the axle and connected with the said grooved plate by a hanging bolt or stirrup, and a downward curved piece from the axle bearing upon the reach, substantially as described. 2nd. The combination of a wagon axle, a fifth wheel thereon, a reach passing under the axle, stirrup connection between the reach and fifth wheel, and a axie, surrup connection between the reach and mit wheel, and a spring between the reach and axles, substantially as described. 3rd. The combination of a fifth wheel having a plate vertically bored as a bearing and mounted upon an axle, a king bolt fitted to the said bore and terminating above the axle and provided with a cross grooved plate to fit upon the plate first named, a reach having lateral arms at its forward end passing beneath the axle, a stirrup connecting the said reach and arms with the king bolt, and springs hung at their forward ends upon the said arms, substantially as described, whereby the springs may be hung beneath the axle in connection with the fifth wheel above the axle without the king bolt penetrating the axle.

No. 39,312. Measuring Apparatus for Bottles.

(Appareil pour mesurer les bouteilles.)

Ewing Buchan, Toronto, Ontario, Canada, 13th July, 1892; 6

Claim.—1st. As an improved measuring device, a cylinder fitted on to the neck of a bottle and having a hole in its end opposite the said neck, a ball contained in the said cylinder and designed to close either the mouth of the bottle or the hole in the end of the cylinder, in combination with an adjustable measuring vessel fitted over the cylinder and marked to indicate the various quantities it may contain, substantially as and for the purpose specified. 2nd. A cylinder A fitted on to the neck B of a bottle and hermetically sealed thereon by the elastically compressible ring C, a ball F contained in, and a hole G made through the end of the said cylinder, in combination with the measuring vessel H fitted on to the cylinder A, over the elastically compressible ring I, air vent J formed in the vessel H, and air vent K in the cylinder A, substantially as and for the purpose specified. 3rd. A cylinder A fitted on to the neck B of a bottle, and hermetically sealed thereon by the elastically compressible ring C, a flange D formed in the cylinder A, and holding the elastically compressible ring E, which rests on the top of the neck of Bottle B, a ball F contained in a hole G made through the end of the cylinder, in combination with the measuring vessel H fitted on in combination with an adjustable measuring vessel fitted over the the cylinder, in combination with the measuring vessel H fitted on to the cylinder A, of the elastically compressible ring I, air vent J formed in the vessel H, and air vent K in the cylinder A, substantially as and for the purpose specified. 4th. A cylinder A fitted on to the neck B of a bottle, and hermetically sealed thereon by the to the neck B of a bottle, and hermetically sealed thereon by the elastically compressible ring C, a ball F contained in and a hole G made through the end of the said cylinder, in combination with the measuring vessel H fitted on to the cylinder A, over the elastically compressible ring I, air vent J formed in the vessel H, and air vent K in the cylinder A, and spring valve L to protect the air vent K, substantially as and for the purpose specified.

No. 39,313. Machine for Rolling Tobacco.

(Machine à rouler le tabac.)

John Edward Ricards, Birmingham, England, 13th July, 1892; 6

Claim.—1st. The improvements in machines for rolling tobacco leaf or cut tobaccos into cigars, cigarettes, tobacco plugs and other such articles, consisting of the spindles mounted to work in combina-ation with and eccentrically to the circular table, substantially as ation with and eccentrically to the circular table, substantially as and for the purpose herein set forth and shown upon the drawings. 2nd. The improvements in machines for making cigars and other such articles, consisting of the table made movable a limited distance, substantially as and for the purpose herein set forth and shown. 3rd. The improvements in machines for making cigars, cigarettes and other such articles, consisting of the adjustable spindles substantially as and for the unprocedure in set for the adjustable spindles substantially as and for the unprocedure in set for the adjustable spindles substantially as and for the unprocedure in set for the adjustable spindles substantially as and for the unprocedure in set for the adjustable spindles substantially as and for the unprocedure in the set of the adjustable spindles substantially as and for the substantially as and for the substantially as and set of the adjustable spindles are substantially as and for the substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles are substantially as and set of the adjustable spindles dies, substantially as and for the purpose herein set forth and shown.

4th. In machines for making cigars, cigarettes and other such articles, the interchangeable spindles of varied sizes and shapes, and interchangeable tables, substantially as herein set forth. 5th. In machines for making cigars and other such articles, the table and spindles shaped to suit the article rolled, substantially as herein shown and described. 6th. In machines for making cigarettes and other such articles, the mode of and means for placing the paper upon the machine, substantially as herein set forth and shown. 7th. In machines for making cigars and other such articles, the pointer, substantially as and for the purpose herein set forth and shown upon the drawings. 8th. The improvements in machines for making cigars and other such articles, consisting of the revolving disc or discs, substantially as and for the purpose herein set forth and shown. 9th. The improvements in machines for rolling tobacco leaf or cut tobaccos into cigars, cigarettes, tobacco plugs and other such articles, substantially as and for the purpose herein set forth and shown upon the drawings.

No. 39,314. Cabinet Organ. (Orgue.)

Melville Clark, Chicago, Illinois, U.S.A., 13th July, 1892; 6 years.

part to the upper and part to the lower of said divided portions of the action, whereby the case and action may be parted at such division plane to give access to the reeds, substantially as set forth.

3rd. An organ having the action divided at a plane between the reeds and the air chamber by which the reeds are vibrated, and having the case also divided and secured part to the upper and part to the lower of said divided portions of the action, whereby the case and action may be parted at such division plane to give access to the reeds, and having the two parts of said action and case hinged to-gether at one edge, substantially as set forth. 4th. An organ hav-ing the action divided at a plane between the reeds and the air chamber by which the reeds are vibrated, and having the mutes mounted with the portion of such divided action which comprises said air chamber, and the manuel valves and levers mounted with the portion having the reeds, substantially as set forth. 5th. An organ having the action divided at a horizontal plane through the reed chamber, and having the contacting edges of the divided vertical walls of the air chamber provided with yielding packing to make said junctions air tight, substantially as set forth. 6th. An organ having the action divided at a horizontal plane through the organ having the action divided at a horizontal plane through the reed chamber, and having the contacting edges of the divided vertical walls of the air chamber provided with yielding packing to make said junctions air tight, said divided portions of the actions being hinged together at one edge and provided with clamping hooks at the opposite edges, whereby the packed junctions of the divided walls of the reed chamber may be forced tightly together, substantially asset forth. 7th. In a blast organ, the reed chamber bounded above by the reed board and below by the top of the storage bellows or compression chamber, and provided with vertical partitions dividing said chamber into compartments corresponding to and enclosing the different sets of reeds, the top of the blast bellows being provided with apertures leading into the said compartments respectively, mutes mounted on the compression chamber, and controlling the apertures into the several compartments respectively. trolling the apertures into the several compartments respectively, stops which actuate said mutes, and manual valves mounted upon the upper side of the reed board, substantially as set forth. 8th. In a blast organ, the reed chamber bounded above by the reed board and below by the top of the storage bellows or compression chamber, and provided with vertical partitions dividing said chamber into compartments corresponding to and enclosing the different sets of reeds, the top of the blast bellows being provided with apertures leading into the said compartments respectively, mutes mounted on the compression chamber and controlling the apertures into the several compression chamber and controlling the apertures into the several compartments respectively, stops which actuate said mutes, and the manual valves mounted upon the upper side of the reed board, said reed chamber being divided horizontally throughout, and the divided parts being separably secured together, whereby the action may be divided between the compression chamber and the reeds, substantially as set forth. 9th. In an organ, a reed board provided with vertically open channels J¹, having laterally undercut grooves j¹ to receive the edges of the reed blocks, and having the valve openings through the board in a position corresponding vertically to the said channels, substantially as set forth. 10th. In an organ, a reed chamber comprised between the reed board upon one side a reed chamber comprised between the reed board upon one side and the air chamber, the condition of whose air contents produces the vibration of the reeds upon the other side, said reed board having the reed valve openings and having on the side within said reed chamber the channels J^1 open in said chamber toward the air chamber and provided with laterally undercut grooves to receive the edges of the reed blocks, said chamber being partitioned vertically into compartments enclosing, respectively, each the reeds pertaining to one stop, substantially as set forth. 11th. In an organ, a reed chamber bounded at one side by the reed board and at the other side by the provinced well of the side by the red board and at the other side by the reed board. side by the apertured wall of the air chamber, the condition of whose air contents produces vibration of the reeds, such reed board being provided on the one side within said reed chamber with channels J^1 open toward the air chamber and arranged in double rows end to open toward the air chamber and arranged in doubt love end, respectively, and provided with the laterally undercut grooves to receive the edges of the reed blocks, the opposite wall of said reed chamber, to wit, the apertured wall of the air chamber, having ribs which contact the line between the rows of grooves, and which with the material left standing between said rows constitute vertical parthe material left standing between said rows constitute vertical par-tions in the reed chamber, the apertures in said air chamber wall being between such partitions, combined with mutes which control said apertures and stops which actuate the mutes pertaining to the compartments of said reed chamber, respectively, substantially as set forth. 12th. In combination, substantially as set forth, the reed board and the manuel frame supported thereby, the keys pivoted to said manual frame and the manual layers underneath the keys resaid manuel frame, and the manuel levers underneath the keys, respectively, and fulcrumed on the reed board, the keys having each a rigid projection extending from its under side downward to its corresponding lever. 13th. In combination with the reed board having valve apertures leading to the reeds, respectively, the rib L projecting upward from the reed board, the valve levers extending transversely across such rib, and the springs having one end inserted loosely through said levers and rigidly into said rib, and the other ends reacting against the levers to force their valve ends down onto Melyille Clark, Chicago, Illinois, U.S.A., 13th July, 1892; 6 years.

Claim.—1st. An organ having the action divided at a plane between the reeds and the air chamber by which the reeds are vibrated, substantially as set forth. 2nd. An organ having the action divided at a plane between the reeds, and the air chamber by which the air chamber by which the reeds are vibrated, and having the case also divided and secured the reed board to close the valve openings, substantially as set forth. In a blast organ, in combination with the blast bellows and an air conduit from the blast bellows into the storage bellows, springs which treat the reed board to close the valve openings, substantially as set forth. In a blast organ, in combination with the blast bellows and an which resist the expansion of the storage bellows, springs when the collapse of said bellows, the reaction of the latter springs when the collapse of the bellows com-