chamber  $a^3$ , and a packing plate l, separate from the plate n, between the latter and the rear wall of chamber  $a^3$ , substantially as set forth. 9th. In a car axle box having a rear wall chamber  $a^3$ , with open top, a sheet metal dust shield plate n, having a flange bore or central opening, and a flangeless periphery adjoining the front wall of chamber  $a^3$ , and a packing plate l, of a different material and separate from plate n, between the latter, and the rear wall of chamber, substantially as set forth. 10th. In combination, with the axle box lid opening have side wedge shaped ribs  $m^3$ , the hid m, having lugs  $m^1$ , adapted to engage said ribs  $m^3$ , to automatically fasten the lid to the box, and correspondingly take up, the wear of the lugs and ribs, substantially as set forth. IIth. In combination, with a car axle box axle and its brass or bearing, of an oiling device composed of a plunger, a chamber for said plunger passes and impinges against the end of the axle, said plate keeping the plunger in position within said chamber, and serving as a shunting plate to avoid wear, a valve chamber, in communication with said plunger chamber, and a channel or conduit between the valve chamber and the brass or bearing, substantially as set forth. chamber and the brass or bearing, substantially as set forth

#### No. 36,979. Device for Identifying a Bottle Containing Poison. (Appareil pour identifier une bouteille contenant du poison.)

Joseph Hector LeMaitre and John Francis LeMaitre, both of Toronto, Ontario, Canada, 15th July, 1891; 5 years.

Claim.—1st. One or more bells connected to a bottle in such a manner that any movement of the said bottle shall cause the bells to sound an alarm, substantially as and for the purpose specified. 2nd. An elastic ring A, fitted to the neck of a bottle having flexibly connected to it one or more bells B, substantially as and for the pur-

#### No. 36,980. Machine for Making Garment Stays. (Machine pour faire les buscs de corsage.)

Frederick Crompton, Toronto, Ontario, Canada, 15th July, 1891; 5

Frederick Crompton, Toronto, Ontario, Canada, 15th July, 1891; 5 years.

Claim.—1st. The combination of the side bars A, and B, back stops a, and b, and knife edged metal strips E, and F, having equidistant notches c, and f, throughout their entire length and opposite to each other so as to parallelly receive a series of blades, as and for the purpose specified. 2nd. The combination of the side bars A, and B, back stops a, and b, knife edged metal strips E, and F, having equi-distant notches e, and f, throughout their entire length and opposite to each other so as to parallelly receive a series of blades, and the removable board G, arranged as and for the purpose specified. 3rd. The combination of the side bars A, and B, back stops a, and b, knife-edged metal strips E, and F, having equi-distant notches e and f, throughout their entire length and opposite to each other so as to parallelly receive a series of blades, and the removable board G, having knife edged metal strips g, extending throughout tis length, as and for the purpose specified. 4th. The combination of the side bars A, and B, back stops a, and b, knife edged metal strips E, and F, having equi-distant notches e, and f, throughout their entire length and opposite to each other so as to parallelly receive a series of blades, and the resupplemental board H, arranged, as and for the purpose specified. 5th. The combination of the side bars A, and B, back stops a, and b, and knife edged metal strips E, and F, having equi-distant notches e, and f, throughout their entire length, and opposite to each other so as to parallelly receive a series of blades, the removable board G, having shots of the side bars A, and B, back stops a, and b, and knife edged metal strips E, and F, having equidistant notches e, and f, throughout their entire length, and opposite to each other so as to parallelly receive a series of blades, the cross bars C, having slots c, and thumb screws D, extending up through the stots into the adjustable side bar B, and designed to clamp it i

## No. 36.981. Shirt. (Chemise.)

Sam. L. Hyman, Nashville, Tennessee, U.S.A., 15th July, 1891; 5 years.

Claim.—A shirt constructed with a bosom, a facing extending alongside the bosom and re-enforcing the shirt body between the bosom and arm hole, a strip extending from the facing beneath and around the arm hole to the yoke, the yoke connecting said strip and the facing, said facing strip and yoke being made integral, as set forth

## No. 36,982. Shipping Package.

(Enveloppe pour le transport.)

William Harvey Cadwell, Lansing, Michigan, U. S. A., 15th July 1891 ; 5 years.

1891; 5 years.

Claim.—1st. The combination, with a head C, of slats A, A, and binding wires B, B, embracing said slats and intertwisted between them, said binding wires having an eye and a locking key for securing the extremities thereof together, substantially as specified. 2nd. The combination, with a head C, of slats A, A, and binding wires B, B, embracing said slats and intertwisted between them, said binding wires having an eye and a locking key for securing the extremities together, and a wire loop  $b^3$ , for securing the free end of said looking key to one of said slats, substantially as specified. 3rd. The combination with slats A, having inside bevel faces a, at their ends, of binding wires B, B, embracing said slats and intertwisted between them and a head C, said bevel faces a of said slats serving to tighten the binding wires B, B, as the head C is forced or driven in place and thus form a rigid package, substantially as specified. 4th. The cylindrical knockdown or extensible shipping package, consisting of the combination with slats A, having inside bevel faces a, at their ends of binding wires B, B, embracing said slats and in-

tertwisted between them, said binding wires having an eye and a locking key for securing the extremities thereof together, and said head C, being driven into place over the bevel faces a, of said slats A, so as to tighten the encircling wires or hoops B, B, and render the package rigid, said heads being removably secured in place by a chine strip so that the heads may be removed and the binding wires or hoops unfastened to extend the package in the flat, substantially as specified. 5th. The cylindrical knockdown or extensible shipping package, consisting of a woven wire slat work A, B, the wires B, B, of which are twisted together between the slats, and furnished with a loop or eye  $b^{\dagger}$ , at one extremity, and a locking key or pin  $b^{\sharp}$ , at the other extremity, formed by twisting together the ends of the wires B, B, substantially as specified.

# No. 36,983. Evaporator for Liquids.

(Evaporateur pour liquides.)

Alexis Bail, Abbotsford, Quebec, Canada, 15th July, 1891; 5 years.

Alexis Bail, Abbotsford, Quebec, Canada, 15th July, 1891; 5 years.

Claim.—Ist. The combination, in an evaporator for liquids, with the vessel A, having a channeled bottom communicating compartments, and an outlet of the trough G, and funnel H, the shallow vessel O, partially covering the said vessel A, and the automatic supply device consisting of the tube I, i, spout K, pivoted to the said tube I, cork or plug L, and float M, substantially as set forth. 2nd. The combination, with the pan or vessel A, a, a, having deep channels B, b, formed in its bottom of the divisions C, C', and E, openings D, D', d, e, and D', formed in the said compartments gates c, and f, and the collecting tube F, substantially as set forth. 3rd. The combination, in an evaporator for liquids, with the vessel A, divided into several communicating compartments of the trough G, having lugs g, adapted to be supported on the divisions of the said compartments and the funnel H, substantially as set forth. 4th. The combination, in an evaporator for liquids, with the vessel A, having rings Q, hinged to its sides of the shallow vessel O, secured to bearers P, handles p, pins R, adapted to be engaged by the rings Q, the cover S, having flanges s, and handles T, substantially as set forth. Sth. An automatic feeding device for evaporators, consisting of a tube communicating with a vessel containing sap or other liquid to be evaporated, the said tube having a down-turned mouth, a spout pivotally connected to the said tube, a cork or plug secured in the said spout under the down-turned mouth of the said type, and adapted to close the same when the end of the spout is raised, and a float dependingly secured near the mouth of the said spout, the said float being adapted to float in the liquid being evaporated, substantially as set forth.

## No. 36,984. Valve for Steam Cylinders.

(Soupape de cylindre à vapeur.)

Henry Watkeys, New Albany, Indiana, U.S. A., 15th July, 1891; 5

Henry Watkeys, New Albany, Indiana, U. S. A., 15th July, 1891; 5 years.

Claim.—1st. In combination, with the valve-seat or cylinder face provided with the two exhaust-ports p, p, between the steam ports o, o, the valve V, formed with the steam channel c, terminating with ports c', c', near the ends of the valve, and spaced with the inner edges of said ports corresponding to the distance from one end of the valve seat to the inner edge of the steam port o, near the opposite end of the valve-seat and having the end portion j, of the valve occupying one-third of the width of said steam-port o, and having the chamber d, extending over the entire width of the other steam port o, and both of the exhaust ports p, p, and intermediate bridge of the valve-seat. and provided across the portion of the said chamber adjacent to the face of the valve with two bridges forming three ports e, e, e, respectively of the same or approximately the same width as the three ports o, p, p, of the valve-seat, substantially as described and shown. 2nd. The combination of the cylinder-face formed with shoulders f, f, across its ends, the valve-seat D, mounted removably on said cylinder-face and formed with shoulders engaging the aforesaid shoulders of the cylinder-face, substantially as described and shown. 3rd. In combination, with the cylinder-face provided with the steam ports b, b, and single exhaust port a, the valve-seat D, mounted on said cylinder face and formed with the steam ports o, o, and two exhaust ports p, p, and the valve V, formed with steam channel c, terminating with ports c', c', at opposite ends of the valve, and the three exhaust ports e, e, e, communicating with the other distinction of the cylinder-face end so the valve, and the three exhaust ports e, e, e, communicating with the steam of the valve, used the valve with the steam of the valve of the

#### No. 36,985. Method of and Apparatus for Sawing Stone. (Mode et appareil pour scier la pierre.)

George Francis Clark, Rutland, Vermont, U.S. A., 15th July, 1891; 5 vears.

Claim.—1st. The herein described improvement in the art of sawing stone in the quarry, which consists in first providing openings in the stone for the movement of the support of the cutting means, then dividing the stone by the action of an endless wire or band, and automatically advancing said wire, wires, or band into said openings and through the stone as the sawing advances, substantially as described. 2nd. The herein described improvement in the art of sawing stone in the quarry, which consists in forming holes vertically in the stone, arranging vertically automatically movable wire supporting devices above said holes, dividing the stone in the quarry by the action of an endless wire or band around said means, and keeping the said endless band or wire taut by the application of weights bearing upon said wire or band, substantially as described. 3rd. The combination, with the fly wheel and the vertically adjustable or movable posts carrying guide pulleys of the endless band or wire passed over said pulleys, and around the drive pulley, substantially as described. 4th. The combination, with the fly wheel and the vertically movable posts free to automatically move in holes in the stone, of the removable receptacles at the bottom of the holes, and the endless wire passed around the fly wheel and over pulleys on Claim.-1st. The herein described improvement in the art of saw