alphabet drums with means for rotating the same, said parts being combined and operating substantially as described. 2nd. Alphabet drums with operating cords, and keys combined, substantially as described. 3rd. An apron with figures or objects thereon, winding drums and guide rollers, devices for operating said drums, consisting of ratchets on the drums, detents engaging with said ratchets, and keys connected with said detents, and a suitable casing, all combined substantially as described. 4th. In a teaching apparatus, a drum, a pulley cord passing around the same, a key and spring combined, substantially as described, said key and spring being connected with opposite ends of said cord, whereby said cord operates the drum or pulley and afterwards creates friction thereon, as stated. 5th. In a teaching apparatus, an apron or sheet and winding devices therefor, in combination with an alarm which is operated in advance of the complete unwinding of said apron, and announces the end thereof, substantially as and for the purpose set forth. 6th. The sheet F and drums D, in combination with the cord X, stops W, a bell and bell hammer, the lattter having its heel ends adapted to be engaged by said stops, substantially as described. 7th. In a teaching apparatus, an object sheet and dividing drums therefor, ratchets and detents, in combination with deflectors for said detents, substantially as described.

No. 27,348. Picture Hook or Hanger.

(*Crochet ou patére d'image.*)

Warren M. Brinkerhoff, Auburn, N.Y., U.S., 6th August, 1887; 5 years.

Claim.—1st. A picture hanger, consisting of a picture cord support, and a retaining device or devices below the cord support for holding the cord in an invariably deflected position, the construction and arrangement of parts being such that the picture can be suspended upon the cord support, and while so suspended adjusted to its proper position, the cord then removably secured by the retaining device or devices by inwardly deflecting and engaging the same therewith, as and for the purpose set forth.. 2nd. The herein described picture hanger, consisting of a main body provided with means for engaging a support for the same, the said body being also provided with a cord support, and a projection or projections below the same for holding the cord in an inwardly deflected position, whereby the picture can be suspended upon the cord support, and while so suspended adjusted to its proper position without the cords bearing against the operative surfaces of said projection or projections, and the cord can then be removably engaged with said projection or projections and held, as and for purposes specified. 3rd. The herein described picture hanger, consisting of a plate provided with means for engaging a support for the same, the said plate having a cord support, and also provided below the cord support with a projection or projections separate from the cord support, for holding the cord in an inwardly deflected position, whereby the picture can be suspended from the cord support, and while the weight is upon the cord and its support the picture can be adjusted to the proper position, and the cord then be removably secured by the projection or projections by inwardly deflecting and engaging the same therewith, for the purposes set forth. 4th. The herein described picture hanger, consisting of a plate provided with means for engaging a support for the same, a cord support and two hooks below, and separate from the cord support, for removably engaging both of the descending portions of the picture cord, for the purposes specified. 5th. The herein described picture hanger, consisting of a main body provided with means for engaging a support for the same, a support for the picture cord, and two cord engaging projections below the cord support separate therefrom, and within vertical lines from the outer edges of such cord support, for the purposes set forth. 6th. The herein described picture hanger, consisting of a plate provided with means for engaging a support for the same, a support for the picture cord, having its outer lateral edges extending nearly or quite to the edges of said plate; the said plate having below the said cord support a centrally depending portion of less width than the cord support, said depending portion being provided with two hooks for removably engaging the cord below the cord support, for the purposes described. 7th. In combination, with the support for a picture cord, of a construction below the cord support having two bearings for removably engaging the portions of the picture cord below the cord support, and lying within the lines of the cord when passing directly from said support to the picture, substantially as described. 8th. A picture hanger, consisting of a main body provided with means for engaging a support for the same, tending to hold it from lateral vibration upon said support, a cord support, and a projection or projections in a different horizontal plane from the cord support for holding the cord in an inwardly deflected position, whereby the picture can be suspended on the cord support, and while so suspended adjusted to its proper position without the cord bearing against the operative surfaces of said projection or projections, and the cord can then be placed in removable engagement with said projection or projections, and restrained from lateral vibration and from movement upon the cord support, substantially as described.

No. 27,349. Barrel Hoop. (*Cerale de baril.*)

James Cosgrove, Brooklyn, N.Y., U.S., 6th August, 1887; 5 years.

Claim.—1st. A barrel hoop having a lengthwise cut or cuts, provided with beveled edges, substantially as and for purposes described. 2nd. A barrel hoop having a lengthwise cut or cuts, for the purpose of increasing its flexibility transversely, said cut or cuts being made terminate at a certain distance from the ends of the hoop, substantially as set forth. 3rd. A barrel hoop composed of two or more sections separated by lengthwise cuts, and connected to one another near the ends of the hoop and also at a point intermediate of said ends, substantially as set forth. 4th. A barrel hoop having its inner and outer walls flaring and parallel to one another, and provided with a lengthwise cut or cuts for the purpose of increasing the flexibility transversely, substantially as set forth.

No. 27,350. Paper Bag Holder.

(*Porte-sac de papier.*)

Marshall R. Wynn, Toronto, Ont., 6th August, 1887: 5 years.

Claim.—1st. A paper bag holder hooked in position, and composed of a shouldered pin with a detachable handle, the sharpened end of said pin which carries the paper bags being adapted to be placed in a hole formed on the inward side of the leg of a bracket, and the squared shouldered end of said pin when detached from the handle being passed through a slot formed in the other leg of the bracket, and through a hole formed near the free end of a spring covering said slot, substantially as described and for the purpose specified. 2nd. A metal bracket B having eye C to receive a hook which holds it in position, and having hole *h* and slot *b* formed in the legs of said bracket, in combination with a shoulder pin A, which carries the paper bags, spring D secured to said bracket by pin *d*, and having a hole *f* formed near the free end of said spring, to receive and keep in position the squared end *g* of the shouldered pin A, substantially as specified. 3rd. A metal bracket B adapted to be held suitably in position and to receive in a hole *h*, and slot *b* formed in the bags thereof, a shouldered pin A having a handle detachable, after piercing the bags with said pin, and held in position by a spring D having a hole formed near the free end thereof to receive and keep in position the squared end of the shouldered pin A, substantially as specified.

No. 27,351. Sheaf Carrier and Bundle Dropper. (*Porte-javelle à bascule.*)

Adam H. Bell, Hillsborough, Ill., U.S., 6th August, 1887; 5 years.

Claim.—1st. The combination, with a harvester, of a sheaf carrier having a direct tilt in a vertical direction, and at the same time therewith a forward movement on an arc of a circle, as set forth. 2nd. The combination, with a harvester, of a sheaf carrier having an automatic direct tilt in a vertical direction, and at the same time an automatic forward movement on an arc of a circle, as set forth. 3rd. The combination, with a harvester, of a sheaf carrier pivotally connected therewith, and having its line of axis above the bottom of said carrier, whereby the said carrier moves downward and forward in discharging its load. 4th. The combination, with a harvester and trip mechanism, of a sheaf carrier having its line of axis above the bottom thereof, but away from the centre of gravity of both carrier and trip mechanism, and said carrier also having an automatic direct tilt in a vertical direction at the same time with a forward movement on an arc of a circle, and an automatic return to its normal position, as set forth. 5th. The combination, with a harvester, of a sheaf carrier and a sliding suspension rod connecting the carrier and harvester frame, as set forth. 6th. The combination, with a harvester, of a sheaf carrier and a sliding suspension rod provided with an adjusting nut for adjustably connecting the carrier and harvester frame, as set forth. 7th. The combination, with a harvester, of a sheaf carrier, a sliding suspension rod connecting the carrier and harvester frame, and a pivotal eye bolt operative on the carrier and engaging the adjacent end of said rod, as set forth. 8th. The combination, with a harvester, of a sheaf carrier provided with a pivotal eye bolt, a sliding suspension rod connected at one end to the harvester frame, and having its other end hooked to the eye bolt, and a supporting arm pivotally connected at one end to said harvester frame, and having its other end provided with a slot that comes over upon the hook end of the suspension rod, as set forth. 9th. The combination, with a harvester, of a sheaf carrier having its main frame and a supporting rod therefor pivotally connected to eye plates on the harvester frame, and the eyes of said plates having a diameter greater than the corresponding parts of the carrier, and countersunk on both sides, as set forth. 10th. The combination, with a a harvester, of a sheaf carrier having the inner terminus of its main frame in the form of a lipped pin, said pin and a supporting rod for the carrier pivotally connected to countersunk eye plates on the harvester frame, and the eye of the forward plate elongated to permit the passage of the lip on said pin, as set forth. 11th. The combination, with a harvester, of a tilting sheaf carrier having a lever arm, and a trip mechanism comprising a toggle link secured at one end to the lever arm, and an angular arm having its bearings on the harvester frame, one of its ends connected to the link and its other end terminated in a foot piece, substantially as and for the purpose set forth. 12th. The combination, with a harvester, of a journal or rock shaft having suitable bearings with relation to the harvester frame, and a crank bend outside said bearings, and a sheaf carrier secured to the journal or shaft outside the crank, whereby when said journal or shaft is rocked the carrier moves downward and forward to discharge its load, substantially as set forth.

No. 27,352. Boiler. (*Chaudiére.*)

William C. North, Cleveland, Ohio, U. S., 6th August, 1887; 5 years.

Claim.—A boiler having a convex upper surface, a series of upward projections thereon, a central opening allowing the heated currents to pass latterally under the article being cooked, substantially as described.

No. 27,353. Apparatus for Tilting Casks.

(*Appareil à reuverser les tonneaux.*)

James Hill, Melbourne, Victoria, 6th August, 1887; 5 years.

Claim.—1st. The combination of a cylindrical casing containing a spiral or coiled spring, with a rod having a cap at its top to press on such spring, and a screw-coupled suspension bar connected to it below such bar having a hook on its lower end for attachment to the cask, substantially as herein described and explained and as illustrated in my drawings. 2nd. The combination of the hooked upper end of the spring casing, with either the T or the H section metal supporting bars, secured and arranged substantially as herein described and explained and as illustrated in my drawings. 3rd. The combination of the screwed suspension bar, having either a crank or a lever handle at its centre, with the hook below, and the spring and its casing above, substantially as herein described and explained and as illustrated in my drawings.