

ENGINEERING INVENTIONS.

A car coupling has been patented by Mr. Fred Tiedt, Sr., of Euclid, Minn. It is a double coupler designed to automatically couple with an opposing coupler of like pattern, and with provision for coupling with the ordinary link drawhead without changing the links or interfering with the arrangement of the improvement.

A lubricator has been patented by Mr. Patrick Brownley, of St. John, New Brunswick, Canada. It is adapted for use in connection with the steam chests of locomotive, hoisting, and other engines, and is made not to depend upon suction or the formation of a vacuum for the proper operation of the lubricator valves.

A car coupling attachment has been patented by Mr. Stephen D. Smith, of Spotswood, N. J. It consists of a folding frame carrying a lever, a nose being pivotally mounted within the frame, and arranged to support the free end of the outer coupling link and be held in position by the lever, making a "three link coupling," which may be coupled without trainmen going between the cars.

AGRICULTURAL INVENTION.

A planter and drill has been patented by Mr. Russell Brock, of Gladstone, Ohio. This invention relates to a corn planter designed to open a furrow, clear the soil of weeds in advance of the shovel, provide means for dropping the seed at regular intervals, and cover the seed when dropped.

MISCELLANEOUS INVENTIONS.

A faucet has been patented by Mr. George W. Aldrich, of Brooklyn, N. Y. It has a loose removable and revoluble valve support or seat, of spider like or open work construction, within the adjustable nozzle section of the faucet, and a soft or flexible and elastic ball valve, preferably of rubber.

A key hole guard has been patented by Mr. Alfred J. Uriin, of Missoula, Montana Ter. This invention provides a slide block preventing persons seeing through the keyhole, or the admission of cold air, etc., and also preventing the key from being turned from the outside, or from falling out of the lock.

An explosive compound has been patented by Mr. Lucien G. Heussen, of Paris, France. It is made with coal oil or naphthaline and glycerine, mixed with nitrate of potash or soda, sulphuric acid and sulphate of iron, together with carbonaceous matter, as carbonized tan or sawdust, and also sulphur.

A reel has been patented by Mr. Frederick Eitapenc, of Oneonta, N. Y. It is intended more particularly for holding lead pipe in coiled condition, and safe from injury during transportation or shipment, the invention covering certain novel features of construction and combinations of parts.

A jail window has been patented by Donald McDonald, of Louisville, Ky. Combined with gratings set in grooved stones is a hinged or swinging sash, with connecting rod and operating cord, to prevent tools and other things being handed in to prisoners, while providing for the admission of light and air.

A tablet binder has been patented by Mr. William B. Pearson, of Jacksonville, Ill. Combined with covers and a flexible back is a metallic strip connected to the back and formed with a lug or ear, a folding clip and side clips, it being feasible to use a single binder for a number of tablets in succession.

An oven door has been patented by Mr. John R. Conrad, of Long Pine, Neb. It has a T-shaped opening covered with graduated transparent material, a securing plate and a socket in which is a thermometer, for accurately indicating the heat of the oven, and for inspecting its contents without opening the door.

A pegging jack has been patented by Mr. Nathaniel Kinney, of Amity, Democracy P. O., Ohio. It is made in sections so connected that the upper section carrying the shoe clamp may be raised and lowered to adapt it to different heights, the invention covering various novel features of construction and arrangement of parts.

A longitudinally expanding roller has been patented by Mr. Arnold W. Schlichte, of New York City. It has sheathing plates arranged to be moved backward and forward upon the face of the roller, the plates being gradually drawn outward as the roller moves forward, and rapidly forced inward as they arrive at a certain predetermined point.

An elevator gate has been patented by Mr. Eugene F. Hardin, of Lincoln, Neb. It is fitted to slide in vertical guides fixed to the side posts at the shaft opening, these posts being hollow to receive weights, making a simple and effective safety gate which will be opened automatically by the rising carriage, and closed automatically as the carriage farther ascends or descends.

A gate has been patented by Mr. Gus H. Ingersoll, of Franktown, Col. It is adapted to be opened and closed by the wheels of passing vehicles, or may be opened from the vehicle while horses are traveling either way toward the gate, and may be automatically closed behind the vehicle, the invention covering various novel features for the making of a simple and inexpensive gate.

An egg beater and mixer combined has been patented by Mr. Louis Rosenkranz, of Rhinebeck, N. Y. It is so made that as a crank shaft is revolved beaters are carried around a central shaft to cut and agitate the material in the body of the receptacle, elevating it also from the bottom toward the top, the action of the apparatus being such that it not only beats the material, but thoroughly mixes it at the same time.

A numbering head for printing presses has been patented by Mr. John G. Sauer, of New York City. It is made with a main casing and inner frame carrying the numbering disks, arranged to receive an

out and in movement in the main casing from contact with the platen of the press, thus turning the numbering disks for consecutively numbering the sheets as they are printed.

A shutter fastener has been patented by Mr. James B. Kelly, of Canton, Miss. It is an effective fastening both for the blinds and the window, which cannot be tampered with from the outside, and when the blinds are thrown open the device swings with the blinds out of the way, while by it the blinds may be held closed in a convenient manner, both when the window is raised and when closed.

A mouthpiece for speaking tubes has been patented by Mr. Patrick McGunnigle, of New York City. It is composed of two main parts connected together back of the bell by a lap joint, in such way that the shaft and whistle have their axis at the diameter of the mouthpiece, and thus avoid hinges and other details of construction of the ordinary form of mouthpiece.

A machine for sharpening and gumming saws has been patented by Mr. George P. Saltenber, of Hamburg, Ark. It is for use with gin saws, and has reciprocating files which operate simultaneously and are drawn back out of contact with the saw teeth at the moment when the saws are being turned, the device being readily changed from a saw sharpener to a saw gummer, and being very rapid and efficient in operation.

A wagon brake lever has been patented by Mr. George J. Riblet, Sr., of Shinnston, West Va. A lever is fulcrumed on the brake hand lever, engaging with one end a fixed segment, a spring lever fulcrumed on the brake hand lever, provided with a segmental gear wheel arm, meshing into a segmental gear wheel arm formed on the other lever, making a lock for the lever of a wagon brake in which the lever is firmly held in place when the brakes are applied.

SCIENTIFIC AMERICAN BUILDING EDITION.

DECEMBER NUMBER.

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Special.

A NEW MINISTERIAL EXPERIENCE.

One year ago last December the pastor of a church in Philadelphia was forced to surrender his pulpit, and, acting on his physician's advice, with his young wife sought the warmer climate of Florida. Both were consumptive, and when it became evident that the young minister must relinquish a future that promised so much, he was broken (in spirit). Together these two afflicted persons traveled toward the milder latitudes. It seemed a journey to death. Nothing more pathetic has been seen since Charles and Mary Lamb set out hand in hand, and with tearful eyes, toward the madhouse to which they had self-condemned themselves. The parting from their friends and parishioners at the railroad station was affecting in the highest degree. Several long, weary months followed, in which the hoped-for improvement was awaited. It came not. Both man and wife gradually grew weaker. The little cottage they had taken at Jacksonville finally began to lack necessary comforts. A small negro servant had to be discharged because she could no longer be paid. Then the despairing young wife took to her bed, and rapidly grew worse. One good lady assumed that death was inevitable, and hoped only to make the end as painless as possible. In her mission of kindness she encountered a hale old gentleman who, after he had given her a ten dollar note, added: "I will do more. I will send that unfortunate woman my Compound Oxygen. I always take it with me to cure sudden colds or throat affections; but I know what it can do even in desperate cases." In a few minutes he was ready, and accompanied the noble hearted lady to the house of suffering. Hot water was readily procurable, and in a brief time the consumptive was inhaling the Compound Oxygen, evolved from one of Drs. Starkey & Palen's Home Treatments. At the end of a week notable improvement in the woman's condition set in. The end of another week's treatment found her seated in a chair on the porch, and she was soon after able to walk about. Meanwhile full advice had been received from Dr. Starkey as to the Compound Oxygen, two Home Treatments had arrived, and the minister began to give some attention to his own case. Friends gathered around them amid the Land of Oranges, and now they are both in a degree of health that enables the pastor to resume his pulpit and his good wife the care of her own home.

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Navy Yard, New York, July 5, 1887.
SIR:—In obedience to your order of the 9th of June (a copy hereunto attached), to make a careful and thorough test of the Star Machine Co.'s Improved Portable Forge, the Board met on June 28 and proceeded to carry out said order.
Forge No. 8, as per circular appended, was the one chosen for trial, it being best suited for purposes under the cognizance of the Bureau of Steam Engineering, for use on board of vessels.
After a fire had been well under way, two pieces of iron, two inches in diameter, were brought to a welding heat in five (5) minutes and a clean, smooth weld made. The blast is excellent and continuous; the frame of the forge well braced, and set screws are so arranged as to take up the lost motion of the shaft and other parts.
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Very respectfully,

[Signed] JOHN L. D. BOTHWICK,
Chief Engineer, U. S. N.
J. J. BARRY,
Passed Ass't Engineer, U. S. N.
F. C. BOWERS,
Ass't Engineer, U. S. N.

To Commodore Bancroft Gherardi, U. S. Navy, Commanding U. S. Navy Yard, New York.

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