the stock into a grooved die, then bending the turned up edges inward at right angles over rectangular wires placed in the angles of the stock while still in the die then bending the inwardly projecting edges downward atright angles along the inner sides of the wires, and then bringing the bracelet into shape upon an oval mandrel with a bending tool.

An improved automatic pencil holder has been patented by Mr. Joseph H. Wright, of New York city. This is an improvement on the pencil holder for which Letters Patent No. 245,257 were issued to the same iuventor August 2, 1881. It consists in a reel provided with an aunular groovefor receivings cord or tape in its circular side, the outer edges of this groove being flush with the circular side of the reel, whereby a great length of cord can be wound on a reel of small diameter

Mr. Lewis McLellan, of Gorham, Me., has patented an improved vessel for cooking, boiling, or preparing corn or other articles which it is designed to preserve in hermetically sealed cans. It consists in the peculiar construction of the boiler or vessel, and in the combination, with a steamtrap, of the boiler, wherein is placed the corn or other article to be cooked by steam at a temperature higher than 212° Fahr., or by boiling under pressure as may be deemed best for the article to be prepared.

A device for attachment to one of the bars of a grate in an open fire place for the purpose of facilitating the heating of a vessel of water, and for other purposes, has been patented by Mr. John J. Mitchell, of Hopkinsville. Ky. The invention consists in a forked bar, for engagement with the upper bar of a grate, provided with a pivoted latch for bolding it in position on the bar, and having a pivot for engagement with a socket on a swinging skeleton plate for holding a vesse

A novel combined stereoscope and graphocope has been patented by Mr. William H. Lewis, of Brooklyn, N. Y. This invention consists in a nove combination, whereby increased facility is afforded fo dismembering and closely packing the instrument for converting it from a standing instrument into one which can be conveniently held in the hand, for supporting and steadying the lazy-tongs frame of th instrument, and for insuring a uniform motion of op-posite ends of the frame; likewise for utilizing the bar which carries the graphoscopic lens as an adjustable

Mr. Samuel Wilson, of Dallas, Lowa, has patented an improved fishing wheel having nets embraced in four or more sectors, each net having an oper ing made from the periphery or near it, and from which there is an escape passage from the center of the wheel, leading to a coute connecting with a cage net, all so ar ranged that the wheel being located in a fishway to be rotated by the water flowing against it or by another wheel attached to the shaft outside of the fishway, the mouths of the passages into the nets of the wheel will open at the rear of the wheel to the fish ascending th stream, to be entered by them as they attempt to pass under the wheel. As that side of the wheel rises the fish will be caught, carried up, and shunted out into the chute, by which they will be delivered into the trap cage.

A novel field stove and kit has been patented by Mr. Walter Clifford, of Fort Buford. Dakota Ter. This invention relates to that class of stoves used in traveling from place to place by soldiers and campers. The object of this invention is to furnish a stove which shall be light, durable, and capable of being packed in the smallest possible space. This is accomplished by constructing the stove body in the form of a parallelopipedon, having removable bottom and top plates; and in attaching to the rear end of said stove a removable extension somewhat less in length and of about half of the depth of said body, said extension having an opening in front coinciding with a like opening in the upper rear end of the stove, a second opening in the back coinciding with a like opening in the stove pipe, and a removable top; and in a stove pipe constructed in two or more sections, said sections decreasing in diameter from the bottom upward, and calculated to fit over each other.

(OFFICIAL.)

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A printed copy of the specification and drawing of any patent in the annexed list, also of any patent issued since 1866, will be furnished from this office for 25 cents. In ordering please state the number and date of the patent desired and remit to Muun & Co., 261 Broad-way, corner of Warren Street, New York city. We also furnish copies of patents granted prior to 1866; but at increased cost, as the specifications, not being printed, must be copied by band.

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