

RECENTLY PATENTED INVENTIONS.

Engineering Improvements.

FEEDING SCALE-PREVENTIVES INTO BOILERS.—GEORGE NEUBACKER, Manhattan, New York city. The apparatus comprises an injector connected at the inlet with the discharge of a boiler feed-pump and at the outlet with the suction of the boiler feed-pump; and a container for the scale-preventive, discharging into the injector. By means of this apparatus the engineer can force more or less of the preventive into the boiler, according to the condition of the feed-water.

Mechanical Devices.

CAR-BRAKE.—JOHN H. DIERCKS, Minneapolis, Minn. One end of a brake-band on one of the wheel-hubs is connected with a lever, and the other end of the band is connected with a second lever. A rock-shaft has operative connection with the first lever; and a brake-rod has connection with the rock-shaft. Band-brakes, co-acting with the other wheels, have operative connection with the lever and the rock-shaft. The brake is set upon one wheel by manual exertion, and this brake thus set operates all the others. Upon releasing the brake-rod the several brake-bands will be relieved of pressure.

CLEARING DEVICE FOR LIFE-BOATS.—ERICK WOLFGANG, London, England. This check-releasing device for life-boats comprises an overhead support for the life-boat, normally inactive, and a keel-support, normally supporting the boat. This keel-support is movable under the control of the operator, to shift the keel-support from under the life-boat and allow the latter to hang from the overhead support. The keel-support comprises a number of center keel-blocks and side keel-blocks movable independently. One side block and the bottom keel-block are arranged to move vertically, and the other side keel-block is hinged to swing transversely relatively to the life-boat. A single operator can release the boat in case of an emergency.

FIRE-ESCAPE.—FRANCIS J. HUGH, Manhattan, New York city. Mr. Hugh has already received a patent for a fire-escape in which a cable unwinds from a pulley controlled by a speed-checking governor. The present invention is an improvement upon this device, and relates primarily to a governor. The principal object of the invention is to utilize a wire rope or cable in such a manner that a positive rotation of the pulley over which the wire passes, and a consequent actuating of the governor co-acting with that pulley, takes place. The ordinary ropes frequently used in fire-escapes are objectionable, owing to the danger of being burnt. In order that the cable may not slip, initial friction devices and a V-shaped groove in the pulley are provided. The heavier the load on the cable, the less danger will there be of a cable's slipping, so that the governor is caused to operate properly and check the speed of the load.

Miscellaneous Inventions.

RADIATOR.—JOHN F. THOMPSON, Manhattan, New York city. The principal object of this invention is to provide a radiator with an auxiliary water-heating device which may be used when comparatively little heat is required and when the radiator is cut off from the main steam or heating boiler. The auxiliary heat supply is automatically controlled.

PAPER BOX.—JOSEPH T. CRAW, Jersey City, N. J. In order to seal the ends of sugar-boxes siftlessly, Mr. Craw provides his box with a snugly fitting interior sealing-strip having adhesive material upon its outer face and a sealing-flap portion of a size to fold over the outside of the sealing-strip and to cover the strip entirely so that its outer surface will be entirely invisible. Thus the flat portion of the box is cemented to the outer face of the strip; the ends of the strip are cemented to the body of the box, and the adhesive material is forced into the spaces between the edges of the flap portion and the sides of the box. Thus the flap portion is held in a folded position, and, together with the strip, closes the box to prevent sifting.

HOP-DRYING BOX.—ADOLF WOLF, Silverton, Ore. The inventor has provided a construction by which a hop-drying box can be readily turned upside down without discharging the contents, the top being left open for a thorough evaporation and escape of steam. The box has a removable top and a removable bottom, constructed and secured in a novel manner to attain the desired end.

FISH-TRAP.—DANIEL H. WELCH and JOB H. LAMLEY, Astoria, Ore. The object of the invention is to facilitate the capture of fish by traps. To this end the inventors employ a movable lead with novel devices for securing one end thereof. Between this movable lead and the stationary or main lead of the trap the fish are impounded, so that they are forced along the main or stationary lead into the pot or crib of the trap.

DEVICE FOR DISINFECTING TRANSMITTERS AND RECEIVERS OF TELEPHONES.—CYRUS F. AXTELL, Manhattan, New York city. The necessity for the application of some efficient and simple means of disinfecting the receivers and transmitters of telephones has long been recognized. The present invention provides means for accomplishing this much-desired end. The disinfecting agent employed by the inventor is ozone or ozonized air, the

antiseptic properties of which are well known. The ozone necessary for the purpose is produced through the agency of a current of electricity generated by the "magneto" forming a part of all ordinary telephones, although the necessary current may be obtained from other sources.

BALE-TIE.—EDWARD T. WARN, Sterling, Ill. A wire has its ends formed with loops, one of which is bent forward and upward, and the other of which is bent forward and downward. The short ends of the loops are normally in contact with the main portion of the wire, but adapted to spring away therefrom. The construction is so simple and durable that the tie can be easily and cheaply manufactured. The ends of the tie safely interlock to hold the baled material in place.

TOP FOR POWDER, COLOGNE OR SAUCE BOTTLES.—JACOB A. MOLLER, JR., Brooklyn, New York city. In its upper portion this top has an opening in line with which is a washer. Below this upper washer is a lower washer having a registering opening. Through the opening in the top and between the two washers a slide has endwise movement. The slide has an opening adapted to register with the openings in the washers and in the top. The washers, between which the slide has movement, tend to clean the slide from any substance that may adhere. By removing the top, the various parts may be conveniently cleaned. By means of the top, the discharge of the material contained in the bottle can be readily regulated.

SORTING DEVICE.—JACOB PFEFFER, Kaiserslautern, Bavaria, Germany. The invention provides a machine for separating flour from dust and from semolina. A series of superposed rotary disks or spreaders of a diameter increasing downwardly from disk to disk are employed, so that the material is subjected to a centrifugal action of progressively-increasing strength. A disk below the topmost disk is apertured centrally. Each of the disks flares downwardly to throw the material scattered by the spreaders upon the next spreader below. A ventilator forces an upward current of air through the apertured disk or disks and between the peripheries of the disks and their surrounding rings. An upwardly-flaring, annular deflector extends from the upper contracted edge of the uppermost ring.

BOLT AND NUT LOCK.—WILLIAM H. PARBEE, Antigo, and JAMES H. MORGAN, Rhineland, Wis. The bolt has a reduced portion and an elongated head. The nut has an inner thread. A threaded sleeve screws in the nut and has an elongated bore for the passage of the head, a reduced portion, and also an elongated recess at the outer end at an angle to the bore for engagement by the head, so that the sleeve is held from turning in the nut when the latter is turned.

PRACTICE-BALL.—FRANCIS OAKLEY, Newport, R. I. The inventor has devised a ball to be used by baseball players in practicing. Externally the ball is similar to the ordinary baseball. The ball, however, is provided with an elastic cord which may be attached to the wrist of the player, so that the ball, when thrown, will be returned to the hand.

ANVIL.—NELSON H. SNYDER, Newton, N. J. This anvil is especially adapted for horseshoers or blacksmiths, and is so made that all horseshoe work can be done without requiring the constant movement of the smith to and from the ends of the anvil. Extended bearing surfaces are provided flush with the upper face of the body of the anvil, which extended bearing surfaces are especially useful when working upon axles and when forming the toe and side clips of horseshoes.

TARGET.—WILLIAM G. SMITH, Glendale, Queens, New York city. Mr. Smith has invented a target representing pigeons in flight, which target can, therefore, be used to take the place of the live pigeons usually employed by sportsmen in trials of marksmanship. In order to give the trial the appearance of real bird-shooting, the target carries a cartridge which, when discharged, causes feathers to fly. The bird not only drops as in death, but the feathers fall as the bird falls.

WOVEN PILE FABRIC.—HOVCEP SARAFIAN, Titusville, Pa. The invention provides a pile fabric which has a fine appearance and excellent wearing qualities, and which can be readily woven without requiring highly skilled labor. Warp-threads and pile weft-threads comprise the fabric. Each of the weft-threads consists of a strip formed of fringe-threads, at the center of the length of which, binding-threads are interwoven. The strip is folded and the parts are secured together to form a strip with a woven back, from which all the fringe-threads extend in one direction.

SUSPENDING ATTACHMENT FOR MANTLES.—WARREN D. HANN, 132 Arch Street, Philadelphia, Pa. The means of suspending incandescent mantles of Welsbach lights have not prevented injury and destruction during transportation. To remedy the evil, a suspending attachment is described in this patent, which consists of an asbestos device made of such length and so attached to the ordinary rigid loop of the mantle and to the hook of the ordinary rigid wire or rod support as to be free to swing laterally in all directions and to allow corresponding movement of the top portion of the mantle.

TESTER FOR BLAST-CAVITIES.—WILLIAM GIBBONEY, JR., Bane, Va. Mr. Gibboney has invented a tester for ascertaining the size of the preliminary blast-cavity usually em-

ployed in blasting rocks for railroad and other construction, so that if not large enough it may be enlarged by additional cartridges of dynamite, or if already larger than desired, it may be sufficiently filled with powder to produce the proper lifting and dislodging effect on the rock without waste of powder. Thus the difficulties of enlarging the lower end of a drilled hole—"springing the hole," as it is usually called—are overcome.

CONVERTIBLE TUB.—MRS. N. F. HURDEL, Manhattan, New York city. The tub is so constructed that it can be used either as a bath-tub or as a laundry-tub. When the bath-tub is to be used as a laundry-tub, a partition is inserted which divides the tub into two compartments. By means of a pivoted spigot hot or cold water can be directed into either compartment. In order that the tub can be raised from the low position of a bath-tub to the raised position of a laundry-tub, or vice versa, a simple form of gearing is provided which can be easily operated by a small handwheel.

Designs.

BELT.—LOUIS SANBERS, Brooklyn, New York city. The upper central marginal portion of the belt is a concave line, gradually merging into convex lines extending to the edges of the belt. The ends of the belt incline from the top downward and outward, and the width of the belt at the ends is greater than at any other portion.

BOX FOR HYPODERMIC NEEDLES.—FAIRLEIGH S. DICKINSON, Bayonne, N. J. The design provides a tray body and a large bridge within the tray body. In the bridge are a series of elongated openings for the reception of the needles.

SKIRT-SUPPORTER.—WILHELMINA McW. LOWRIE, Buffalo, N. Y. The design shows a very simple and efficient skirt-supporter, comprising a triple-hooked head from which an apertured shank springs.

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.

NEW BOOKS, ETC.

THE PROCESS YEAR-BOOK FOR 1900. Edited by William Gamble. London: Penrose & Company, New York: Tennant & Ward, 1900. 8vo. Pp. 111. \$1.50.

Penrose's pictorial annual, of which the present is the sixth volume, is illustrated as usual with a most elaborate series of engravings and plates which show the wonderful possibilities of the half-tone, especially the three-color process. Some of the latter are not very successful. The literary contents are thoroughly up to the usual high standard. The interior views of some of the large German process establishments are very interesting.

TECHNOLOGISCHES LEXIKON. Handbuch fuer alle Industrien und Gewerbe. Uebersicht der gesammten Technologie der Jetztzeit, zum Gebrauche fuer Techniker, Chemiker, Gewerbetreibende, Kaufleute u. s. w. Unter Mitwirkung von Fachgenossen redigirt von Louis Edgar Andes. Illustrated. Parts 11 to 15. Vienna: A. Hartleben, 1900. Post octavo. Price per part 20 cents.

TASCHENBUCH DER DEUTSCHEN UND DER FREMDEN KRIEGSFLOTTEN, 1901. Herausgegeben von B. Weyer, Kapitänleutnant a. D. München: Verlag von J. F. Lehman, 1901. Illustrated. 12mo. Pp. 273. Price 75 cents.

Capt. Weyer has compiled a handbook which presents in the most concise form conceivable everything that is worth knowing about the sea power of the countries of the world. A careful examination of the book convinces us that its information is as trustworthy as that conveyed by any of the more pretentious naval annuals, with the additional merit of being much briefer. The paragraph on page 92, in which the possibilities of a war with the United States—for that, we take it, is the country referred to by the writer—growing out of commercial jealousy, is too preposterous to warrant insertion. Moreover, the argument might as readily be used by an American against Germany.

HANDBUCH DER INGENIEURWISSENSCHAFTEN. Dritter Band. Dritte vermehrte Auflage. Herausgegeben von L. Franzus, A. Frühling, H. Garbe, J. Schlichting, und Ed. Sonne. Dritte Abteilung. Erste Lieferung. Leipzig: Wilhelm Engelmann, 1900. Large octavo. Pp. 352. Price, paper, \$5.

The third part of the third volume of this admirable handbook is devoted to exhaustive dissertations on the ocean and navigation; the effect of the sea on coasts; shore structures; the effect of the sea on estuaries, and seaharbors. The text is illustrated by many clear engravings. In the back of the book will be found fourteen handsome plates.

DER HAUSFREUND. Illustrierter Familien-Kalender fuer das Jahr 1901. Buffalo: Published by the Volksfreund.

SURVIVALS. A Book of Poems. By Lewis V. F. Randolph. Embellished by Bryson Burroughs. New York and London: G. P. Putnam's Sons, 1900.

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 your name and address to the party desiring the information. In every case it is necessary to give the number of the inquiry. MUNN & CO.

Marine Iron Works, Chicago. Catalogue free.

Inquiry No. 26.—Wanted the name and address of a manufacturer of a continuous feed machine that will press most of the moisture out of a substance containing about 90 per cent. The amount of wet matter to be pressed is about 1,000 tons daily.

For hoisting engines. J. S. Mundy, Newark, N. J.

Inquiry No. 27.—Wanted the name and address of a manufacturer of retorts, machinery and tools for the manufacture of wood alcohol and its by-products, such as gray acetate of lime, etc.

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

Inquiry No. 28.—Wanted the name and address of a manufacturer willing to undertake the manufacture of a small metal household utensil consisting of three parts, viz., steel blade, a cast metal handle and a thumb-screw, all nicked, to be made in quantities.

WATER WHEELS. Alcott & Co., Mt. Holly, N. J.

Inquiry No. 29.—Wanted the name and address of a manufacturer of small porcelain-lined water tanks for refrigerators.

Yankee Notions. Waterbury Button Co., Waterbury, Ct.

Inquiry No. 30.—Wanted the name and address of a manufacturer of a die or stamp such as is used in cutting out men's gloves.

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

Inquiry No. 31.—Wanted the name and address of a manufacturer of steel pressed collars for horses.

Rigs that Run. Hydrocarbon System. Write St. Louis Motor Carriage Co., St. Louis, Mo.

Inquiry No. 32.—Wanted the name and address of a place where a manufacturer may examine, and if so desired, purchase patents and novelties which can be made in completely equipped brass, woodworking and leatherworking shops.

Special and Automatic Machines built to drawings on contract. The Garvin Machine Co., 141 Varick St., N. Y.

Inquiry No. 33.—Wanted the name and address of a manufacturer of paper box and paper bag machinery.

Design and Construction of Oil Engines, new book by Goldingham, by mail \$2. Spon & Chamberlain, 12 Cortlandt St., New York, U. S. A.

Inquiry No. 34.—Wanted the name and address of a manufacturer of ice harvesting machinery.

Hand Book of Corliss Engines: 224 pages, 68 illustrations, cloth binding. By mail \$1.00. Catalogue free. Amer. Ind. Pub. Co., Bridgeport, Ct.

Inquiry No. 35.—Wanted the name and address of a manufacturer of water stills without worms.

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. 36.—Wanted the name and address of a manufacturer of a portable, centrifugal gold separator.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$4. Munn & Co., publishers, 361 Broadway, N. Y.

Inquiry No. 37.—Wanted the name and address of the manufacturer of a Serpillet meter of 3 or 4 horse power for launches.

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. 38.—Wanted the name and address of a manufacturer of machine for painting flat surfaces, mouldings, etc., that require painting on one side only.

Inquiry No. 39.—Wanted the name and address of a manufacturer of diving outfits to be used in very shallow water and that do not need an air pump.

Inquiry No. 40.—Wanted the name and address of a manufacturer of sand blast apparatus.

Inquiry No. 41.—Wanted the name and address of a manufacturer who could make a tool of the following description, in quantities: A sharp steel cutting edge with an aluminum handle.

Inquiry No. 42.—Wanted the name and address of a manufacturer of machines for blanching and grinding, or otherwise preparing peanuts.

Inquiry No. 43.—Wanted the name and address of a manufacturer of machinery to make small wooden sticks like match sticks, for the manufacture of Persian shades.

Inquiry No. 44.—Wanted the name and address of a manufacturer of tools and machinery for sheet iron work, such as stamping and folding.

Inquiry No. 45.—Wanted the name and address of a manufacturer of small paper disks about 2 inches in diameter, 7-16 face and 1/8 hole, made of compressed paper and used for friction purposes in variable speed pulleys.

Inquiry No. 46.—Wanted the name and address of a manufacturer of feather duster machinery.

Inquiry No. 47.—Wanted the name and address of a manufacturer of water meters; answer stating different sizes made.

Inquiry No. 48.—Wanted the name and address of a manufacturer of machinery for printing on tin.

Inquiry No. 49.—Wanted the name and address of a manufacturer of worm gears, such as are used in cream separators; with full worm instead of one worm and one straight gear.

Inquiry No. 50.—Wanted the name and address of a manufacturer of boiler water tubes for a circulating pipe inside, of copper and brass for model boilers and steel for larger ones.

Inquiry No. 51.—Wanted the name and address of a manufacturer of paraphernalia for side degrees for secret societies, such as trick goats, trick chairs, etc.

Inquiry No. 52.—Wanted the name and address of a manufacturer of machinery for printing postage stamps and like work.

Inquiry No. 53.—Wanted the name and address of a manufacturer of a successful cow-milking machine.

Inquiry No. 54.—Wanted the name and address of a manufacturer of machinery for shaving off the bark of a special foreign tree (name not given).

Inquiry No. 55.—Wanted the address of a factory willing to undertake the manufacture of a new separable collar button in quantities.

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