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LIST OF PATENT CLAIMS

Issued from the United States Patent Office.
FOR THE WEEK ENDING JUNE 24, 1851.

To John Cooper (administrator of Benj. Giger, deceased), of Sangamon Co., Illinois, for improvement in Plows.

What is claimed as the invention of Benjamin Giger, is the peculiar form and construction of the standard, with the sockets at the upper extremity and flanges at the lower, and the method of uniting them, so as to form a double machine capable also, of being used for cultivation in its separate parts, as set forth. The whole machine, as above described constitutes Giger's Corn Planter.

To C. A. Pöstley, of Spring Garden, Pa., for self-acting Guard Frog.

I claim the combination of the rising and falling guards, with the levers, by means of an arrangement of levers connecting rods, &c., substantially such as herein specified, and acting in the manner and to produce the results herein set forth.

To John Pepper, of Portsmouth, N. H., (assignor to Crane, Pepper & Crane), for improvement in Knitting Machines.

I claim, first, a sinker, to be used in machines for knitting, so constructed as to form the loops upon the needles used in knitting two separate fabrics at the same time and at one operation, and of sufficient weight to draw the requisite quantity of yarn from the supply to form the loops required.

Second, A slur to be used in knitting machines, so constructed as to let each sinker drop to the falling bar, and draw the requisite quantity of yarn from the supply, to form the loop or loops, between the needles, before it allows the succeeding sinker to drop and act upon the yarn.

Third, a falling bar, so constructed that the slurs and slur boxes traverse upon it instead of traversing a separate bar.

Fourth, the combination of the sinkers, stop bars, combs, and needles that traverse, so arranged as to knit two separate fabrics at the same time, with one and the same set of sinkers and slur.

Fifth, I do not intend to limit myself to the precise construction described in the foregoing specification, but to use such forms of construction as will answer the purpose intended,

To Maria Vaughn (administratrix of J. C. Vaughn, deceased), of Greenbush, N. Y., for machinery for making Wrought Iron Car Wheels.

I claim the machinery and apparatus set forth and described, to wit, the mould blocks or welders, the hammer or ram, with the wedges thereto attached, and the mandrel, in combination with each other, for the purpose set forth.

To Jabez Robins, of Boston, Mass., (assignor to J. R. Morse, of Leominster, Mass.), for improvement in machines for Splitting Horn and Shell.

I claim the cylindrical rotary bed, or drum, in combination with the water cistern, or trough, and its furnace, and machinery over the drum, for bearing the shell or material down upon it during its revolution, as specified, the said drum being provided with a roughened or friction curved surface, such as will adhere to the shell, and cause it to move with it and against the knife, as described.

To Henry Maesser, of Pittsburgh, Pa., for improvement in printing names of subscribers upon newspapers, &c.

The arrangement and construction of a machine for printing names of persons or places on newspapers and other papers, after the manner substantially as described, viz., of a form containing the column of names to be

printed set up in types, and being brought under the action of a stamp, by means of a slide moving by degrees, together with the application of a slitted plate, allowing the paper to be printed to be pressed down on the line right beneath the slit of the plate, and shielding the paper from the lines adjoining that under action of the stamp, as described.

To Jacob Selgrath, of Pottsville, Pa., for improvement in Lubricating Compounds.

I claim the combination of ingredients herein described, whether the proportions be the same as herein set forth, or varied to any extent that the same may admit of, without changing the peculiar character of the compound as a lubricator.

To Lawrence Myers, of Philadelphia, Pa., for improvement in Cars for transportation of Coal.

I do not claim the use of cylinders for conveying material upon common roads, as this has been done heretofore, but I claim the combination of a partition or partitions, with a metallic cylinder or cylinders, provided with flanged rims, as herein described, for the purpose of carrying material in bulk, on rail or other roads where high velocities are attained, said material being held in place by centrifugal force, whilst in motion, and prevented from falling or rolling in the cylinder, by the partition or partitions, whilst in the act of stopping or starting, as herein fully described, or by any other means essentially the same.

To Sylvanus Sawyer, of Templeton, Mass., for improvement in machinery for Cutting Rattan, &c.

I claim, first, the combination of the cutters, as described, with the levers, the springs, and cams, or their equivalents, and handles and links, for the purpose of applying said cutters or scrapers, so as to act upon the stick of rattan in the manner herein described, and by which they may all be operated simultaneously, substantially in the manner described.

Second, in the process of cutting cane or rattan into strands, as described, I claim bending the stick at the point at which the cutter is removing the strand from the surface.

Third, I claim the combination of the elements which compose each simple section of the cutting apparatus, that is to say, of the cutter and gauge, with the stock, guide, and bed roller, or their equivalents, substantially as described, for the purpose of bending the stick and removing the strand therefrom, whether said section is used alone or is combined with others, as described.

Fourth, I claim the combination of that part of the machine called the scraper, with the feeding rollers or their equivalents, and the several sections of the cutting apparatus, said sections being so arranged, in relation to each other, as that the stick, in passing from the one to the other, shall be properly bent, and also that the several cutters should act upon different points of its circumference, the whole being arranged and operating substantially as set forth.

To Chas. Starr, of New York, N. Y., for improvement in machines for finishing the Backs of Books.

I do not claim to be the inventor of backing books by means of a roller, as rollers having concave peripheries have been used, which were passed longitudinally over the back, nor do I claim the construction of the clamps or jaws between which the book is held. Nor do I claim to have invented the use of circular engraved tools, or rollers for embossing books, but I claim, first, the use, for the purpose described, of a roller of the whole length or part of the length of the back of the book, either plain, for a plain back book, or grooved for a raised banded book; or having a figure or figures cut or engraved, or otherwise made upon it, rolling over the back of the book, from side to side, or from the centre to the sides, and having a yielding pressure applied to it by weighted levers, or their equivalents, in the manner substantially as described.

Second, I claim clamping or holding the book in a swinging book holder, or its equivalent, which hangs on pivots or journals, and is capable of being swung back and forth, so as to cause the back of the book held in it, to describe an arc of a circle, and bring each part of the back to the roller, so that it shall receive an equal pressure all over its surface, substantially for the purpose as set forth.

Third, the gauges sliding upon an inclined bar, or bars, that they may be set to form guides for placing both ends of the back of the book at an equal or nearly equal elevation in the clamp, so as to cause each part to receive a uniform pressure, and may be drawn back from the book without dragging or rubbing the surface of the back, in the manner substantially as shown.

To S. T. Armstrong, of New York, N. Y., for improvement in making Gutta Percha Hollow Ware.

I claim the method, substantially as described, of moulding articles of gutta percha, or the compounds of gutta percha, with other substances, by first making the same in the form of a pipe, and whilst in a partially heated and plastic state, giving to it the form required in a mould by forcing a liquid inside to expand the gutta percha, as described.

To Wm. & Wm. H. Lewis, of New York, N. Y., for improvement in fastening Pedestals to Columns.

I claim the application of the piece, c, and different shaped lugs, 8 and 9, on the end of the column, to enter the hole, 2, and notches, 3 and 4, so that on turning the columns the lugs take the inclined seats, to attach the column to the pedestal, in combination with the locking piece, to prevent the column turning, substantially as described.

To Wm. H. Start, of Smyrna, Ill., for improvement in Grain Harvesters.

I claim, first, the standard to which the steering wheel is attached, constructed as herein described, so as to perform its own office proper, and also to adjust the cutter at the required height above the surface of the ground.

Second, the discharging rake, which is moved as described, in combination with the endless apron for collecting and discharging the cut grain, as set forth.

To Joseph Wright, of Waterloo, N. Y., for improvement in Mashing Tubs.

I claim, first, the employment of buckets formed by the revolving arms, working within the hopper, for delivering the grain through suitable openings into, and operating in combination with the mashing cylinder having an outlet or outlets, for supplying the cooler, substantially as described.

Second, the use of a mashing cylinder, having beaters within it, and operating in combination with a cooler, carrying any number of barrels or shafts fitted with projecting pins, essentially as described for the purposes as set forth. [See engraving on page 137, this Vol. Sci. Am.]

To Jean Blanc, of New Orleans, La., for improvement in making Hemp from Okra.

I claim preparing of hemp from the bark of the okra plant, in its green state, and the herein described method of preparing it for use.

DESIGNS.

To S. A. House, of Mechanicsville, N. Y., for design for Stoves.

(For the Scientific American.)

Practical Remarks on Illuminating Gas.

[Continued from page 326.]

Complaints have sometimes been made by persons using gas, grounded upon an opinion that it effects the lungs deleteriously; this, however, is seldom, if ever the case, unless the gas is allowed to escape by accident or through carelessness, and then the odor of the air is rendered so unpleasant that a person would naturally escape from the apartment before its effects could be produced upon the lungs. In almost every instance the cause of such unpleasant feelings may be traced directly to the carbonic acid gas emanating from an anthracite coal fire, from hydrogen generated in cess-pools and drains and conveyed through them to the building; or perhaps may result from gas which passes from the burner unconsumed, or, in a close apartment where many lights are burning, to the vitiated air caused by the carbonic acid gas evolved during combustion, and which collects, if proper means are not adopted to secure ventilation. It is so much easier to charge all such unpleasant sensations, all odors and annoyances to the gas, than it is to spend a little time and thought in searching out the true cause, that it is often done, much to the annoyance of gas companies and their agents, and at a great sacrifice of time.

Many consumers have a mistaken idea as

regards regulating their burners, to produce an economical consumption of gas: it is a great error where we have, say for instance, five burners, and wish to decrease the light to partially close them all, the proper manner of regulating them would be to entirely close two or three of them as the case may be, and increase the flame in the remaining ones; for by turning them all down, we consume much more gas in proportion to the quantity of light given; while in the latter case by extinguishing the two or three, we derive the best economical results from the remaining ones burning. A little careful examination will convince every skeptical person of the truthfulness of these statements.

Every gas consumer should learn to read the meter within his premises; and it would be well if he should habituate himself to the calculation of his consumption of gas nightly; by so doing, he could regulate the amount consumed as it may please him, and not only derive benefit but satisfaction thereby. If upon lighting up his burners, and examining his meter he finds that they are consuming more gas than is requisite, he has only to shut off the cocks and reduce the amount; and if he finds upon examination that the expense of one evening's illumination is too large, he can govern himself accordingly and economize upon the following evening; and thus he can make his bill for gas just whatever he pleases; and will know the amount due, even before his bill is presented. Were this course pursued by all gas consumers much trouble and hardship would be saved, and I trust that a matter so simple, and which takes so little time will come into more general custom among the consumers of gas.

Whenever coal gas works are about being located, there is almost invariably a general complaint made by those residing or owning land in the vicinity, conceiving that they will be a great nuisance, and thereby decrease its value. An opinion of this kind expressed, would convey to any practical mind the want of information upon the subject; and any person understanding the nature and the construction of a coal gas apparatus, would, we are convinced never entertain such an opinion. There can be no direct nuisance emanating from a well conducted coal gas establishment, the very nature of the process forbids it. The gas is generated in closed vessels and is conveyed through all its detail progressions from the retort to the burner, unseen, through pipes, and invisible. There is no smoke from the fires, coke being the only fuel used, and this is perfectly free from all smoke or gas, save perhaps a small portion of carbonic acid gas, which is not visible, and cannot be deleterious when escaping in the open air, by means of a suitable chimney.

When the retorts are opened for the renewal of coal, the escaping gas or smoke is ignited immediately and burnt, very little if any passing off unconsumed. And I repeat it, there can be no nuisance or inconvenience arising from a well arranged and well managed coal gas establishment, and there can be no odor of gas without being caused by some accident, or by gross carelessness of the workmen employed.

J. B. B.

[Remainder next week.]

Treatment of Children in Public Schools.

Many physicians in our city complain that it is injurious to the health of children in detaining them as the custom is, around or in the school, during the time they should be at home for dinner. The dinner meal is the most important of any to children.

Professor Dick, of Edinburgh, has pronounced an opinion that hydrophobia is purely a work of imagination.

[The above is going the rounds but is not altogether true. Prof. Dick never said that hydrophobia was purely the work of fiction, but that it had been like many other diseases produced by the imagination.]

Mr. Whitney has been lecturing before the London Geographical Society, on the subject of his railroad to the Pacific through Canada.