

RECENTLY PATENTED INVENTIONS.
Mechanical Devices.

WOOD-TURNING MACHINE.—L. D. BULLOCK, Pompanoosuc, Vt. This invention relates to improvements in machines for turning wood, the purpose being to provide a machine of simple construction by means of which spiral moldings or so-called "rope" and "cane" formed dowels may be rapidly produced.

BUTTON-TURNING MACHINE.—H. A. BERGER, Brooklyn, N. Y. A machine for turning mother-of-pearl buttons and the like is provided by this invention. It operates automatically to pass the button-blanks singly from a chute to a chuck, then the turning-tool is advanced to turn the face of the button-blank while the chuck revolves, after which the tool recedes and is sharpened, and finally the turned button is ejected from the chuck and replaced by a button blank.

WABBLE-SAW.—C. SEYMOUR, Defiance, Ohio. In bringing this device to perfection the inventor has provided a wabble-saw arranged to counteract the strain of the saw-blades on the arbor, to prevent undue vibration of the arbor, and to insure easy running of the saw and the formation of a smooth cut.

INTESTINE-CLEANER.—F. MATHEYER, New York, N. Y. The butchering industry gains an improvement in this intestine-cleaner which is very effective in operation, and arranged to thoroughly and quickly wash and lengthwise split open the intestines without requiring great skill of the operator.

CENTRIFUGAL SEPARATOR.—R. A. LUCAS and O. JEPPESEN, Hilo, Hawaii. By employing centrifugal action for separating the impurities from sugar-cane juice, these inventors have produced a machine by means of which the impurities may be removed much more rapidly and economically than is possible with settling-tanks usually employed.

FALL-ROPE CARRIER AND OPERATING DEVICE THEREFOR.—A. LAMBERT and J. G. DELANEY, Newark, N. J. The inventors secure in this case, an improvement on fall-rope carriers of cable ways in which the fall-rope extends at both sides of the carriage. In the cableway it is desirable that the fall-rope have support at both sides of the carriage, and for this purpose a novel arrangement of carriers and a button-rope are provided therefor.

GLASS-BLOWING MACHINE.—J. SCHIES, Anderson, Ind. The main object of this improvement in apparatus for use in the manufacture of glass, is to connect the table supporting the pressing devices with the one sustaining the blowing devices, so the same may move in unison, and to provide power mechanism to operate the tables by power instead of by hand.

Railway Improvements.

RAILROAD-TIE.—F. H. ALFRED and P. CHIPMAN, Saginaw, Mich. This tie provides a substitute for wooden and all metallic ties now in use. The invention consists in combining concrete with metal to produce a tie in such manner that the tensile strains on it are mostly borne by the metal, while the compressive strains are taken up by the concrete to secure the greatest strength.

RAILROAD CROSS-TIE.—F. W. DUNNELL, Springfield, Mass. The aim in the present invention is to provide a cross-tie composed mainly of leather and stiffened by a metal core-bar. By provision of a plate-metal core-bar in combination with a composite tie-body a light, strong, slightly-resilient tie is produced, which, if made of waste leather for the tie-body will be inexpensive.

Miscellaneous.

HARP.—W. MOERSCHER, Belvidere, N. J. This instrument is similar to and played like the chromatic harp. The invention embodies a string-supporting frame and a co-operative arrangement therewith of a sounding-board, a sounding-damper, and a foot-controlled damper for regulating the tone effect. It is easily handled and will produce tone and resonance, similar to the piano.

ABDOMINAL SUPPORTER.—EVA M. TEMPLE, Portland, Ore. In producing this improvement the inventor secures a sanitary, simple, efficient, and easily adjusted bandage that can be worn at all times with very little discomfort. It will not interfere with or change the figure, it does not come in contact with the waist-line, and will not push up over the hips.

SAFETY-POCKET.—B. A. JAMES, Evansville, Ind. Mr. James has invented a wearing-apparel pocket. It consists of a peculiar safety-pocket more particularly intended for drawers, but which is adapted for and useful in connection with any article of clothing in which a pocket may be needed.

TOBACCO-PIPE.—A. W. THORNTON, McKeesport, Penn. In obtaining this improvement in tobacco-pipes the inventor supplies a simple and novel means for condensing or separating the moisture and nicotine from the smoke, thus preventing them from entering the smoker's mouth. The smoke will be practically cool and clean.

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.

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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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"U. S." Metal Polish. Indianapolis. Samples free.

Inquiry No. 3989.—For manufacturers of machinery used in a paper box factory.

Coin-operated machines. Willard, 284 Clarkson St., Brooklyn.

Inquiry No. 3990.—For makers of side rod galleries for gasoline gas, alcohol torches and galvanized iron expansion tanks.

Blowers and exhausters. Exeter Machine Works, Exeter, N. H.

Inquiry No. 3991.—For manufacturers of spring clamps for valises and sample cases.

Handle & Spoke Mchly. Ober Mfg. Co., 10 Bell St., Chagrin Falls, O.

Inquiry No. 3992.—For blue prints of one horse power stationary engines.

Sawmill machinery and outfit manufactured by the Lane Mfg. Co. Box 13, Montpelier, Vt.

Inquiry No. 3993.—For makers of underwear machinery.

PATENT FOR SALE.—A. L. & O. Sovelius' Twine Holder. Price, \$6,000. Hancock, Mich.

Inquiry No. 3994.—For makers of graduating machines for graduating hardened steel scales.

FOR SALE.—60 h. p. Otto gas engine, the latest type, practically new. Colborne Mfg. Co., Chicago.

Inquiry No. 3995.—For the address of the Eclipse Flue Brush Mfg. Co.

Let me sell your patent. I have buyers waiting. Charles A. Scott, Granite Building, Rochester, N. Y.

Inquiry No. 3996.—For the address of the manufacturers of the Clayton disinfecting apparatus.

Automobiles built to drawings and special work done promptly. The Garvin Machine Co., 149 Varick, cor. Spring Streets, New York.

Inquiry No. 3997.—For manufacturers of boats of about 50 feet over all fitted with steam turbines.

Manufacturers of patent articles, dies, stamping tools, light machinery. Quadriga Manufacturing Company, 18 South Canal Street, Chicago.

Inquiry No. 3998.—For makers of seamless steel tubing of different sizes.

Crude oil burners for heating and cooking. Simple, efficient and cheap. Fully guaranteed. C. F. Jenkins Co., 1103 Harvard Street, Washington, D. C.

Inquiry No. 3999.—For manufacturers of flexible steel tubing.

The largest manufacturer in the world of merry-go-rounds, shooting galleries and hand organs. For prices and terms write to C. W. Parker, Abilene, Kan.

Inquiry No. 4000.—For manufacturers of balloons and parachutes.

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.

Inquiry No. 4001.—For makers of tin foil collapsible tubes.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$5. Munn & Co., publishers, 361 Broadway, N. Y.

Inquiry No. 4002.—For makers of umbrella covers and handles for repair shop.

Parties wanted to manufacture and market latest improved copying press, on royalty basis. Child can exert a pressure of tons. Principle adaptable to presses of all kinds. H. W. Haff, Chappaqua, N. Y.

Inquiry No. 4003.—For a machine for paring and coring pineapples.

Manufacturers wanted to introduce on royalty a metallic strap grip for buckle attachment adapted for all light straps. Inventor will pay cost of all necessary dies. Address Snaffle, Box 773, New York.

Inquiry No. 4004.—For makers of water levels for leveling up machinery or other objects by a column of water.

Wanted—Revolutionary Documents, Autograph Letters, Journals, Prints, Washington Portraits, Early American Illustrated Magazines, Early Patents signed by Presidents of the United States. Valentine's Manual of the early 40's. Correspondence solicited. Address C. A. M., Box 773, New York.

Inquiry No. 4005.—For makers of drying machines for use in manufacturing paper.

Will estimate on General Machine Work or Mfr. Pat. Articles on Royalty. Address Greenfield Steam Engine Works, East Newark, N. J.

Inquiry No. 4006.—For a pump for extracting mud from the bottom of streams.

WANTED.—Superintendent on heavy machinery. Shop located in large eastern seaboard city, and has up-to-date facilities, employing 500 hands. Work varies widely. Applicant must have broad experience, executive and mechanical ability and satisfactory references. To the right man permanent employment, and liberal salary. Address in confidence giving age, experience and salary. James Brady, Room J, 20th Floor, 22 Broadway, N. Y.

Inquiry No. 4007.—For machinery for extracting turpentine from refuse of yellow pine saw mills, such as sawdust, slabs, etc.

AN INTERNATIONAL EXHIBITION of machinery and implements for Dairy Industries is to be held at Palermo, in the city of Buenos Aires, Argentine Republic, from the 15th to the 23d of September, 1903, under the management of the Argentine Rural Society. American manufacturers are invited to concur with their exhibits. For further information and programmes please address R. A. de Toledo, Argentine Consul General, 124 Produce Exchange, N. Y.

Inquiry No. 4008.—For manufacturers of building stone dressing machinery.

Inquiry No. 4009.—For skimming pens for cream separators.

Inquiry No. 4010.—For manufacturers of stove irons, also for parties engaged in stamping in sheet metal.

Inquiry No. 4011.—For machines for digging ditches and trenches 4 feet deep and not more than 18 inches in width.

Inquiry No. 4012.—For the manufacturers of the Twitchell Acidimeter for determining the acidity of wines and grape juice.

Inquiry No. 4013.—For makers of rough drop forgings used in the polishing and plating of dental forces.

Inquiry No. 4014.—For makers of machinery for knitting mills, woolen mills, pearl buttons, etc.

Inquiry No. 4015.—For manufacturers of stable fittings.

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INDEX OF INVENTIONS

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

March 24, 1903,

AND EACH BEARING THAT DATE.

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

Combination heater, Mansfield & Hayes.	723,538
Commutators for dynamos or motors, device for filing, J. B. Macintosh.	723,399
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Concrete dumb machine, rotary, C. R. Cook.	723,243
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Electric furnace, C. S. Bradley. .	