

cyanides of the fixed alkalies, consisting in a melting pot or vessel heated by suitable means, and having an open ended or perforated pipe descending to or entering at or near the bottom thereof, so as to enable ammonia or the vapours of alkaloidal bases to be distributed by bubbling or otherwise through the liquid-fused mixture contained in the bottom of such melting pot or vessel, substantially as specified. 6th. The apparatus for the production of cyanides of the fixed alkalies, consisting in a melting pot or vessel, heated by suitable means, and having an open ended or perforated pipe descending to or entering at or near the bottom thereof, so as to enable ammonia or the vapours of alkaloidal bases to be delivered to the bottom of such melting pot or vessel, in combination with a set of perforated shelves arranged one above the other in the pot or vessel, and over and through which a liquid-fused mixture of alkali, cyanide and carbon is caused to flow downwards in succession, and of a set of stirrers arranged to sweep such shelves, either the shelves or the stirrers being caused to rotate, substantially as specified. 7th. The apparatus for the production of cyanides of the fixed alkalies, consisting in a melting pot or vessel, heated by suitable means and having an open ended or perforated pipe descending to or entering at or near the bottom thereof, so as to enable ammonia or the vapours of alkaloidal bases to be delivered to the bottom of such melting pot or vessel, in combination with a set of pairs of shelves arranged one above the other within the pot or vessel, one of each pair of the shelves being perforated or having openings at or near its periphery, while the other one of each pair of shelves has perforations or openings at or near its centre, substantially as specified.

#### No. 38,802. Mouth-Piece for Speaking Tubes.

(*Embouchure pour porte-voix.*)

William Horace Ross, Camden, New Jersey, and William Bryant, Philadelphia, Pennsylvania, both in the U.S.A., 25th April, 1892; 5 years.

*Claim.*—1st. A mouth-piece for speaking tubes consisting of a suitable chamber provided with a mouth-piece proper at one end, and at its other end with suitable means for connecting with a speaking tube, a whistle located in said chamber and free of any attachment thereto, the whole constructed, arranged and adapted to operate, as and for the purposes set forth. 2nd. In combination with a speaking tube, a mouth-piece consisting of a suitable chamber provided with a mouth-piece proper, and a whistle located in said chamber free of any attachment thereto, and self-adjusting as described, and for the purposes set forth. 3rd. In mouth-pieces for speaking tubes of the character herein described, a valve or whistle located therein free of any attachment thereto, and provided on one side with prongs or projections, as and for the purpose set forth.

#### No. 38,803. Corset. (*Corset.*)

Frederick Compton, Toronto, Ontario, Canada, assignee of Wallace White Gould, Bridgeport, Connecticut, U.S.A., 25th April, 1892; 5 years.

*Claim.*—A corset consisting of sections having straight and curved edges, as set forth, whereby, in the completed corset, the straight edge of each section is joined to the adjacent curved edge of the next section, substantially as described.

#### No. 38,804. Drag Saw Rail Cutting Machine.

(*Scieur à scie traînante pour couper les rails.*)

Robert C. Cowan, Montreal, Quebec, Canada, and Terrick G. Haultain, New York, State of New York, U.S.A., assignees of Joseph Warren Calif, North Easton, Massachusetts, U.S.A., 25th April, 1892; 5 years.

*Claim.*—1st. An upright standard or support adapted to be removably secured to a rail, combined with a rocker arm and link mounted laterally of said standard at its top, and a drag saw pivotally hung to said link to move in right lines, substantially as set forth. 2nd. In combination with the standard, its hooked foot, and the co-operating hooked lever to grasp the rail head, a rocker arm, the pendulum link, a pivotal block in said link at one end, and a saw adapted to be removably united at its front end to the block, substantially as explained. 3rd. The combination, with the standard 2, its foot 4, the hooked lever 6 pivotally secured, the operating rod 9, and the lateral shaft 12, of the rocker arm pendent from said shaft, the link 15 pivotally mounted at the end of said rocker arm, and the block 17, which unites the saw with the link, substantially as described and stated.

#### No. 38,805. Revolving Hat Case.

(*Montre-tourante pour chapeaux.*)

David Henry Sanders and Edwin Orin Wood, both of Flint, Michigan, U.S.A., 25th April, 1892; 5 years.

*Claim.*—1st. A hat case comprising a stationary portion closed at top and bottom and a revolving portion completely covered by said closed top and journaled in said stationary portion, and comprising supports for a number of sizes and shapes of hats, and a wall partly surrounding the hat supports and united therewith and constituting the front portion of the case, the said revolving portion being adapted to be rotated to cause its wall to recede within the stationary portion, and thereby open the case and move the hat supports to the

front within the stationary portion to expose the hats thereon for handling, the reverse movement of the revolving portion serving to return the wall to the front to close the case and cover up the hats, substantially as described. 2nd. A hat case comprising a stationary portion closed at top and bottom, and a revolving portion journaled within such stationary portion and constructed with crossed arms to receive and support the hats, standards in which such crossed arms are secured, and a wall movable with the arms and standards to open the case to expose the hats and to close the case to conceal the hats, substantially as described.

#### No. 38,806. Ore Concentrator.

(*Concentrateur de minéral.*)

William Henry Harrison Bowers and the Colorado Iron Works, all of Denver, Colorado, U.S.A., 25th April, 1892; 5 years.

*Claim.*—1st. In an ore concentrator, the concentrating table having a flexible bottom, and a flexible beam to which the bottom is secured, arranged between the sides of the table, means for vibrating the table, and a bumper block against which the said beam strikes, as the table is vibrated, substantially as described. 2nd. In an ore concentrator, a table having a bumper beam formed with one of its ends gradually diminishing in thickness, as the centre is approached, substantially as set forth. 3rd. In an ore concentrator, a table having a central bumper beam composed of two longitudinal parts, the lower part gradually decreasing in thickness as the centre is approached, and the upper part gradually increasing in thickness as the centre is approached, substantially as set forth. 4th. In an ore concentrator, a table having a central beam composed of two parts, the lower part gradually decreasing in thickness as it nears the centre, the upper part gradually increasing in thickness as it nears the centre, a bottom of suitable thin metal secured between the said two parts forming the bumper beam, and side pieces which correspond to the incline of the said bumper beam, substantially as set forth. 5th. In an ore concentrator, the combination of a longitudinally reciprocating table or concentrator having an inclined bottom, an ore supply trough, and a water supply trough, substantially as described. 6th. In an ore concentrator, the combination of a longitudinally reciprocating table or concentrator, a retracting spring therefor, an ore supply trough, and a washing water supply trough, substantially as described. 7th. In an ore concentrator, a table having a central beam composed of two parts between which the bottom is secured, the said parts being cut away at the centre, whereby increased flexibility is secured, as set forth. 8th. In an ore concentrator, the combination of a longitudinally reciprocating table, having a central bumper beam gradually decreasing in thickness as its centre is approached, side pieces curved to correspond with said bumper beam, a bottom secured to said beam and side pieces, means for reciprocating said table, and a spring secured to said table, substantially as described. 9th. In an ore concentrator, the combination of a longitudinally reciprocating table having a bumper beam composed of two parts, substantially as described, side pieces curved underneath to correspond with the cut in the bumper beam, a bottom secured between the parts of the said beam and to the sides of the table, means for reciprocating said table, and a retracting spring secured at one end to the said beam, substantially as described. 10th. In an ore concentrator, the combination of a longitudinally reciprocating table or concentrator, having a bottom of thin sheet metal, a bumper against which said table comes into contact, and an ore and water supply trough, substantially as described. 11th. In an ore concentrator, the combination of a longitudinally reciprocating table or concentrator, having a bottom of thin sheet metal, a retracting spring therefor at one end, a bumper at the other, and an ore and water supply trough, substantially as described. 12th. In an ore concentrator, the combination of the two sets of vertical supports, a longitudinally reciprocating table or concentrator suspended between said supports, a retracting spring located at one end beneath the table, a bumper located at the other end, and an ore and water supply trough, substantially as described. 13th. In an ore concentrator, the combination of the longitudinally reciprocating table having the central beam, a tappet arranged on one end of said beam, and the drive shaft provided with the cam for striking said tappet, substantially as described. 14th. In an ore concentrator, the combination, with a longitudinally reciprocating table or concentrator, of the vertical supports, the rock shafts held by said supports, and the vertically adjustable hangers or rods passing through said rock shafts and secured to the sides of the table, substantially as described. 15th. In an ore concentrator, the combination of a longitudinally reciprocating table or concentrator, the vertical supports, the rock shafts, the vertical hangers, and the diagonal hangers adjustable with respect to said vertical hangers, connected with the bottom of the table between its sides, substantially as described. 16th. In an ore concentrator, the combination of a longitudinally reciprocating table or concentrator, the rock shafts, the vertical supports, the vertical hangers adjustable vertically in said rock shafts, and the diagonal hangers independently adjustable with respect to said vertical hangers, connected with the table or concentrator between its sides, substantially as described. 17th. In an ore concentrator, the concentrating table consisting of a flexible bottom, and side pieces, to which the bottom is secured, in combination with rigid strips secured to the said side pieces outside of or below the bottom, substantially as set forth. 18th. In an ore concentrator, the concentrating table consisting of the flexible