

No. 9329. Hinge for Attaching Buggy Tops. (*Charnière pour ajuster les soufflets des voitures.*)

William Robinson, Jr., Godesch, Ont., 5th November, 1878, for 5 years.

Claim.—The hinge 4 semi-circular rack 1, button catch 3 with spring D.

No. 9330. Apparatus for Cooling Wheel Tires. (*Appareil à rafraîchir les bandages des roues.*)

John Roger, Hamilton, Ont., 5th November, 1878, for 5 years.

Claim.—1st. The water tank J below the platform K, into which the tire plate A is lowered or immersed for the purpose of cooling off the tire, in connection with the tire plate A, chains E and holting chains G and lever I. 2nd. The side straps L in connection with the tank J, said straps being worked by the shifting gearing N in the centre pin P, by the lever M.

No. 9331. Hop Picking and Stripping Machine. (*Machine à éplucher et teiller le houblon.*)

Herbert G. Locke, Waterville, N. Y., U.S., 5th November, 1878, for 5 years.

Claim.—1st. The combination of drawing rollers AA' and a stripper or strippers EE, as shown in the drawings. 2nd. The combination with the drawing rollers AA' and a stripper or strippers in a hop machine of a reciprocating feeder H for assisting the said rollers in seizing the hop vine. 3rd. The combination with the drawing rollers AA' and a stripper or strippers EE, in a hop picking machine, of the reciprocating feeder H and inclined planes or wedges I attached to the said feeder for separating the strippers when the said feeder approaches the said drawing rollers. 4th. The combination of the feeder H, rock-bar M, rock-shaft N, rock-lever O and cam P driven by suitable gearing from the main shaft D to actuate said feeder. 5th. The reciprocating separator composed of parallel staggered rods set in the U-shaped support Q and the fan wheel W, for freeing the stripped hops from impurities. 6th. The combination with the drawing rollers AA' and strippers EE, of the reciprocating separator R Q and the fan wheel W, arranged as shown. 7th. The endless apron or carrier T, in combination with the roller V when attached to a hop-picking machine as shown. 8th. The combination with one or more stripping rollers, of a guard F or guards for preventing the stripped hops from passing around said roller or rollers as shown.

No. 9332. Art of, and Apparatus for Making Paper Bags. (*Art de faire les sacs en papier et appareil pour cet objet.*)

Frederick E. Porter, Baltimore, Md., U.S., 5th November, 1878, for 15 years.

Claim.—1st. In an improvement in the art of manufacturing tubes for paper bags, &c., by machinery, the method of simultaneously and continuously forming two flattened tubes with parallel pasted seams, the one within the other, from two separate sheets or webs of paper preparatory to severing into short lengths of duplex blanks. 2nd. In an improvement in the art of manufacturing paper bags by machinery which simultaneously forms two unconnected tubes, the one within the other, from two sheets or webs of paper, the method of simultaneously drawing the two papers along, applying paste to one edge of each sheet, forming the tubes and passing down the pasted seams preparatory to severing blanks from the duplex tube, connected with sheets or webs from which it is continuously formed. 3rd. In an improvement in the art of manufacturing paper tubes for bags, &c., the method of simultaneously and continuously forming two flattened parallel sealed tubes, the one within the other, and subsequently severing the tubes at intervals to form blanks. 4th. In an improvement in the art of manufacturing paper bags by machinery, the method of simultaneously forming two tubes, the one within the other, and after so forming them, severing the tubes at intervals, to form duplex bag blanks having exposed end projections or lips on the outer tubes, or on both the outer and inner tubes, to receive the paste for securing the bottom. 5th. In an improvement in the art of manufacturing duplex tubes for paper bags, &c., the method of simultaneously forming the two tubes, one within the other, pressing in their edges to reduce the width, and then widening out the tubes to cause them to fit the one closely within the other. 6th. In an improvement in the art of manufacturing paper bags, the method of uniting two tubular blanks, the one within the other, which consists in cutting the ends of the tubes (previously formed from long webs or uncut sheets) on parallel lines, to form exposed projecting lips on the inner and outer tubes, or on the outer tubes alone, applying paste to said lips and folding them upon the body of the blank. 7th. The duplex bag-blank, the same consisting of an inner and an outer tube made up of a uniform number of the thickness of paper throughout, except at the longitudinal laps or seams, and having no transverse laps or seams, and terminating at the end in exposed parallel projections or lips on the inner and outer tubes, the cuts producing such lips extending the width of the tubes only. 8th. The peculiar lined or duplex bag, the same consisting of independent inner and outer tubes united together at the bottom by pasting and folding and unconnected elsewhere, the said bag being made up from a blank of a uniform number of the thicknesses of paper throughout, except at the longitudinal laps or seams, and having no other laps or seams whatever, except those produced by the pasting down of the lips formed by cuts extending the width of the tubular blank only. 9th. The combination of mechanism for supplying two sheets of paper and applying paste to the edges thereof, said mechanism being and operating as described, and two formers to which the sheets of paper pass, along which they are drawn, and upon which they are simultaneously formed into an inner and an outer tube. 10th. The combination of the former F, the supporting arch or bridge, the annularly-grooved pressing roller, and the annularly-grooved drawing roller. 11th. The combination of the top former and the bottom former projecting beyond the top former and having a serrated end. 12th. The combination of a bottom former, the supporting arch or bridge, its suspending centrally open bracket, a top former and its supporting bracket, these members being constructed and operating as set forth. 13th. The combination of the paper-supplying rollers, the paste wheels, the paste reservoir, the depressing wheels, the formers and their supports, whereby the edges of the paper are pasted on the way to the formers, and the two sheets properly presented to the formers to be formed into a double tube as drawn along them from the supplying rollers. 14th. The combination of a roller G having an annular groove, the bottom former adapted to enter said groove, and the top former supported on said roller and laid above the bottom former. 15th. The combination of the two formers,

such as described, the annularly-grooved roller G, the groove of which receives the bottom former and upon which roller the shoulder of the top former is supported. 16th. The combination of the two formers and the drawing rollers having annular grooves of different widths to receive the bottom former and the neck of the top former, whereby the clamping of the paper between the formers, or between them and the rollers, is a cold, and the bite of the rollers upon the paper, at the sides of the former neck is insured. 17th. The combination of two formers, arranged one above the other and terminating in serrated ends, with the end of the bottom former projecting slightly beyond that of the top former and the stationary cutter above and at a slight distance back from the end of the top former, whereby the blanks may be severed in three lines. 18th. The combination of two formers having serrated ends, one projecting beyond the other mechanism, essentially as described, for supplying two sheets of paper to the formers, drawing them along the formers, and simultaneously forming them into two tubes, one within the other, the cutter above the former beyond which cut the serrated ends of the formers project, and a striker to deflect the paper upward and sever the duplex blanks on different lines, whereby lips for pasting are formed upon both the inner and outer tubes of the blank. 19th. The combination of two formers upon which two tubes are simultaneously formed, one within the other, and the pressing finger K acting upon the paper near its pasted edge. 20th. The combination of the two formers and the curved tool ended pressing finger, crossing the pasted edge of the outer tube and acting upon the inner tube. 21st. The combination of the former narrowed or recessed as at F, mechanism substantially such as described for supplying the two papers, drawing them along and forming them into a double tube, and the edge pressing or guiding plates acting on the double tube. 22nd. The combination of the top former narrowed or recessed as at F, and then widened again, the narrow bottom former and the edge pressing former plates or guides M31.

No. 9333. Composition for Making Follow Boards. (*Composition pour faire les matrices de coulage.*)

Alexander Faulkner, Cleveland, Ohio, U.S., 5th November, 1878, for 5 years.

Claim.—A composition of sand, boiled laseed oil, pulverized gum arabic and liquid glue.

No. 9334. Improvements in Boiler Feeders. (*Perfectionnements aux alimentateurs des chaudières.*)

Josiah M. Simpson Oakosh Wts U.S. and Wellington Ault, Barrie, Ont., 11th November, 1878, for 5 years.

Claim.—1st. The double-faced valve C provided with its steam passage V and stem T with posts L L together with the auxiliary valve J. 2nd. The steam valve and syphon case B provided with steam chambers H and U, and also with steam and water inlets and outlets. 3rd. The water chamber A with inlets, outlets and check valve, as shown in connection with the above mentioned. 4th. The float S and counterpoise N and cranks and connections O O, as shown in connection with the above mentioned, also syphon D with water pipe I and check valve P, in connection with the above named parts.

No. 9335. Improvements on Grain Drills. (*Perfectionnements aux semoirs-traceurs.*)

Phineas P. Mast and Charles O. Gardner, Springfield, Ohio, U.S., 11th November, 1878, for 5 years.

Claim.—1st. In combination with the feed wheel D, a feed cup or case B, a laterally moving gate F, arranged to enter the feed passage or channel opposite the side face of the wheel to check the flow of grain and diminish the discharge. 2nd. The combination of the vertical feed-wheel D, a feed cup or case B and the transversely sliding gate F, located in the bottom of the cup and arranged to move into and across the grain passage or channel, in such manner as to limit the amount of grain discharged and hold the remainder back within the cup. 3rd. The combination of the vertical feed-wheel having a grooved or channelled side face, a feed cup B and the flat faced regulating gate F, arranged to slide into said cup toward and at substantially right angles to the face of the wheel. 4th. The combination of the vertical feed-wheel having the annular shoulder in the side face, in combination with the feed-cup B, and the transversely moving feed regulating gate F. 5th. In combination with a vertical feed-wheel, a laterally moving gate F provided with a depression or recess g at its inner end. 6th. In combination with the feed wheel D, having the annular groove c, the transversely moving gate F having the recess or depression g in its end, the two being arranged for joint operation. 7th. In combination with the gate F having the depression or cavity g in its end, the feed wheel D provided with the peripheral teeth e to insure the delivery of the grain through the recess g. 8th. The combination of the feed wheel D with the shaft E having two ribs or feathers on opposite sides.

No. 9336. Improvements on Scrubbing Machines. (*Perfectionnements aux machines à frotter.*)

Alexander Meltonald, Toronto, Ont., 11th November, 1878, for 11 years.

Claim.—1st. The brush E in combination with the frame A, said frame being mounted on rollers or wheels and provided with a clean water reservoir, from which the water is fed down to the brush. 2nd. The rotary wiping and dirty water elevator G, in combination with the scraper D, and receptacle C. 3rd. The scrapers and wipers F and I in combination with the rotary elevator G. 4th. The crank handle H with pulley and belt A, in combination with the belt G, rollers G G, and G. 5th. The roller G loosely mounted on its bearing for the purpose of allowing the lower portion of the elevating belt to vibrate. 6th. The combination of the handle E, lever E' and frame of machine with the brush E, and frame of machine, for the purpose of equalizing the pressure on the scrubbing brush. 8th. The combination of the adjustable brush E, wiper and scraper F and elevator G with the frame A said frame being mounted on rollers or wheels and provided with a clean water reservoir and a dirty water receptacle. 9th. The combination of the front scraper J with the frame and working