

ing of the churn, of a hollow supply shaft arranged in the inlet end of the churn, a driving pulley secured to the outer end of said shaft, and a beater shaft arranged within the shell or casing and attached to the inner end of said shaft, substantially as set forth. 5th. The combination, with the stationary shell or casing of the churn, of a hollow supply shaft arranged in the inlet end of the shell or casing, rotating beaters arranged within the shell or casing and connected with said hollow shaft, a discharge for the product of separation at the opposite end of the churn, and a receiving hood inclosing said discharge, substantially as set forth. 6th. The combination, with the stationary shell or casing, provided with a supply inlet at one end, and a discharge for the product at the opposite end, revolving beaters arranged within the shell or casing, and a water jacket surrounding said shell or casing, of a hollow cooler having its cream discharge connected with the supply inlet of the shell or casing, and its water space connected with the water jacket of the shell or casing, substantially as set forth.

No. 42,538. Device for Attaching Horse-Shoes.

(*Appareil pour assujeter les fers à cheval.*)

Roland D'Anvers, Hastings, Hawke's Bay, New Zealand, 10th April, 1893; 6 years.

Claim.—1st. In a nailless horse-shoe, the combination, with the shoe plate *a*, of the heel shoe *c*, the half bands *d*, front strap *b*, and screw *b*², substantially as described. 2nd. In a nailless horse-shoe, the combination, with the shoe plate *a*, of the heel shoe *c*, the half bands *d*, front straps *b*, spikes *b*² and screw *b*², substantially as described. 3rd. In a nailless horse-shoe, the combination, with the shoe plate *a*, of the heel shoe *c*, the half bands *d*, elastic packings *e*, front straps *b*, screw *b*², substantially as described. 4th. In a nailless horse-shoe, the combination, with the shoe plate *a*, of the heel shoe *c*, the half bands *d*, front strap *b*, screw *b*², elastic packings *e*, screws *b*² and *e*, with calks *f*, substantially as described.

No. 42,539. Machine for Producing Ozone.

(*Machine pour la production de l'ozone.*)

Christen Rainsback Poulsen, Horsens, Denmark, 10th April, 1893; 6 years.

Claim.—1st. Apparatus for production of ozone by the oxydation of phosphorus consisting of a reservoir, a suitable liquid in the lower part of the same, a finely perforated diaphragm some distance above the level of the liquid and a holder containing a piece of phosphorus, said holder passing through the diaphragm and being adapted to be adjusted so as to be in contact with the liquid, the apparatus operating so that the phosphorus acid developed and arising against the diaphragm is deflected down upon the liquid and transformed into phosphoric acid while the ozone in a pure state escapes through the perforations of the diaphragm and out through the top, substantially as set forth. 2nd. Apparatus for production of ozone by the oxydation of phosphorus consisting of a reservoir, a suitable liquid in the lower part of same, an open worked cap or lid, a finely perforated diaphragm between the cap and the level of the liquid and a holder containing a piece of phosphorus, said holder passing through a cork in the cap and through the diaphragm, and being adapted to be adjustable so as to be in contact with the liquid, substantially as and for the purpose set forth. 3rd. Apparatus for the production of ozone by the oxydation of phosphorus consisting of a reservoir, a liquid in the lower part of same composed of distilled water, pure sulphuric acid and permanganate of potash as described, a finely perforated diaphragm some distance above the level of the liquid and a holder carrying a piece of phosphorus and adapted to be adjusted so as to be in contact with the liquid, substantially as and for the purpose set forth. 4th. Apparatus for the production of ozone by the oxydation of phosphorus consisting of a reservoir *A*, a suitable liquid in the lower part of same, an open worked cap *B* with cork *E*, a finely perforated diaphragm *G* between the cap and the level of the liquid and a bent holder *C* with cup *C*¹ containing a piece of phosphorus *D*, said holder passing through the cork *E* and the diaphragm *G*, substantially as and for the purpose set forth.

No. 42,540. Stool. (Tabouret.)

Robert Mostyn Burrows, Cleveland, Ohio, U.S.A., 10th April, 1893; 6 years.

Claim.—1st. The combination of a stationary plate *K*, an upright supporting stand, arm *I*, a revolving plate or member *I*¹, pivoted to the aforesaid stationary plate and having one or more notches *I*², lever *O*, and a spring *P*, all operating substantially as set forth. 2nd. The combination of a stationary plate *K*, having lug or bearing *K*¹, an upright supporting stand, arm *I*, revolving plate or member *I*¹ provided with a hole or perforation *I*², and a bolt *I*² and washer *M*, all operating substantially as set forth. 3rd. In a stool, the combination with the seat and supporting stand terminating at its upper end in an upright sleeve *E*, of a rotating jointed spindle *D* suitably secured to the seat, nicely fitting within the aforesaid sleeve, and having a shoulder or bearing *D*¹, the parts being arranged substantially as set forth. 4th. In a stool, the combination with the seat, and supporting stand having an upright sleeve, of a jointed and vertically movable spindle *D* rigidly secured to the seat and revolvably supported by said sleeve, and a stop for limiting the elevation of the spindle, the parts being arranged substantially as set forth.

No. 42,541. Burner for Hydrocarbon.

(*Foyer à hydrocarbures.*)

William F. Otis, Norwalk, Ohio, U.S.A., 10th April, 1893; 6 years.

Claim.—1st. The combination with the casting and its diaphragm and curved air pipes, of the generator, with central hole, and the elbow pipe communicating with the generator, and having the vent beneath the hole of the generator and the air pipes terminating below said hole, and centrally over the vent in said pipe, as set forth. 2nd. The combination with the casting and its air pipes, of a generator with central opening, the supply pipe communicating with the generator and the elbow pipe communicating with the generator, and having a vent hole beneath the opening in the generator, said air pipes being oppositely curved and terminating over the said vent hole and below the central opening of the generator, as and for the purposes specified. 3rd. The combination with the casting having integral depending flange, horizontal diaphragm and curved air pipes rising from the diaphragm, of the generating chamber, the pipe having vent below and between the said air pipes, and having a nozzle within the generating chamber, the supply pipe and the tube connecting the diaphragm of the casting with the generator and with which the supply pipe communicates, all substantially as shown and described. 4th. The combination with the casting having integral depending flange, horizontal diaphragm and curved air pipes rising from the diaphragm, of the generating chamber, the pipe having vent below and beneath the said air pipes, and having a nozzle within the generating chamber, the supply pipe and the tube connecting the said diaphragm with the generator and with which the supply pipe communicates, and a removable funnel-shaped air mixer, all substantially as shown and described. 5th. In an oil burner, a spreader having a scalloped plain edge, as set forth.

No. 42,542. System of Cutting Ladies' Garments.

(*Méthode de tailler les vêtements de dames.*)

Louise Lehn, Buffalo, New York, U.S.A., 10th April, 1893; 6 years.

Claim.—1st. A system of cutting and fitting ladies' garments, consisting of a number of patterns, the outlines of the different sizes of which are enclosed within the other and advance from the smallest size up, and portions of some of the lines of some sizes lie between the lines of their adjacent pattern lines, substantially as and for the purposes hereinbefore set forth. 2nd. A device for cutting and fitting ladies garments, consisting of a number of patterns advancing from the smallest to the largest size, and having each pattern of one size, and its corresponding connecting pattern indicated by a different kind of a line from any other pattern of a different size, substantially as and for the purposes hereinbefore set forth.

No. 42,543. Money Recording and Receipting Machine. (Caisse registre de monnaie.)

Joseph F. Scherer, Plymouth, Wisconsin, U.S.A., 10th April, 1893; 6 years.

Claim.—1st. In a money recording and receipting machine, the combination, of a casing, shafts therein, placed in a series of vertical lines, the shafts in the rear being arranged on a plane higher than the plane of the front shafts, slips wound upon the several shafts, the ends thereof passing through openings in the front of the casing, the slips upon the rear shaft extending out above and clear of those upon the front shaft, substantially as set forth. 2nd. In a money recording and receipting machine, the combination, of a casing, a series of transverse strips constituting the front of the machine, provided in their contacting or contiguous edges with registering semi-circular grooves, roller bars, fitting in said registering grooves, a series of shafts journaled in the casing, and slips wound upon the shafts, having their outer ends passing between the contiguous or contacting edges of the transverse strips with the roller bars bearing against the same, as set forth. 3rd. In a money recording and receipting machine, the combination, of a casing, a series of transverse strips constituting the front of the machine, said strips provided in their contacting or contiguous edges, with registering semi-circular grooves and in their front with depressions or recesses, roller bars fitting in the registering grooves, knives projecting out from the transverse strips at a slight incline, a series of shafts journaled in the casing, and recording and receipting slips wound upon the shafts, having their outer ends passing between the contiguous or contacting edges of the transverse strips, with the weight bars bearing against the same, and having printed thereon a series of coupons, substantially as set forth. 4th. In a money recording and receipting machine, the combination, of a casing having a removable front and back, a series of vertical strips, front and rear shafts journaled in said strips, and a series of vertical lines, each of the rear shafts mounted a slight distance above the shaft in front, and recording and receipting slips wound upon the shafts, the ends of said slips being carried through slits in the front of the machine, alternately from the rear and front shafts, and composed of a series of coupons in the form of a receipt for the amount of the purchase, numbered consecutively from one upwards, and constructed to be detached or severed separately, substantially as set forth.