No. 22,764. Top Spinning Roll.

(Cylindre Supérieur de Machine à Filer.)

Jeremiah O'Neill, Cornwall, Ont., 4th November, 1885; 5 years.

Claim.—1st. In a speeder spinning frame or railway head, spinning rolls B of solid leather, rings D compressed together on the roll shaft A, as described and shown substantially as and for the purpose hereinbefore set forth. 2nd. It cinning rolls B, the combination of solid leather rings D compress, together on the roll shaft A, as shown and described and for the purpose hereinbefore set forth. 3rd. The combination of the roll shaft A and the leather rings D, as shown and described for the purpose he embefore set forth.

No. 22,765. Liquid Measure. (Mesure Liquide.)

Louis Bredannez, Toronto, Ont., 4th November, 1885; 5 years.

Louis Bredannez, Toronto, Ont., the November, 1885; 5 years.

Claim.—1st. A liquid measurer, constructed as described, having four arm-less or more-projecting from the outer shell of a tap, each arm provided with a measure and when one of the measures is brought round to given point shown in the upper part of the middle shell, it will be filled with liquid and indicated to be full by the projecting stem of an air valve which is pressed upwardly from the valve chamber of the liquid therein, as set forth. 2nd. A liquid measurer composed of a tap B having outer shell by and four arms less or more bi., bi., bi., bi., bi., bi. and a nut biz on the bottom of the centre piece to: nuts bi, bo, bio, bi. and a nut biz on the bottom of the centre piece for securing the handle biz, the combination of the measures, ci., ci., ci., ch., ci., and in the additional projecting stem ci. of an air chamber es to indicator when the measure is full, as specified and described and for the purposes set forth.

No. 22,766. Machine for Pointing Wire Nails, etc. (Machine à Faire les Pointes des Clous en Fil de Fer.)

Samuel Loring, Duxburg, and Fphraim S. Morton, Plymouth, Mass., U.S., 4th November, 1885; 5 years.

Samuel Loring, Duxburg, and Fphraim S. Morton, Plymouth, Mass., U.S., 4th November, 1835; 5 years.

Claim.—1st. In an organized machine for pointing headed wire nais and other articles, the combination of a chute or raceway, a grinding wheel, a fixed plate having a continuous spriace or support for the shanks of the nails, and a shoulder to support the heads of the nails, a belt running substantially parallel with said fixed plate and causing the nails to roll along the latter devices, substantially as described, for pressing the belt sazinst nails interposed between said surface and belt, the belt and co-perating uxed plate being arranged to receive the nails from the raceway and to present their ends to the wheel, as set forth. 2nd. The combination of the grinding wheel, the chute, the fixed saculdered plate forming a bearing for the nails, the beit and its pressure devices, the separator and means substantially as described, for operating the separator, whereby the nails are kept separate white being presented to the grinding wheel, as set forth. 3rd. The combination of the grinding wheel, the frame f, the fixed shouldered plate g having a substantially vertical surface, the beit r and pulleys g, of supported by said frame, and means, substantially as described, whereby the frame may be adjusted vertically and borinontally to modify the form of the points made by the grinding wheel, and recontentially to modify the form of the points made by the grinding wheel and positively held at any position to which it may be adjusted, as set forth. 4th. The combination of the grinding wheel, the belt r and its supporting pulleys and the pressure blocks t, t, as set forth.

No. 22,767. Water Wheel. (Roue Hydraulique.)

John W. Wesson, Attala, Ala., U.S., 4th November, 1835, 5 years.

Claim.—A water wheel having buckets provided with inclined straight faces a said buckets or blades being thickened near their lower enes at the points b and narrowed or reduced to their lower ends at the point, whereby the water ways of passages between the buckets or blades are widened at the upper side of the wheel and narrowed onear the lower side thereof, the blades presenting flared opening below the point b, substantially as described.

No. 22,768. Method Method and Apparatus for Treating Wood for Paper Pulp. (Mode et Appareil de Traitement du Bois pour la Pâle à Papier.

Charles S. Wheelwright, Providence, R. L., and George E. Marshall, Turner Falls, Mass., U.S., 4th November, 1885; 5 years.

Turner Falls, Mass., U.S., 4th November, 1835; 5 years.

Claim.—1st. The improved process for treating wood and similar fibre for paper making, the same consisting in boiling the material ander pressure in a solution containing subburic acid in a digester, the apper portion of which is connected with a condenser by which the gases expelled are condensed so as to provent accumulation or change, as described. 2nd. The process herein described for regaining the chemicals used in the boiling of wood and their fibers, the same consisting in passing the gases through a condenser or condensers connected with the digester, as described. 3rd. The combination, with the digester A of the rondenser H constructed to condense the cases during the process of boiling, as described. 4th. The combination, with a digester of a condenser connected with the steam space of the digester and constructed to condense the gases during the process of boiling, as described. 4th. The combination, with the blow-off pipe I, of the tank L and condenser K enstructed to condense the passes and beat the water, as and for the purposes described. 6th. The combination, with the digester A, of the blow-off pipe I, of the tank L and condenser K enstructed to condense the gases and beat the water, as and for the purposes described. 6th. The combination, with the digester, constructed and arranged, substantially as electric, of the pipe N having the branch u, the chamber at having the T-headed, branch as and the valved steam pipe o, substantially as described. 8th. An improved digester having double walls made in

sections and united section to section and wall to wall by rings, subtantially as described. Ath. The combination, with the sacus sections of P. of the rings Q to which the saie sections are belted, substantially as described. 10th. The combination, with the sections pl. pr.; q, the hood and the cap of the rings Q2 and the bots rs, substantially as described. 11th. The combination, with the digester constructed as described. and provided with the cap and hood. The rings Q2, re and the botts hanged to said ring re and arranged to time recesses in the ring Q2, substantially as described. 12th. The combination, with the shells O, P composed of the sections pr, pr, q he hood and cap, of the rings Q, Q2, the belts r, rl and the riverwith the sleeve r), constructed and arranged substantially ac described. 13th The combination, with a digester composed 1 separate sections, of a lining formed also in separate sections, each of which overlaps the edges of the shell sections, the said surplus portions being united so as to form tight tights and constitute a continuous lining, as set forth. sections and united section to section and wall to wall by rines

No. 22.769. Electric Belt. (Ceinture Electrique.

Lee Hughes, Marshall, Mo., U.S., 4th November, 1885, 5 years,

Lee Hughes, Marshall, Mo., U.S., 4th November, 1885, 5 years. Claim.—Ist. The combination, in a battery, for electric belts or other like purposes, of the position and negative plates or elements and the connecting conductors having brushes at their extrem new bearing upon the connected plates, substantially as and for the parposes specified 2nd The combination, with the belt, of the battery connected in sections by the connecting conductors having brushes at their extremities, and the metallic disks or pads connected to the terminal conductors, substantially as and for the purposes specified 3rd. The combination, with the belt proper, the battery and the metallic disks or pads of the flaps adapted to cover said disks or pads substantially as specified. 4th. A conductor for connecting the nne and copper plates, of a battery for electric belts consisting of strands of wire twisted together between their ends and having said ends spread apart in the form of brushes, substantially as and for the purpose set forth. purpose set forth.

No. 22,770. Pencil Sharpener. (Taille-Crayon.)

John Williamson, Camden, N.J., U.S., 4th November, 1835 . 5 years.

John Williamson, Camden, N.J., U.S., 4th November, 1889. Syears. Claim.—1st. A pencil sharpener, consisting of a holder B provided with a U-shaped blade depression or channel, a longitudinal stating the holder, a V-shaped blade to fit in the said depression, and a thumb nut and acrew for holding the blade at any point of the length of the slot, as set forth. 2nd A pencil sharpener, consisting of a holder having a coating of gritty substance, and a U-shaped depression to receive the V-shaped adjustable blade sharpened at both ends, and openings d in the holder, as set forth.

No. 22,771. Harrow. (Herse)

Manly D. Bronner, Ilion, N Y., U.S., 4th November, 1885, a scars

Claim.—The combination of the circular harrow, having the circular plate or ring E and the pivotal bolt at the centre of the barrow, the draft-beam G and the guide-beam H having handles said beams being pivoted independently of each other on the bolt F and the straps h secured to the guide and draft seams, and beams over and under the projecting outer flange or edge of the ring E, substantially as described.

No. 22,772. Preparation of an Agent for Use in the Treatment of Sewage and other Liquid, or semi-Liquid Putrescent or Putrescil ie Matters, and Treatment of such Matters. (Préparation d'un Agent pour le Traitement des Matières d'Egouts et cures Matières Laquides ou semi-Liquides en étal de Putréfaction ou Sujettes à se Putréfier, a Traitement de telles Matières.)

John W. Slater. Holloway, and William Stovens, London, Eng., 4th November, 1885: 5 years.

Claim.—1st. The preparation of muriate of alumina for use in the purification of sewage and other like matters, by treating minerals containing terhydrate of alumina with muriatic acid, substantially as hereinbefore described. 2nd The use in the treatment of sewage and other like matters, of muriate of alumina prepared by treating minerals containing terhydrate of alumina with muriatic acid "dd The use in the treatment of sewage and other like matter, of marriate of alumina, prepared as hereinbefore described, in conjunction with elay and charcoal, or earbon, or liquid, substantially as bereinbefore described. 4th. Thouse in the treatment of sewage, of brood, in conjunction or admixture, with muriate of alumina, prepared is hereinbefore described, or in conjunction or admixture with such muriate of alumini and clay, or earbon, or liquid, substantially as hereinbefore described.

No. 22,773. Horse Shoe. (Fer & Cheval.)

Luther H. Bellamy, Brockville, Ont., 5th November, 1885 5 years Claim.—1st. Horse shoes, having the metal b projected in frost of the toe-calk, and containing a nail hole, as shown and described and. A horse-shoe toe-calk having the ends considerably these than the intermediate part, and on a district horizental plane to form a clearance at the toe to lessen the chance of stumbling and to promote evenness of wear, as described. 3rd. The web of a horse the provided with ends curved inwardly to form spring bearings for fire, lessen the shoes of concession, produce an improvement in knee action and provide for the natural expansion of the foot and having on its lower side soven hearings. arranged substantially as shown as on its lower side seven bearings, arranged substantially as shown and described. 4th. In a horse shoe, the toe-calk made slightly shallower than the side and heel calks, as and for the purpose set forth. Sh