RECENTLY PATENTED INVENTIONS. Agricultural Implements,

SEPARATOR.—BENJAMIN B. NEWMAN, Tampa, Fla. It is well known that when the the roller a shaking-screen is arranged, over the left-hand side of which the peanuts with the hulls removed are discharged into a chute, and thence delivered to any suitable receptacle. The hulls are blown out by an air blast.

SEED-PLANTER .- MARTIN EVERHART, Aus tin, Texas. The seed-planter is designed parof revolution oblique the one to the other and ticularly for planting corn. The principal feature resides in the measuring and dropping devices, which comprise a wheel mounted on the frame of the planter and having its periphery running on the ground. The hub and ring and the other by the exterior of a respokes of the wheel are hollow, and each of the hollow spokes communicates at its inner end with the interior of the hub through the medium of a box which contains devices for measuring and uniformly delivering the grain to the hollow spokes, through which it is A. PRALL, Dayton, Iowa. Mr. Prall has imdropped into the earth.

Ton, Ocheyedan, Iowa. The draft-equalizer is such that the device is rendered more comespecially adapted for use with gang-plows, and pact, strong, and light. The improved stormis capable of effective work at either the right front is made in sections separable, one from or left-hand side of the gangs. One horse will the other. These sections can be stored away walk in the furrow and four horses on the stubble, each horse being compelled to do an equal amount of work.

Electrical Apparatus.

SWITCH FOR ELECTRIC CONDUCTORS. -Theodore B. Shaffer, Westmoor, Pa. This improved switch for suspended electrical conductors insures the proper passage of the trolley from the siding to the main line. The construction comprises a main line rib, a siding rib, terminating at its inner end opposite the main line rib, and a trolley-supporting surface extending beyond the inner extremity of the siding rib.

Apparatus for Special Purposes.

FIRE - EXTINGUISHING APPARATUS. ALEXANDER LOGAN, North Sydney, Nova Scotia, Can. Mr. Logan has provided a system of perforated pipes having valves arranged to be opened by weights or other pressures when released by the burning away of supporting cords or cables. The invention is characterized by its simplicity and apparent efficiency.

EXERCISER .- WILLIAM W. SLOAN, JR., Buffalo, N. Y. The exercising device is designed for developing the muscles of the wrists and arms, and consists, briefly stated, in two hand-blocks connected to turn relatively to each other. A friction device bears between the blocks, so that by relatively turning them the various muscles of the arms and wrists are brought into play and thereby developed.

OPERATING-TABLE.—ALBERT TAUBERT and RICHARD KNY, Manhattan, New York city. The operating-table is constructed in three sections—two end sections and an intermediate section. Each section can be independently adjusted; and the sections can be so locked together that they can be collectively adjusted. These various adjustments are effected expeditiously.

Tools.

CUTTER-HEAD.—CHARLES H. WEST, Estabutchie, Miss. The inventor has devised an arrangement by which the cutters or bits are held securely and in a position properly to form the tongue without splitting or tearing the wood. The essential feature of the invention is to be found in two sets of bits, the members of each set of which are arranged in peripheral alinement. The two sets work together on each side of the tongue of the plank. All the parts are capable of easy access; and the device can be taken apart for repair or adjustment.

TUBE CUTTER AND EXPANDER.-WIL-LIAM CANTON, Paris, Ill. This boiler-tube-cutter comprises few parts, all of which are readily accessible and work without the use bell. of springs. It has been the inventor's prime purpose to reduce friction as much as possible. The body of the tool is inserted in the tube so that a collar abuts against the head of the boiler. By turning a nut the tool-carrier is forced outwardly against the tube. When the cutter has cut through the tube, the entire tool is rotated. This causes the cutter to revolve along the inner surface of the tube and to sever the tube. Rollers bear against the tube on the side opposite the cutter and materially reduce the friction.

Mechanical Devices.

LEADER-FORMING MACHINE:-LAWRENCE A. McCarthy, Savannah, Ga. By means of this leader-pipe-forming machine, leaders can be rapidly formed from a flat sheet of tin or other metal up to the point of soldering the joint. The characteristic features of the invention are a mandrel, swinging dies for forming the opposite lan edges of the leader, means for swinging these dies in opposite directions, and devices for turning the leader-forming metal or sheet around the mandrel.

FIREARM.—KARL K. BJERKNESS, Kaslo, B.

attachment for firearms which is connected with a lever in the magazine-chamber and which is so related to the muzzle of the barrel that, through the expansion of the gases escaping from the barrel, the device will autoshell is removed peanuts are still enveloped matically operate the lever in question when by a brown skin or husk. The present inventible charge is fired. The empty shell is thereby tion provides a machine for the removal of this extracted, a new shell brought in position for skin. A rubber-faced roller working against firing, and the hammer carried to a firing a breast serves to loosen the husks. Below position, all without the assistance of the

> GRINDING.—JOHANNES C. WEGERIF, 45 Wo- hunter, prospector, civil engineer, or soldier. burn Place, London, England. The mill con-sists essentially of internal and external revolving grinding-surfaces, having their axes in different planes, so that the planes of revolution will be oblique and a disruptive as well as a crushing action produced. The one surface is formed by the interior of a revolving volving roller working within the ring.

Vehicle Accessories.

STORM-FRONT FOR BUGGIES .- ARTHUR proved the construction of storm-fronts which DRAFT-EQUALIZER.—ARTHUR A. HAMIL- he patented last year. The improvement is in the body of the buggy or at the dash. The upper section can be droped down so as to hang close to the dash, the lower section remaining connected with the body of the vewhich window opens in an upward direction and is automatically carried to the upper position when released from engagement with its latch.

ELASTIC TIRE.—WILLIAM F. WILLIAMS, 17 and 18 Great Pulteney Street, London, W., England. The tire is of D-section and adapted to be secured to the wheel-rim by a band passing through the bore of the tire. The invention has for its object to facilitate the longitudinal compression of the tire, particularly the base portion thereof, when lapping it around the wheel-rim, so that the tread of the tire will not be put in tension. This object is obtained by forming the walls of the bore of the tire with grooves extending circumferentially of the bore, the grooves being either helical convolutions or separate grooves, each lying in a transverse plane.

England. The invention relates to the same class of tires as that refererd to in the pre-vious notice. A cord is embedded in the rubber, the cord being either in the form of a continuous helix or an independent convolution extending around the bore of the tire. With the cord a reinforcing strip of openmeshed fabric is combined, which fabric bridges the intervals between the cord convolutions when spaced as described, and serves as a guide for insuring uniformity of spacing in winding.

Fasteners, Hinges, etc.

FRICTION-HINGE.—VALENTINE C. LUPPERT, South Williamsport, Penn. The friction-hinge is of that class particularly adapted for supporting mirrors, swinging screens, transoms and the like. The pintle is attached to the swinging frame. The friction-hinge or holder consists of a spring plate or leaf having a $transverse \ \ corrugation \ \ \acute{a} \ \ a \ \ slot \cdot extending \ \ on$ opposite sides thereof, and a smaller leaf adapted for insertion in the slot and engagement at the ends thereof. The plates apply elastic pressure to the pintle, which is held

COMBINATION-LOCK. - WILLIAM E. H. MORSE and OLIVER H. BEMIS, Algona, Iowa. The invention has for its object to provide a new and improved combination door-lock arranged to permit the owner readily to set the outside knob to a desired combination in order to prevent the opening of the door. The combination can be rendered ineffective whenever it is desired to use the door-lock as an ordinary lock. The device can likewise be used for sounding an electric alarm on the door-

window-shutters at any adjustment desired. A disk or plate of peculiar construction is fastened to one of the slats through the medium of flanges. The disk works with a spring-bolt mounted on the framing of the shutter.

SASH-LOCK .- John P. Geraghty, Jersey City, N. J. The invention relates to window and door buttons; and its object is to provide a new and improved sash-lock which is readily applied and arranged automatically to lock the closed sashes in order to prevent burglars from opening the lock on the outside of the window. The sashes can be drawn securely together to prevent rattling.

Miscellaneous Inventions.

HAIR-BRUSH.—Emile Bick, 107 Gold Street, Buffalo, N. Y. The invention is a hair-brush provided with a passage or socket for holding a comb. A circular mirror is secured on the back of the brush.

FLYTRAP.—JAMES MANNING, Marathon,

by which the flies are trapped and caged and then disposed of. The trap is arranged for adjustment beneath a window-sash or beneath a fly-screen. The flies are attracted, pass into the trapping-chamber and then into the cage.

TENT.—THADDEUS D. McCALL. 7 Monroe Street, Chicago, Ill. Mr. McCall has devised an improved portable floor tent designed for the use of one or two persons. The tent is the use of one or two persons. of such small proportions and light weight as to be easily carried as a part of the bodily ROLLER-MILL FOR CRUSHING AND outfit and especially adapted to the needs of the

ROLLER-SKATE .- PAUL JASSMANN, Brooklyn, New York city. The roller-skate is of that class in which a foot-rest is geared with one of the wheels and is moved downward by the weight of the skater and upward by a spring. The skate is easily attached to the foot and is arranged to transmit the downward motion of the foot-rest to one of the wheels in order to attain a high rate of propelling speed.

TRAHLACTOR.-WILLIAM H. MARTIN, Manhattan, New York city. This breast-pump is characterized by the efficiency in drawing the milk from the glands; absence of mechanical irritation during use; and the fact that mechanical construction is such that the parts can be separated, thoroughly cleaned, and reassembled, without difficulty. This is extremely important, as the instrument can be made perfectly antiseptic before use, thereby obviating any possibility of the contraction of disease.

CALENDAR.—HERMAN F. RUEGER, Brooklyn New York city. This calendar is simple, and is arranged to permit the ready change of hicle. A window is placed in the upper section, the dates for each month, the date of the month and the day of the week being very distinctly indicated.

SCREEN .- ALBERT TAUBERT, New York city. The purpose of the invention is to provide a simple, strong and light screen to which any material capable of folding is attached. The frame can be conveniently closed when not in use or enlarged horizontally. To secure this end lazy-tongs are used to connect the uprights of the screen.

CANE-UMBRELLA. - GRACE A. GEIGER, Brooklyn, New York city. The patent describes a case for covering umbrellas when closed. The usual leather case is neatly and effectively secured in place so as to give the umbrella the appearance of a cane.

LEAD FOR SETTING STAINED GLASS. JACOB PFLEGING, Bronx, New York city. The lead is provided with stiffening devices at each ELASTIC TIRE.—WILLIAM F. WILLIAMS, 17 side of the heart whereby the lead is pre-and 18 Great Pulteney Street, London, W., | vented from bending under ordinary strains. novel means is provided for connecting or joining the leads with one another.

NECKWEAR - FASTENING. — BERTHA KOEHLER, Brooklyn, New York city. The fastener is particularly adapted for the use of women to hold in position ribbons, bows and stocks. The fastener is attached to the inner side of the stock or other article of neckwear at the back and front of the neck and connected with a collar-button on the collar-band.

LAMP-HANGER.—CHARLES D. KEMMERER, Weissport, Pa. This simple hanger can be readily turned in any direction and held at any desired angle between that of the axial line with its base and at substantially right angles to its base, thus providing a device particularly adapted for use in barber-shops, dentists' offices, workshops, and the like.

DUMPING-CAR. - WILLIAM H. HOLMAN Durango, Colo. A simple and effective dumping-trip and gate or gate lock combined has been secured. The latch for securing the gate is constructed so as to serve also as a carhandle. The main shaft, which also operates as a detent, is arranged for operation to release the body of the truck and to release the latch, so that the latter can be adjusted out of engagement with the gate.

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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For Sheet Brass Stamping and small Castings, write Badger Brass Mfg. Co., Kenosha, Wis.

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

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Felix Daus Duplicator Co., 5 Hanover St., N. Y. city. Inquiry No. 1510.-For manufacturers of nails.

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DESENISS & JACOBI, A. G., Hamburg, deep-well and pumping machinery manufacturers, are desirous to How It Has Been Defended for Half deal in modern pneumatic pumping systems, either for

MECHANICAL SUPERINTENDENT WANTED. - Familiar with the manufacture of firearms on a large scale, possessing executive and mechanical ability. Address, stating age, experience and references, A. Box 2123 General Post Office, New York.

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Inquiry No. 1524 —For manufacturers of per-crating typewriter type for use on a Remington ma-