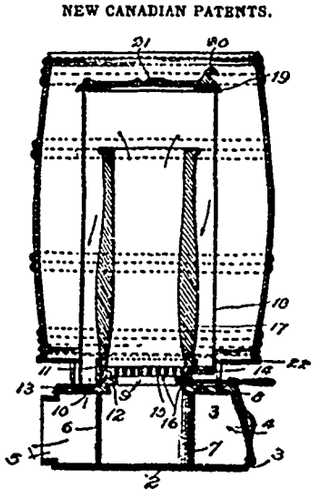
pair of oxen hitched to a heavy wood sled with a load of basket timber, logs cut about nine feet in length. On the walls inside one sees an assortment of drawing knives, some of them polished, worn and ground down to a narrow strip of steel, ready to break after many years of use. There are wooden bench vises, where the men sit to shave off the splints, and overhead one will see rows of bent white hickory handles, looking like rows of horseshoes in a blacksmith's shop.

No little skill is required to split up the wood so as to waste scarcely any, to shave out the tough, upright strips and to bend them in proper shape, to split out the "filling" and deftly weave it in. White oak, black oak, pin oak, hickory, white walnut, pignut, white ash and black ash all enter into basket making, more or less, but white oak is the standard wood.

The basket makers who prepare their own material look with contempt on the baskets made in factories, where the splints are cut out by machinery. The machine necessarily often cuts across the grain of the wood, causing a weak place in the basket. The factory baskets are much cheaper, of course. One can buy a bushel basket of this kind for 35 cents, when a hand-made basket, strengthened and bound with hoop iron, may cost $2; yet one of the latter may outwear ten of the former; the one may weigh five pounds, the other ten to twelve. Sometimes an order will come for a big wool basket, to hold twelve to twenty-five bushels, or a dealer may want a few hundred of the conical bushel baskets used by the market gardeners of Long Island and New Jersey.

It is an exciting day in the basket village when one of the big rick waggons is loaded up with baskets to go to the steamboat landing or railroad station. There may be consignments in it from half a dozen families to half a dozen dealers. And there follows an interesting suspense as the wagon rolls out of sight till the check comes back from the New York merchant through the mail. Meanwhile the big wagon makes its way down to the shipping point, discharges its load, and the driver sets about to lay in supplies of dry goods and groceries for the return trip.

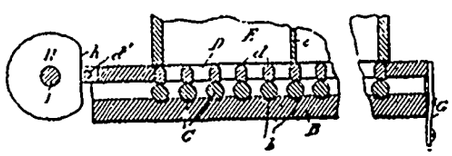
NEW CANADIAN PATENTS.



BARREL HEATER.

Patentee: Charles G. Menzel and Julius C. Etnmitt, both of Minneapolis, Minnesota, U.S.A., 12th August, 1865; 6 years.

Claim.—1st. The combination, in a barrel heater, of a base, the shell 18 supported thereby, the ring 12, the fire-pot 17 supported by said ring, the grate 15 arranged within said ring beneath said fire-pot, means for shaking said grate, the flues or openings 13, and the wall of said fire-pot being thicker near the base than at the top thereof, for the purpose set forth. 2nd. In a barrel heater, the combination, of a base, containing the independant ashpit, the smoke outlet 5, the shell 18 arranged above said base, the ring 11, and flues or openings 13, the fire-pot 17, the grate 15 beneath the same, the casting 19 for closing the top of said shell, and said casting being provided with the openings 21, for the purpose set forth. 3rd. In a barrel heater, the combination, of the base containing the independent ash-pit, the smoke outlet casting 5, the ring 11 arranged over a central opening in the top of said base, the parts to supporting said ring, the ring 12 having an inwardly turned flange and arranged within said ring 11, the grate 15, the fire-pot supported by said ring 12, the flues or openings 13, the shell 18, and a cover for closing the top of the same, substantially as described. 4th. The combination, in a barrel heater, of the base, the fixed ring 11 surrounding an opening provided in the top of said base, the shell 18, the movable ring 12, the grate 20, means for shaking the same, the openings 13, between said ring 11 and said shell, the fire-pot 17, and a barrel rest 22 provided outside of said shell, substantially as described. 5th. The combination, in a barrel heater, of a polygonal base, comprising the bottom 2, and the side walls 3, provided with the front and rear openings, the smoke outlet casting 5, the casting 8, the shell 18, the ring 12, the fire-pot 17 supported by said ring, the grate 20, arranged within said ring 12 beneath said fire-pot, the flues or openings 13, and the barrel rest 22 supported by said base substantially as described.



MATCH RACKING MACHINE.

Patentee: Edmund George Shepherd, Edwin Septimus Leetham and Charles Derbishire Chitty, all of Ottawa, Ontario, assignees of John Daniel Mantion, Hull, Quebec, all of Canada, 27th August, 1895; 6 years.

Claim.—1st. In a match racking machine, the combination of a stationary plate, an upwardly projecting ring or flange secured to each longitudinal edge of said plate provided with a series of notches at the level of the upper surface of said plate, rollers journalled in said rims between and clearing said notches and extending across said plate, a frame secured slidingly in said rims by runners adapted to move in wider grooves in said rims so as to allow vertical play and provided with slats parallel to said rollers and adapted to rest at the top of the same and in a little lower position in the spaces between them, a spring pressing said frame longitudinally in one direction, a vibrating cam disc with flat space against which said frame is pressed by said spring and carried upon a shaft receiving suitable motion and a hopper held above said frame, substantially as set forth. 2nd. In a match splint racking machine, the combination of a stationary plate B provided with a series of shallow segmental grooves extending transversely across the same, an upwardly projecting rim or flange at each longitudinal edge of said plate provided with a series of notches each adapted to pass a match splint between each groove in the plate and level with upper surface thereof, a small roller journalled in said rims between each pair of said notches and clearing the same and for which the grooves in the plate form a suitable race, and a series of slats parallel to said rollers and forming a grid above them and held slidingly and with vertical plate on and between said rollers, substantially as set forth. 3rd. In a match racking machine, the combination of a stationary plate B, rims B', at the longitudinal edges, a series of notches b', in said rims at the level of the surface of said plate, and a series of rollers C journalled in said rims between and clearing said notches, substantially as set forth. 4th. In a match racking machine, the combination of a stationary hopper, a transversely grated bottom held slidingly under the same in guides allowing vertical play, a spring pushing said grid longitudinally in one direction and a vibrating cam disc with flat space against which the other end of said grid is pushed by the spring, substantially as set forth.

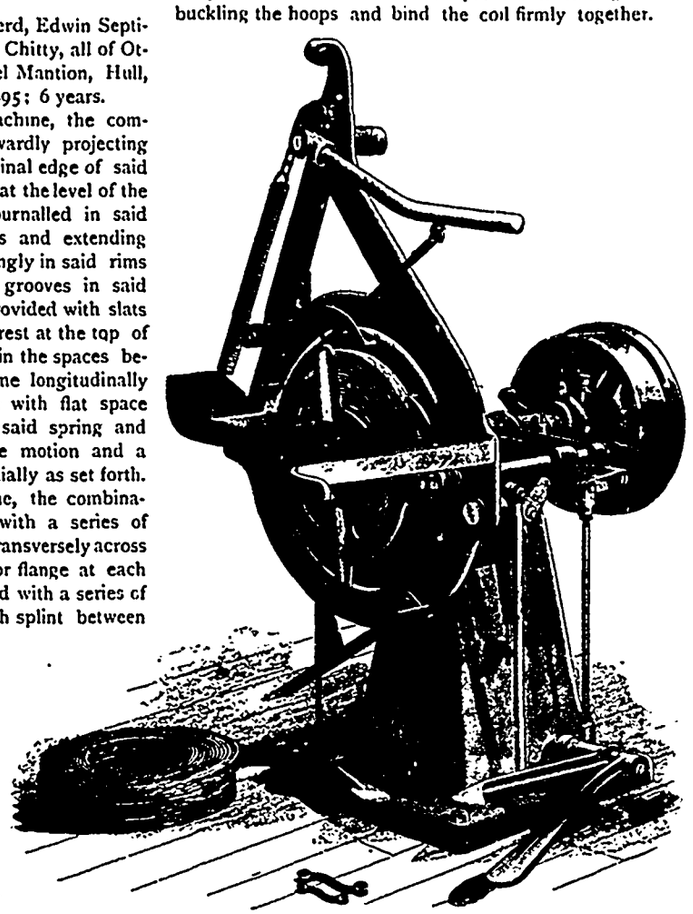
Patents for match making machines have been granted to (1) Levi H. Montross, Camden, New Jersey, and Adolph Segal, Philadelphia, dated 26 Aug., 1865; and (2) Henry A. La Chicotte and Walter S. La Chicotte, of Brooklyn, N. Y., dated 27 Aug., 1895.

ELECTRIC HOOP-COILING MACHINE.

THE engraving represents a new hoop-coiling machine, made by the Defiance Machine Co., at Defiance, Ohio, designed for accurately coiling slack barrel and keg hoops of various sizes and lengths at a rate of from 15,000 to 18,000 per day. It is constructed on a heavy iron frame cast in one piece, with a broad floor base to overcome vibration and jar to the working parts. All link and lever joints are provided with lugs which are turned true and fitted into reamed holes and held in position by washers, entirely relieving the cap screws from strain.

The quick-opening gate facilitates the removal of defective hoops, and gives free access to the coiling drum and parts. By an ingenious pneumatic cushion the carriage is returned after having discharged the finished coil of hoops without jar or noise, which greatly increases the life of the machine, and enables the operator to perform more and better work; weights and bumpers as a relief have proved unsatisfactory.

The operation of this machine is exceedingly simple. With no complicated parts or adjustments, it can be successfully handled by cheap labor. One end of the first hoop to be coiled is entered into an open jaw in the revolving drum, while the machine is in operation, which firmly holds the end of the hoop to the drum when coiled around it; each succeeding hoop is fed into the machine at the proper time to allow the preceding hoop to form a lap. A steel band is used to prevent fracturing or buckling the hoops and bind the coil firmly together.



HOOP COILING MACHINE.

The outer end of the last hoop is held to the coil by a single nail, a supply of which is kept in the convenient nailing box attached to the support rail. When the coil is completed it is instantly discharged from the machine by the weight of the operator's foot upon the pedal.

By a new and novel arrangement the steel band or coiling strap may be removed for examination or repairs, in a moment's time, by simply releasing a set-screw. The friction clutch for driving the machine is at the rear of the machine and is started and stopped by a convenient foot treadle; it is 18 inches in diameter, 4 inches face, and should run 100 rotations per minute; it can be belted to from above, below, or either side.