

RECENTLY PATENTED INVENTIONS.

Agricultural Implements.

COTTON-CHOPPER.—A. D. EZZELL, Clinton, N. C. By a novel construction the machine first mashes down the portion of the row it is desired to chop and then cuts the mashed portions down. A harrow is provided at the rear of the chopper to harrow the cotton after it is chopped.

GANG-PLOW.—H. BRYAN, Modesto, Cal. The problem in gang plows has been to provide a draft attachment which could be securely locked in any adjustment and yet possess due strength and durability without too great weight of parts. Mr. Bryan's new plow is especially designed to meet this problem. The attachments are few in number and of inconsiderable weight, while the adjustment may be made with facility and the lock is perfectly secure.

GRAIN OR SEED SEPARATING DEVICE.—J. E. HILL and W. W. BROWER, Meservey, Iowa. The separating device is so constructed that a separating cylinder is employed in connection with spring risers secured to a vibrating or agitating grain table, the cylinder being of such character that it will not clog and will cause the straw to move freely to the rear end of the machine, while through the combined action of the cylinder and risers the grain is quickly and effectually shaken from the straw.

Miscellaneous Inventions.

GAS LIGHTER.—R. E. JÄHNIG, New York, N. Y. The gas lighter proper consists of a number of wires which are twisted together at one end and secured to a socket, the outer ends being laid in the notches of a comb-shaped cross member. At the inner end the wires carry a body of finely divided platinum. An aperture hood protects the wires. When the gas is turned on the finely divided platinum absorbs the gas so energetically as to become itself incandescent, thus igniting the gas.

APPARATUS FOR PRESERVING FRUITS OR VEGETABLES.—KATHRYN M. KEISER, Walshville, Ill. The improved apparatus provides for the reception of closed vessels adapted to contain fruits or vegetables. These vessels are exposed to the heating action of steam which is supplied from a steam tank in a manner to minimize loss or waste. The escaping steam is retained in a condenser and returns to the tank.

SETTING INSTRUMENT.—M. CHAMBERLAIN, Bartley, N. J. The object of the invention is to provide a means for setting the cutting edge of a square-nosed tool level in a planer or like machine, to insure accurate cutting of a key seat, and to allow of setting the instrument quickly for cutting the seat to any desired width.

MANUFACTURE OF HANDLED GLASS-WARE.—H. BASTOW, Steubenville, Ohio. The invention provides means for casting handles directly upon the bowl or body of the glassware to insure homogeneity between the body and the handle. The body and handle are molded from the same mass, the handle being integral with the body at opposite points thereof and extending approximately parallel with the upper edge. The glassware is then reheated and the handle bent to extend transversely to the body in a vertical plane.

HOISTING GEAR.—F. V. NIELSEN, San Francisco, Cal. By using this gear the cargo can be readily lifted from the hatch and delivered clear of the ship's side. In many large vessels the distance from the mast to the center of the hatch is considerably less than the distance to the ship's side, so a guide for the lifting-rope, which will direct such rope to the center of the hatch, will not direct the rope to the side of the ship to deliver the cargo from the hatch. This invention provides guide devices to the lift-rope whereby the same may be adjusted relatively to the mast, so that it will operate centrally over the hatch and will also clear the ship's side.

PIPE-CLEANER.—J. L. STEITZ, Chicago, Ill. The cleaner is designed to thoroughly cleanse the pipe or draft-tube after a barrel or keg is empty, to keep the pipe as sweet as possible. A self-closing supply valve, which is connected with the supply of cleansing liquid under pressure, is arranged to receive the tapping-tube which, when forced downward, opens the valve and permits the cleansing liquid to flow through the tapping-tube and the parts connected therewith.

PLUMBING AND TANNING PROCESS.—S. SAXE, New York, N. Y. The process consists in subjecting the hides first to weak and then to progressively stronger solutions, containing both a commercial tanning extract and an extract of natural bark, and also containing a commercial lactic acid.

COMPOSITION OF MATTER.—F. JONES and C. L. PENNELL, Massillon, Ohio. These inventors have invented a composition which consisted preferably of 25 per cent of peat or vegetable soil, 50 per cent of clay, 20 per cent of straw, 1 per cent of tar, 1 per cent of soda ash, and 3 per cent of lime. This mixture is applied to a core bar and dried in an oven, when it may be used as a core for casting pipes and other tubular articles.

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Aerial capitalist, interested in the solution of the aerial navigation problem, communicate with J. V. Janin, Seattle, Wash. Inquiry No. 2410.—For dealers in electric elevators.

Factory room with power, steam, elevator, etc.; good light, also storage room. Chas. F. Kilburn, 84, 86, 88 Mechanic Street, Newark, N. J. Inquiry No. 2411.—For a burner for brazing with crude oil and air pressure.

FOR SALE.—To party direct, for cash, patent 608,925 on folding umbrellas. No selling agencies need answer. M. R. Studams, Bridgeton, N. J. Inquiry No. 2412.—For manufacturers of cheap motors.

FOR SALE.—Patent for "Vaporizer." T is O. K. and reasonable every way. G. F. Dyer, Manchester, Mass., Inventor and Patentee. Inquiry No. 2413.—For dealers in electric novelties.

Manufacturers of patent articles, dies, stamping tools, light machinery. Quadriga Manufacturing Company, 18 South Canal Street, Chicago. Inquiry No. 2414.—For candy making machinery, such as lozenges, etc.

Designers and builders of automatic and special machines of all kinds. Inventions perfected. The W. A. Wilson Machine Company, Rochester, N. Y. Inquiry No. 2415.—For the manufacturers of an attachment for spoons to avoid slipping into dishes, also for the makers of a spoon with a perforated bowl for mixing batter, etc.

ELECTRIC DRY BATTERY.—Manufacturers submit free samples with casting qualities. Quote prices for quantities. Darling Motor Company, Chicora, Pa. Inquiry No. 2416.—For manufacturers of coffee roasters.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company, Foot of East 13th Street, New York. Inquiry No. 2417.—For the address of Morton Evans & Co., makers of gasoline traction gear.

IDEAS DEVELOPED.—Designing, draughting machine work for inventors and others. Charles E. Hadley, 584 Hudson Street, New York. Inquiry No. 2418.—For makers of gasoline fuel marine steam engines and boilers 1 to 4 h. p.

Wanted.—Revolutionary Documents, Autograph Letters, Journals, Prints, Washington Portraits, Early American Illustrated Magazines. Correspondence Solicited. Address C. A. M. Box 773, New York. Inquiry No. 2419.—For machinery for making a feed brick under pressure.

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Inquiry No. 2428.—For manufacturers of small refrigerating plants suitable for residences. Inquiry No. 2429.—For a gas plant for from 25 to 50 bunsen burners, also wire and piping.

Inquiry No. 2430.—For a dynamo for 100 to 150 incandescent lights; also an engine for pumping water and running dynamo.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending April 8, 1902, AND EACH BEARING THAT DATE.

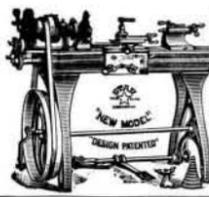
[See note at end of list about copies of these patents.]

Table listing inventions with patent numbers and names of inventors. Includes items like Abdominal supports, Accumulators, Advertising device, Air-brake, Air compressor, etc.

Table listing inventions with patent numbers and names of inventors. Includes items like Drying apparatus, Edge setting machine, Electric circuit protector, etc.

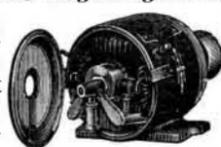
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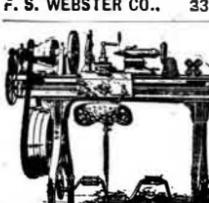


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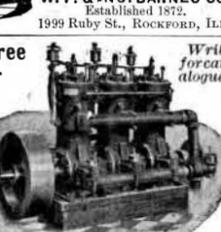


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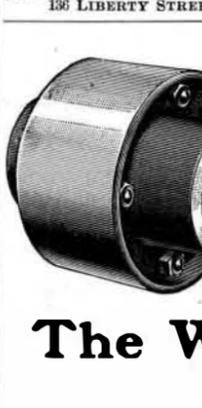


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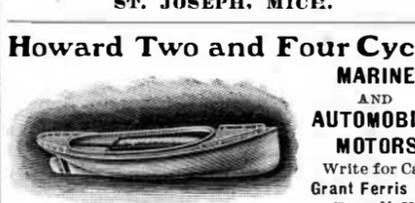
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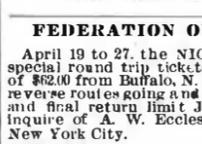
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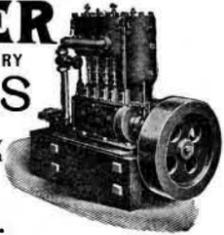
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(8584) G. C. T. asks how to solder a piece of carbon and a piece of brass together. I think the carbon has to be lined in some way. A. Copper the carbon with a battery, then attach the brass with soft solder.

(8585) J. F. C. asks: 1. What advantages has the double pole receiver over the single pole (as they are called) electrically? Why would not one coil, the same resistance of the two, placed on one pole of a permanent horseshoe magnet (traversed by an alternating current) affect the magnet flux as much as the two coils of half the resistance, one placed on each pole? A. A horseshoe magnet is always stronger than a bar magnet of the same number of turns of wire upon its poles, and so a double pole magnet in a telephone will act more powerfully than a single pole of a straight magnet. 2. Is pure soft iron free from resistance to magnetic flux? What is the resistance of the air to magnetic flux as compared to pure Norway iron? A. The number of lines of force which will pass through iron as compared with air under the same degree of magnetization varies with the degree of magnetization. It may be as much as 5,000 times as many, and it may be only a few times as many when saturation is nearly reached. See the table of permeability in electrical works such as Foster's "Pocket Book," price \$5 by mail. 3. Which is correct to say, that a magnet attracts a piece of soft iron because it lowers the resistance of the magnetic flux, or that an opposite magnet is induced in its mass by induction? A. When a piece of iron approaches a magnet it both becomes a magnet and furnishes an easier path for the lines of force than the air. 4. Is the greatest force of attraction exerted in a magnet in attracting opposite poles of itself? A. We do not know whether a magnet works most in attracting its own poles or not. 5. What electrical disturbance is made by the action of the wind on telephone wires that a receiver takes it up? A. The noise to which you refer in a telephone is produced by vibrations caused by induction of adjacent wires and not by the friction of the wind. The wind produces no electrical disturbances.

(8586) M. W. and C. P. write: We would like to know, through the columns of your valuable paper, how a boiler of 15 horse power, that is only in use about three months during a year, should be left. Should it be filled with water or empty, and should the smokestack be protected. A. A boiler to be laid up for a season should be thoroughly cleaned on the inside, filled with water with steam on, so as to be full of hot water that has been boiled, up to the safety valve. The flues and fire surface of the boiler should then be cleaned; ashes and soot removed from every part where such lodge. Then close fire doors, ash pit, and put a cap on the smokestack. With this treatment laid-up boilers do not rust inside or outside. It is the moist air drawn through a laid-up boiler that does damage by rust.

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