

ENGINEERING INVENTIONS.

An injector has been patented by Mr. Elijah Ware, of Omaha, Neb. It has an ejecting cone, combination cone, and overflow pipe, in combination with a steam inlet valve, water valve, and an overflow valve adapted to be connected with the inlet port of the steam valve, so as to cause suction in the overflow pipe, and means for operating the three valves simultaneously, with other novel features.

A dredge has been patented by Mr. Henry G. Geiger, of Tacoma, Washington Ter. A shaft is arranged within a suction pipe and provided with an Archimedean screw, there being mechanism for raising and lowering the pipe with its screw, with other novel features, the rotation of the screw agitating the sand, clay, or mud at the bottom of rivers, etc., so that it is forced to ascend the suction pipe.

A car coupling has been patented by Messrs. Levy and David Rosenthal, of Hudson, N. Y. The drawhead has spring-actuated doors and means for opening them, a spring-actuated drawer being adapted to slide beneath the drawhead and support the link, a shaft journaled beneath the sill of the car carrying ratchet wheels being connected with the drawer, and a pawl-carrying shaft being adapted for co-operation with the ratchet-carrying shaft.

Feeding air to steam boiler furnaces forms the subject of a patent issued to Messrs. Alanson Horton and Benjamin J. Wright, of Hammondsport, N. Y. The invention consists of a fan or its equivalent connected to the boiler, the fan being provided with means for regulating the amount of air supplied to the boiler, whereby the draught may be greatly increased without increasing the height of the stack, and all kinds of fuel can be better burned.

AGRICULTURAL INVENTIONS.

A lister cultivator has been patented by Mr. Joseph P. Lutes, of Ridgeley, Mo. It is specially adapted for working listed corn, and is designed to work the corn in the gutters or furrows made by the lister, and at the same time smooth the ridges between the corn and feed fresh soil to the same.

A corn and cotton planter has been patented by Mr. Jesse A. Childs, of Coushatta, La. It has a reciprocating cylinder, whereby the distance between the hills may be exactly met, and a cut-off regulating mechanism for measuring with great exactness the quantity of seed discharged into each hill, with other novel features.

A combined cultivator and corn planter has been patented by Mr. Emil Westhoff, of Cuero, Texas. It is designed to be self-covering and adjustable as to the transverse and longitudinal space between the hills and rows, and to be regulated as to the material fed at each throw of the seed slide, and also to mark off the adjacent row as the machine advances.

A low-binding harvester has been patented by Messrs. J. C. and George A. Cunningham, of Washington, Kansas. It is so constructed that the grain is carried to the binding mechanism by means of a continuous endless carrier belt arranged upon a level with or slightly above that of the binding table, one of the main objects being to carry the grain directly to the binding table.

MISCELLANEOUS INVENTIONS.

An improvement in the ornamentation of wall paper has been patented by Mr. Charles H. Provost, of Brooklyn, N. Y. The invention consists in the method of distributing on a wet or dry ground color or bronze, so that the bronze will appear upon the color, and then the paper is embossed.

A method of and apparatus for making fibrous vessels, such as pails, tubs, etc., has been patented by Mr. Leroy Tobey, of Penn Yan, N. Y. It consists in drawing fibrous material held in suspension, such as paper or rag pulp, on to a perforated form immersed in the liquid, continuing the suction afterward to dry the fiber, then soaking the vessel so formed in a hardening compound, and pressing and finishing.

A folding baby carriage has been patented by Mr. Charles Haller, of New York City. The invention covers an improvement on two former patented inventions of the same inventor, simplifying the construction of the carriage, and rendering it lighter, less liable to disarrangement, and more convenient in use.

A windmill has been patented by Mr. Hanford Reynolds, of Gifford, Ill. It is so constructed that its wings can be automatically adjusted in accordance with the force and direction of the wind, and with the power required, and can be readily thrown in or out of action, the mill requiring no vane or other device for adjusting it in accordance with the direction of the wind.

A wheel for grooving machines has been patented by Mr. Sabin F. Brown, of Dawson, Minn. It is for grooving together tin and other sheet metal by passing the wheel once forward and back over the seam, and is made in three parts, one part to be lowered to stand flush with the edges of the other parts, or raised to form the offset, the movable part of the wheel being acted upon by an eccentric and crank.

A suspender or other buckle has been patented by Mr. Charles R. Harris, of Williamsport, Pa. This invention relates to combined buckles and lower hooks or loops capable of manipulation or adjustment from the front, and in which the buckle frame is made of wire and has combined with it a rear toothed cross bar that engages with the web passing through the buckle frame.

A vehicle hub has been patented by Mr. Burwell C. H. Simpson, of Lebanon, Tenn. This invention covers a novel construction, whereby the spokes may be securely clamped, and so as to allow renewal of either the spokes or felly sections, and also to allow tightening of the tire by expansion of the felly

sections by endwise thrust of the spokes when wedged outward from the hub.

A device for stuffing mattresses has been patented by Mr. John R. De Haven, of Cloverport, Ky. It consists of a stand supporting loose slats and a removable head piece, of side bars having points on one end, of bottom plates, and of top rods supported by the head piece and by a U-shaped frame pivoted to the stand, enabling an operator to fill a mattress tick rapidly and evenly.

A corset has been patented by Mr. Milton J. Roberts, of New York City. Its distinctive feature is that it is woven over a form into curvilinear contour out of wire strands, the meshes having a greater number of twists in some parts of the corset than in others, and the corset being designed especially to support the body and relieve the sufferings of the deformed or crippled, although otherwise advantageously applicable.

A knife cleaner has been patented by Mr. Robert W. Jamieson, of Prince Albert, Saskatchewan, Northwest Territory, Canada. The machine has two pairs of rubbing blocks, a lower pair for use first as cleaning blocks and an upper pair for use as polishing blocks, the blocks being faced with leather or other suitable fabric, to which the cleaning or polishing powder is supplied, by which the knives may be cleaned at both sides and the back, without strain on the handle.

An artificial ear drum has been patented by Mr. Benjamin N. Huestis, of New York City. It consists of a cup-shaped body having an annular flange and provided with a hollow stem closed at its outer end, which may be inserted or withdrawn without pain to the wearer, will be wholly invisible when worn, the wearer being able to sleep with comfort with the drum in position, it being designed to relieve deafness to a greater extent than has heretofore been possible, and when the natural drum has been lost.

SCIENTIFIC AMERICAN BUILDING EDITION.

SEPTEMBER NUMBER.

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INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

August 23, 1887,

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

Table listing various inventions and their patent numbers, including Accordion, Air heater, Air or water purifying apparatus, Anti-friction composition, Auger, Automatic gate, Battery, Bed, spring, Bedding, retaining device, Bedstead, Bellows attachment, Binder, twine, Bit, Blind, window, Boiler, Boiler, G. Bolton, Boiler, J. A. Svedberg, Boiler feed and steam trap, Interchangeable, G. W. Baird, Boiler head and man hole, N. W. Pratt, Boiler tube, E. S. T. Kennedy, Boiler tube cleaner, H. L. Currier, Boilers, combined drum head and manifold for sectional steam, Martinez & Muller, Boilers, connecting box for sectional steam, O. Muller, Boilers, connecting box for sectional steam, N. W. Pratt, Boilers, drumhead manifold for sectional steam, C. P. Higgins, Boilers, manifold for water tube, N. W. Pratt, Boilers, etc., scaling tool for, G. Cowie, Jr., Bolt, See Flour bolt, Book covers, etc., imitation bronze or other ornamental plate for, C. Wagenfohr, Books, protector for the covers of, Henry, Jr., & Brown, Boot or shoe burnishing machine, S. Ross, Jr., Boot or shoe heel, A. A. Marquette, Boots or shoes, buttonhole piece for, J. Reese, Boots or shoes, metal plated rubber heel for, F. D. Hayward, Bottle stopper, G. A. Gessner, Bottle stopping mechanism, G. A. Gessner, Box, See Cartridge box. Paper box, Brackets, attachment for towel, A. McKanna, Brake, See Car brake, Brick kiln, L. Manning, Bridge gate, draw, F. Gerard, Bridle, E. McEvers, Bridle bit, J. A. Manning, Broom, L. Pelton, Brush, fountain, H. A. Beaumont, Button fastening machine, E. O. Ely, Button fastening machine, J. H. Vinton, Button setting machine, E. H. Taylor, Camera, See Photographic camera, Canal lock, T. Sidensol, Cane and cigar and cigarette case, combined, G. B. Fowler, Car brake, J. C. Larkin, Car brake and starter, D. Goff, Car coupling, W. J. Evans, Car coupling, J. A. Fouts, Car coupling, N. Muslar, Car coupling, L. & D. Rosenthal, Car coupling, U. N. Strickler, Car coupling, S. L. Stuver, Car coupling, J. Wilhelm, Car, dump, L. E. Truesdell, Car motor, street, A. W. Getchell, Car starter, J. R. Tracy, Car, staking, F. G. Kent, Cars, braking mechanism for railway, J. E. Loughridge, Cars, sand box for street, C. Clark, Carriage, folding baby, C. Haller, Carrier, See Trace carrier, Cartridge box, J. W. Frazier, Cashiers' windows, self-closing gate for, W. B. Cannon, Casting tubes, revolving and tilting mould for, G. Adams, Cereals, etc., machine for reducing, V. Ryerson, Chenille, F. Landenberger, Chimneys, means for preventing smoke from, P. Orville, Fils, Chuck, F. W. Taylor, Churn, M. V. Ensley, Cigar fillers, mould for measuring and partially shaping, S. Henry, Cigar selling machine, automatic, C. O. Cole, Cigar tip cutter and match safe, combined, T. Dalton, Cigars, cigarettes, etc., vending apparatus for, C. H. Bingham, Clasp, See Pocketbook clasp. Spring clasp, Clay crusher and temperer, M. & S. Bierline, Clay disintegrator, C. & A. Potts, Cleaner, See Boiler tube cleaner, Clip for rope traces, C. H. Allen, Clock, isochronal, H. Conant, Clocks, controlling device for, W. S. Scales, Cloth cutting machine, E. Dredge, Cock for electro-pneumatic brake systems, stop, J. F. Carpenter, Cock, gauge, D. H. Roberts, Coffins, head rest for, C. Krauser, Coin package, G. L. Castner, Coloring matter, production of blue, E. Greppin, Colter, J. A. Kennedy, Comb, See Curry comb,