

ENGINEERING INVENTIONS.

A pump has been patented by Mr. Nathan Hemenway, of Napa City, Cal. It is intended more especially for raising water from deep wells and mines, and provides for arranging together several pumping cylinders of twenty-five or thirty feet length each, the lower one supplying the one next above, and each cylinder thus becoming a water reservoir.

A spark arrester has been patented by Mr. Abraham O. Frick, of Waynesborough, Pa. The cone of the smoke stack has an inside sleeve arranged concentrically around its upper end, and above this is a deflector cheaply made of two pieces of sheet iron, which performs the double function of deflector and receptacle for escaping sparks, being itself very light and simple.

An improved car coupling has been patented by Mr. Thomas C. Jones, of Willows, Cal. The drawhead has a U-shaped drawbar connected with the drawrod, with which is a coupling hook held down by a spring and a bow and yoke. With the coupling hook is a lifting bar, a lever with a keeper and catch bar, and an upright bar and its keeper, so the cars can be uncoupled from the side of the track or the top of the car.

An improved car brake has been patented by Mr. Josiah Harding, of Autofagasta, Chili. A screw staff is connected to the elbow lever by a swiveled bearing, the lever being connected by its long and short arms to the front and rear brakes of the car, the shaft by which the lever is made to work the brakes forming one of the brake bars, and the devices employed being almost identical for any form of car, so the hangers, screws, and other parts may be interchangeable.

An electric railway signal forms the subject of a patent issued to Messrs. James C. Upham, of North Sydney, and John P. Rogers, of Elmsdale, Nova Scotia, Canada. The road bed is provided with electric conductors connected together to form blocks of any suitable length in addition to the rails, which are arranged as continuous conductors, and the engines are provided with batteries, electric signaling apparatus, and circuit closing devices.

MECHANICAL INVENTIONS.

A machine for drawing bars has been patented by Mr. John S. Griffin, of Cleveland, O. The machine is intended for drawing iron and steel bars for heavy shafting in one continuous operation, the bars being cut the proper length, their ends heated to allow the thickest part to be drawn clear through the dies, when the operation is performed automatically.

Clothing for pulleys forms the subject of a patent issued to Mr. Gilman Jaquith, of Maysville, Ky. This invention provides for increasing the friction on the driving surface of the pulley, and making a better bite or hold for the band, and for this purpose a thread is first made on the pulley surface, then the surface is treated with a composition coating, after which strong thread is wound on, and then another composition coating added.

AGRICULTURAL INVENTIONS.

A combination plow has been patented by Mr. Jeff. D. Pace, of Arcadia, La. In combination with a plow shoe and standard is a brace plate, flush with the straight side of the shoe, some distance below its upper edge, and receiving an angled plow plate, so the plow may be readily converted from a scooter into a mould board or turning plow.

A grain sacker has been patented by Mr. Richard H. Purnell, of Rosedale, Miss. This invention provides that, when cotton seed is thrown into the machine in its usual lumpy and mixed condition, they will be separated, the seed deposited in a sack, weighed and held to be sewed, the machine being also adapted to separate shelled corn from the cobs, and to sack and weigh the former and other grain.

A roller attachment to grain drills has been patented by Messrs. James M. Wishart and William F. Buzick, of Topeka, Kansas. This covers such improved arrangement of roller attachments to grain drills as will give a better action, and be more substantial and durable than those now in use, the weight of the frame being equally distributed on the rollers, while the rollers are free to assume any position the irregularities of the surface may require.

MISCELLANEOUS INVENTIONS.

A sofa bedstead has been patented by Mr. Joseph McGrath, of Newton, Kansas. This invention covers a new and improved hinge for hinging the removable seat or top of a sofa bed, lounge, extensible chair, or other like piece of furniture, to the seat frame.

A driving cuff and wristlet has been patented by Mr. Byron E. Northrup, of Broadabin, N. Y. In combination with a ganilet or cuff is a flexible wristlet with an elastic webbing, the wristlet being made of kid or other suitable leather or of woven or knit fabric.

A gate operating apparatus has been patented by Mr. Henry Ziegler, of North Lima, O. This is a device for opening and closing gates without dismounting from a carriage, by pulling a rope at either side stretched along the side of the roadway from the post whereon the gate is hinged.

A napkin ring and holder has been patented by Mr. Gus A. Bahn, of Austin, Texas. It consists of a yoke-shaped piece of metal with a hinged section connecting the two ends, and serving as a ring, in combination with a clasp for holding the napkin, if desired, at the throat.

A cigar stand has been patented by Mr. Charles N. Swift, of New York city. This invention covers an upper and a lower plate, suitably held apart, perforated for the reception of cigars, and made adjustable for cigars of different lengths, so it will hold the cigars without danger of breaking the wrappers.

An adding machine has been patented by Mr. Albert K. Barmore, of Benton, Texas. The invention covers a special construction and combination of

parts in a machine, of which the wheel is actuated by the operator to advance at each movement as many teeth as there are units added by that movement.

A shot case has been patented by Mr. Quincy A. Ellis, of Gatesville, Texas. The case is tapering, and so hung upon a rod that its spout will be upward, but this is fitted with a device which enables a definite quantity of shot to be withdrawn, on tipping it down, without weighing, for the convenience of retailers.

A machine for extracting and cleaning the fibers of plants has been patented by Mr. Philip Cohn, of New Laredo, Tamaulipas, Mexico. Dull edged knives are arranged spirally upon a roller, fitted to revolve at a high speed, whereby the outside of the plants is broken and scraped, and the soft parts or meat of the inside is also scraped off.

A machine for scraping and cleaning intestines has been patented by Mr. Andrew M. Woods, of Shiloh, S. C. A rotating drawing roller is fitted with a suitable clamping device for grasping an end of the entrails, and a contiguous die plate, through the apertures of which the entrails are drawn by the revolution of the roller.

A combined automatic floor and safety clutch for elevators has been patented by Mr. Thomas H. Wood, of Philadelphia, Pa. This invention provides for a safety floor for elevator shafts, which is opened and closed automatically as the car rises and falls, with which is combined a safety clutch to hold the car whenever the cable breaks or gives way.

An apparatus for revivifying bone black has been patented by Mr. Edward P. Eastwick, of New York city. This invention seeks to effect a further saving in fuel than is possible by present methods, so the heat given off from the bone black coolers is utilized and also the heat contained in the heated air that has been passed through the bone black in the drier.

An extensible latch has been patented by Messrs. Brommie Copeland and Frank Wright, of Salem, N. Y. An extensible latch bolt, with a block swiveled on a screw, and connected by the latter to a piece provided with a screw threaded aperture, affords means by which the bolt can be adjusted to extend or project a greater or less distance from the edge of the lock casing.

A striking mechanism for eight day clocks has been patented by Mr. Edward A. Muller, of Louisville, Ky. This invention covers special details in the construction of the alarm mechanism, whereby the quarter, half, and three-quarter hours are struck on a gong and the full hours on a spiral spring, thus making different sounds; the clock also has a second hand and an alarm.

A whip holder has been patented by Mr. St. George J. Boswell, of Quebec, Canada. The socket is fastened to one end of lazy tongs, the opposite end of which is secured to the vehicle and connected with devices for extending the lazy tongs, so the whip can be brought within easy reach of the hand when required, or the holder will be out of the way when not in use.

Watering apparatus for hot houses forms the subject of a patent issued to Mr. Warren H. Howe, of Marlborough, Mass. This invention covers a system of distributing perforated pipes suitably suspended in the house, connected with an elevated supply tank or pump, and with suitable regulating cocks, whereby the moisture and temperature of the air may be readily regulated.

A wire stretcher has been patented by Messrs. William H. and Jeremiah W. Bliss, of Hamilton, Mo. The invention covers a reel support, brake, and guides, to attach to a wagon box to be driven along the line of fence posts, for delivering wires to be attached to the posts and for stretching them, the reels being readily taken out when desired, and the wire being wound thereon with facility.

A refrigerating counter for bar rooms has been patented by Mr. Charles E. Crockett, of Waupun, Wis. This invention combines with a refrigerating counter an ice box of two or more sections, with hollow walls, each section having a horizontally projecting work board. One section also has pigeon holes for bottles, spices, sugar, etc., and an air forcing apparatus is provided for to force air around the hollow walls.

A cockle separator has been patented by Mr. James M. King, of Rochester, Minn. There is a connected series of inclined screens, having detents in combination with a series of transversely arranged guttered bars, within which the detents are located; there are also imperforate smooth-faced plates secured to the lower or forward sides of the detents, in combination with the guttered bars.

A fire escape ladder has been patented by Mr. Arnold M. Downing, of Oneida, N. Y. It consists of a folding ladder formed of a series of linked rods united at every second joint by a transverse rod or rung, forming a ladder which can be folded very compactly, so that a ladder a hundred feet long can be contained in a box eighteen inches long, eight inches wide, and four inches deep.

A tree protector has been patented by Mr. Franklin R. Hogeboom, of Brooklyn, N. Y. This invention covers an incircling trough, made in semicircular sections, to hold kerosene or other insect destroying fluid, which may be readily attached to the tree at a distance from the ground; flexible flaps are provided, to conform the protector to the size or irregularities of the tree, which is thus made secure against the ravages of caterpillars and other insects.

An ironing machine has been patented by Messrs. Henry Podger, of Bromley, County of Kent, and William H. Davey, of Highgate, Middlesex County, England. It is specially adapted for ironing shirt fronts, collars, etc., and consists mainly in the combination, with a vertically adjustable and horizontally moving table, of a longitudinally reciprocating iron; there is also a gas heated iron, double faced and reversible, so that one face is being heated while the other is used.

A dental engine attachment has been patented by Mr. Jesse W. Norwood, of Greenville, S. C. The invention covers the peculiar construction and arrange-

ment of a pneumatic pump and the means for regulating its stroke, as well as means for supporting it and throwing it into and out of gear, to better adapt such engines for using the pneumatic plugger. A dental plugger has likewise been patented by the same patentee, in which the mallet operates as a piston in the hollow handle, and a sheath takes the frictional wear which would otherwise rapidly reduce the soft metal, the holder of which is adapted to form an air tight joint with the chamber of the handle.

Business and Personal.

The Charge for Insertion under this head is One Dollar a line for each insertion; about eight words to a line. Advertisements must be received at publication office as early as Thursday morning to appear in next issue.

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Special.

JUDGE KELLEY'S VIEWS.

The Hon. William D. Kelley, of Philadelphia, has long been known for his fearless advocacy of the right, and his uncompromising opposition to the wrong. Since 1860 he has been a member of the House of Representatives of the United States. He has always been known as a man of positive counsels, a powerful speaker, an earnest debater, an able thinker, and an unwearying worker.

Judge Kelley has been so long and so prominently before the American people, that his sentiments on any important subject are valued, even by those who do not agree politically with him. He is emphatically a man of the people. Elevated to the Judgeship many years ago, he proved to be a man of such unswerving integrity, such earnestness of purpose, and such depth of conscientious conviction, that he was for a long term of years retained on the judicial bench; and on his desiring to retire to the comparative seclusion of an extensive law practice, was told by the people that he must serve them in Congress. For twenty-three consecutive years his Congressional service has been rendered with singular fidelity and purity. His utterances are well known to come from his inmost heart, and his opinions to be the result of the most mature deliberation. The judgment of such a man carries with it immense weight, and his views, whether on public affairs or private interests, are entitled to the respect and esteem of all thoughtful persons.

Judge Kelley's power of resistance to obstacles which would have put an ordinary man in his grave has long been the subject of comment, not only among his friends, but by the public generally. Such was his physical condition ten years ago, that it was feared that the next Congressional session would be his last.

For many years the Judge had been afflicted with the most obstinate catarrh, which defied all the old fashioned remedies, and which would have entirely laid on the shelf a less indomitable man than himself. His life became almost a burden to him, and he was nearly at death's door. To-day, although at an age when most men begin to show signs of wearing out, he is hearty and vigorous, and as ready and as able to perform his arduous Congressional duties as he was twenty years ago.

An account of Judge Kelley's remarkable case, as given by himself, will be of interest to all who are suffering with Catarrh, and who are wondering what they shall do to get rid of this horrible disease. One of our editors recently spent a morning with Judge Kelley at that gentleman's home, in West Philadelphia. To him the Judge communicated the history of his illness and recovery, substantially as follows:

"I had, as a hereditary victim of Catarrh, suffered for years. I was subject to violent paroxysms of coughing. Straining for relief had produced abrasion of the membranes and daily effusion of blood from my throat. For four years I passed a portion of each Congressional vacation in the Rocky Mountains or on the Pacific coast. While there, I found relief; but on my return to tide-water, the disease appeared with apparently renewed vigor. My breathing power diminished, so that in the early summer of 1873 it was little more than a panting for breath. About two years before this my attention had been called to Compound Oxygen Gas as then administered by Dr. Starkey. A friend who had great faith in its efficacy advised me to try it. On reading Dr. Starkey's advertisement I threw the little book aside, and declined to resort to the treatment, on the ground that it was a quack medicine which proposed to cure everything, and was consequently without adaptation to any particular disease. I grew worse, and in the summer my breathing was so short that a cough, a sneeze, or a sigh produced such acute pain at the base of the left lung, that I felt it necessary to close up my affairs, as I did not believe I could last for sixty days. Nor do I now believe I would have lasted for that time, had I not found a potent curative agent.

"I had lost none of my prejudice against the gas, as a medicine; but in very desperation, seeing that it could not make me any worse than I was, and as medical treatment had utterly failed to meet my case, I concluded to try it. After a thorough examination, Dr. Starkey, to whom I was then a stranger, said: 'Sir, I have no medicine for either form of your disease (alluding to the Catarrh and the bleeding at the throat), but if you will give me time I will cure you.' My response was a natural one: 'You are frank in saying you have no medicine for either form of my disease, and yet you propose to cure me. By what agency will you work this miracle?' 'The Oxygen Gas,' said he, 'is not a medicine. It has none of the characteristics of medicine compounded of drugs. These create a requirement for continual increase of quantity to be taken; and, if long persisted in, produce some form of disease. But the gas produces no appetite for itself. It passes by inhalation into the blood, and purifies and invigorates it. The system is thus enabled to throw off effete matter. You will find by experience, if you try the treatment, that it will not increase the rapidity of the action of your pulse; though the beating thereof will be stronger under its influence.'

"This explanation removed my objections, and I could see how such an agent could operate beneficially in cases of widely different symptoms and character.

"Dr. Starkey said that the cells of my left lung were congested with catarrhal mucus, and that he believed the gas would at once address itself to the removal of the deposits, and the restoration of my full breathing power.

"I entered on the use of the treatment, and at the end of three weeks, with an improved appetite, with the ability to sleep several consecutive hours, with a measurable relief of the pain in the lung, and with Dr. Starkey's consent, I made the tour of the lakes from Erie to Duluth, in company with my venerable friend Henry C. Carey. Returning, we visited friends in St. Paul, Chicago, and Pittsburg.

"Notwithstanding the intense heat, I remained in Philadelphia during the summer, and inhaled the gas daily, with the happiest effect. Before Congress assembled in December, my lung had been relieved of much of its nauseous deposit, and I was able to breathe without pain.

"Without detaining you with detail, I may say that in the progress of my recovery I had occasional hemorrhages, which always preceded a palpable step in the progress of recovery; so that I came to regard these unwelcome visitors as part of the remedial action of nature, assisted by Compound Oxygen Gas.

"I am now more than ten years older than I was when I first tested the treatment. I have had no perceptible effusion of blood for more than six years. I breathe as deeply as I did at any period of my young manhood, and my natural carriage is so erect as to elicit frequent comment.

"I have regarded my case as a very extraordinary one, and yet I have had under observation one which I regard