

RECENTLY PATENTED INVENTIONS.

Engineering Improvements.

WINDMILL.—E. H. BENEDICT, O'Neill, Neb. Means are provided in this case to revolve a perpendicular frame freely. It is propelled by sets of fans which automatically open and shut so as to keep a full front to the wind no matter from where it blows. The pressure of wind upon these fans propels the frame in one direction. Power is communicated by two cranks one at each end of the frame arranged so that one pulls and the other pushes to alternate a perpendicular beam. A lever and shifting fulcrum give the plunger to the pump a long stroke in high winds, and a short one in low winds.

COMPOUND STEAM-ENGINE.—F. CAHA, Wahoo, Neb. The inventor's object in view is the production of an improved construction designed to secure an increased and uniform expansion of a motive fluid, a greater impulse from the same volume and pressure of a fluid, a reduction in the back pressure of the high-pressure cylinder during the return stroke of the piston therein, a decreased pressure on the steam-inlet valve, and the employment of short direct steam-passages to the working cylinders.

Of Interest to Farmers.

WIRE-STRETCHER.—J. E. HOWELL, Spearfish, S. D. Mr. Howell's improvement relates to that class of wire-stretchers employing a lever-and-ratchet mechanism to exert the necessary tension on the wire. The invention provides a means whereby considerable power will be effective to stretch the wire, while at the same time the operations of the lever-and-ratchet mechanism may be performed rapidly, the whole being arranged in a novel and convenient manner.

HEATER AND STEAM-GENERATOR.—O. R. RAND, JR., Smithfield, N. C. The design in this case is to provide a heater and steam-generator of improved construction by means of which the necessary degree of heat or moisture may be maintained in the tobacco barn or pack-house during or after the curing of the tobacco to preserve the proper condition of the atmosphere as required by the tobacco at different stages.

WIRE FENCE.—B. B. WOOD, Helena, Mont. By certain novel constructions and combinations of parts the inventor secures a tie of the wires at crossings which will involve no exposed ends of the tie-wire and in which the tie-wire will be so made that when applied to a fence and properly handled it will form a practically continuous rigid tie around the joint with no exposed ends and will tend to bend the wires at the crossings equally.

Machines and Mechanical Devices.

RIMMING-MACHINE.—G. A. ENSIGN, Defiance, Ohio. This invention relates to wood-working machinery, and its object is to provide a new and improved rimming-machine, more especially designed for automatically driving or pushing wheel-rim sections onto the tenons of the spokes for cutting off the surplus portions of a rim-section to insure proper abutment of the ends of the rim-sections.

DRAG-SAW FRAME.—E. E. REDFIELD, Grants Pass, Ore. In the present patent the invention relates to a frame adapted to be engaged with and sustained on a log or other timber and to carry an engine and drag-saw in position for operation to saw the log. The saw and engine may be of any form, but concerning the engine the inventor prefers to employ the apparatus disclosed in a former patent granted to him for an improvement in engines.

Miscellaneous.

SWIMMING-GLOVE.—E. G. VANS AGNEW, Kissimmee, Fla. This inventor provides a glove for use in swimming, having a front portion and a back portion constructed to provide a double web portion between the compartments for the fingers and thumb and whose edge is reinforced to give rigidity at such point and which has a suitable outlet in its palm portion for the escape of any water that may get into the palm of the hand.

TACKLE-BLOCK.—T. E. MADDUX, Goldbar, Wash. The object claimed by the inventor is to provide a tackle-block with details of construction that adapt it for the free reception of a tackle rope at any point between the ends of the latter, to afford a block which permits the sheave to be readily removed, to provide a removable pintle-bolt for the support of the sheave, and to adapt the bolt to hold one of the hinged side walls of the shell of the block in closed adjustment, but permit its convenient release.

GAS-BURNER.—B. COLUMBUS, New York, N. Y. There is provision for a gas-burner in this improvement, which is simple and durable in construction and arranged to insure a perfect mixture of the air and gas, to allow of regulating the amount of gas to the minutest degree, and to permit of maintaining a pilot-flame of a mixture of air and gas whenever the valve-plug is turned into a closed position.

QUICKSILVER-FEED FOR AMALGAMATORS.—J. W. SWEARINGEN, Gaston, Cal. As quicksilver cannot be conveniently and certainly fed by any ordinary feeding device, this inventor has contrived a special form of feeding devices suited to the physical qualities of

quicksilver and to the needs of the amalgamators, whereby it is automatically fed in regulatable quantities and at close and proper intervals, thereby making a great saving in gold and silver and in the millman's time.

NOTE.—Copies of any of these patents will be furnished by Munn & Co. for ten cents each. Please state the name of the patentee, title of the invention, and date of this paper.

Business and Personal Wants.

READ THIS COLUMN CAREFULLY.—You will find inquiries for certain classes of articles numbered in consecutive order. If you manufacture these goods write us at once and we will send you the name and address of the party desiring the information. In every case it is necessary to give the number of the inquiry.

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Inquiry No. 4433.—For the address of the manufacturers of the packing box typewriter.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foot of East 138th Street, New York.

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Inquiry No. 4435.—For makers of machinery for manufacturing manila rope and cordage.

Matthews Torpedo Launches. Matthews & Co., Bascom, Ohio, U. S. A. Builders of high grade power boats.

Inquiry No. 4436.—For manufacturers of yeast mixing machines.

Manufacturers of patent articles, dies, metal stamping, screw machine work, hardware specialties, machinery and tools. Quadriga Manufacturing Company, 18 South Canal Street, Chicago.

Inquiry No. 4437.—For a machine for making artificial stone of cement.

WANTED.—Patent Office draughtsmen; only thoroughly experienced men need apply. Must show specimens of patent drawings. Munn & Co., SCIENTIFIC AMERICAN office, 361 Broadway, New York.

Inquiry No. 4438.—For manufacturers of fiber or paper maché that can be molded.

WANTED.—In large manufactory representing many trades, in a large city of the West, superintendent of technical education and of experience in handling men. Address, with full particulars, Mechanic, Box 773, New York City.

Inquiry No. 4439.—For the address of the manufacturer of the patented skirt supporter, called the "Little Gem."

Patent No. 732,675. Improvement on fork for sale or on royalty. M. K. Kelter, No. 507 South Market St., Wilmington, Delaware.

Inquiry No. 4440.—For manufacturers of machines, outfits, etc., for making gravel ready-roofing.

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NEW BOOKS, ETC.

GAERUNGS-ESSIG. Von Paul Hassack. With 75 illustrations. Vienna: A. Hartleben. 1903. Crown 8vo. Pp. 408. Price, \$3.

Mr. Hassack is a well-known New York vinegar expert who has in this work embodied his experiences in an industry with which he is thoroughly familiar. His first chapter gives a general idea of what a vinegar factory should be. In his second chapter he discusses the generator. How the generator should be operated is made the subject of the third chapter. In the fourth chapter, which is chemical in its nature, the methods of testing and controlling the production are treated. The difficulties which must be encountered and which must be overcome are discussed in the fifth chapter. "Ferments and Nutriment" is the title of the sixth chapter. In the seventh chapter the filtration of vinegar is described. Wine vinegar and new generator types are respectively the subjects of the eighth and ninth chapters. An admirable index completes the work.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending

July 21, 1903.

AND EACH BEARING THAT DATE. [See note at end of list about copies of these patents.]

Table listing inventions with patent numbers and names of inventors. Includes items like Acetyl cellulose, Adding and recording machine, Adjustable wrench, Air compressor, Alkali chlorides, etc.

Table listing inventions with patent numbers and names of inventors. Includes items like Cigar cutter, pipe tamper and cleaner, Circuit breaker, return current, Clamp for suspending books, etc.

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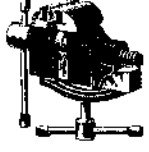
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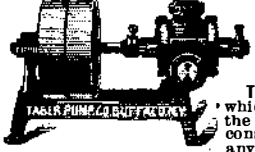
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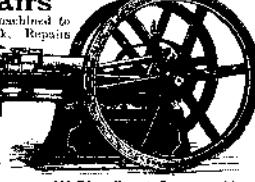
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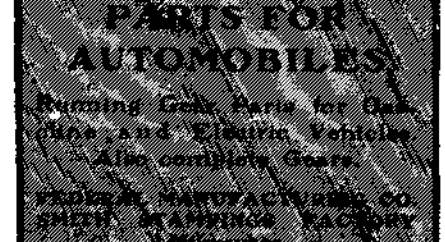
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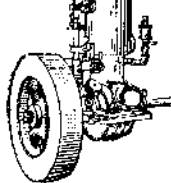


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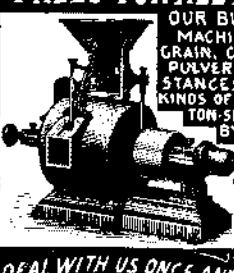
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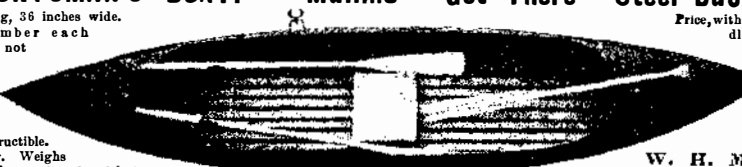
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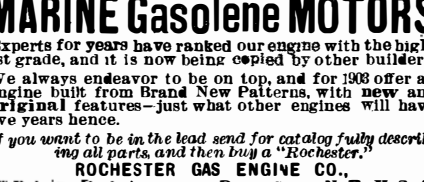


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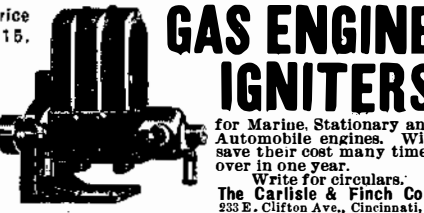


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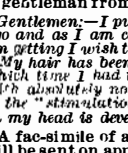
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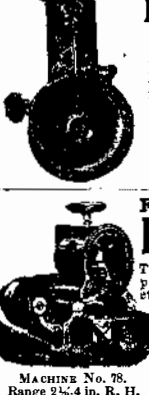
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