

No. 32,437. Cord and Rope Making Machine. (*Machine à fabriquer les cordes et les câbles.*)

Thomas B. Dooley, Boston, Mass., U.S., 3rd October, 1889; 5 years.

Claim.—1st. The combination, in a cord and rope making machine, of a series of flier frames, each adapted to receive a spool, with a plurality of strands, gearing for rotating said frames to twist the strands carried thereby into cords, a head at which said cords are formed into rope, and provided with feed and take-up spools, gearing for imparting a double rotation to said feed, and take-up spools to effect an axial and endwise rotation of the same, the endwise rotation of the take-up spool being at a slower rate of speed than that of the feed spool, substantially as set forth. 2nd. The combination in a cord and rope making machine, of a series of flier frames, each adapted to receive a spool, with a plurality of strands, gearing for rotating said frames to twist the strands carried thereby into cords, spools g' for receiving said cords, means for actuating said spools g' , a head at which said cords are formed into rope, and provided with feed and take-up spools, gearing for imparting a double rotation to said feed, and take-up spools to effect an axial and endwise rotation of the same, the endwise rotation of the take-up spool being at a slower rate of speed than that of the feed spool, substantially as set forth. 3rd. The combination of a shaft j , feed and take-up spools, and gearing for imparting a double rotation to said feed and take-up spools, to cause them to rotate axially and endwise, the endwise rotation of the take-up spool being slower than that of the feed spool, substantially as set forth. 4th. The combination in a cord and rope making machine, of a series of flier frames, each adapted to receive a spool with a plurality of strands, gearing for rotating said frames to twist the strands carried thereby into cords, a revolving head comprising mechanism, substantially as described, for laying up the cords into rope mechanism, substantially as described, for taking up the completed rope, and mechanism, substantially as described, for imparting motion to the take-up mechanism for taking out a slight amount of the twist put into the rope, to avoid kinking in the latter, as set forth. 5th. The combination, with take-up spool n^2 and its revolving shaft, of the gear wheel q , gear wheel q' , and peripherally grooved take-up pulleys q' , q'' , and means for supporting said pulleys and last mentioned gear wheel, as set forth. 6th. The combination, in a cord and rope machine, of a series of flier frames, each adapted to receive a spool with a plurality of strands to form cords, gearing for rotating said flier frames, a shaft j , a hub n^1 mounted thereon, bearings n^2 , n^3 carried by said hub, a take-up spool n^3 mounted in said bearings and upon which the cords are laid in rope form, devices intermediate of said spool, and frames for receiving the cords, devices, substantially as described, intermediate of said take-up spool, and flier frames for feeding forward the cords, twisting the same into rope, and feeding forward the rope as twisted, means for rotating said hub on said shaft j , and devices for rotating the take-up spool in its bearings, gear wheels q , q' , peripherally grooved take-up pulleys q' , q'' , a coiler can or receptacle, and gearing for revolving the same, substantially as set forth. 7th. The combination, with the fliers a , having the square notches or holes a' , of the spool shaft b having square ends corresponding to said square holes a' , split sleeve b' , sleeve c , spline c' , and spool e provided with the hollow barrel b^2 having the groove c' , as set forth. 8th. The combination, in a cord and rope making machine, of a series of flier frames, each adapted to receive a spool with a plurality of strands, a hollow spindle for each flier, and having a gear wheel, gearing for revolving said gear wheel, stem f' located in said spindle, spring f^2 , pin f^3 , and nut T , and a saddle f suspended on said stem, and twisting and coiling devices, substantially as set forth.

No. 32,438. Buffer. (*Lissoir de cordonnerie.*)

Sidney W. Winslow, (assignee of Andrew W. Rogers), Beverly, Mass., U.S., 3rd October, 1889; 5 years.

Claim.—1st. In combination with the foot of a buffer, an abrading covering for said foot having a practically stiff margin extending beyond the margin of the said foot, and a non-abrading edge, substantially as described. 2nd. In combination, with a foot, of a buffer, an abrading covering for said foot, said covering having a continuous working face, a practically stiff margin extending beyond the margin of the foot, and a non-abrading edge, substantially as described. 3rd. In combination, with the yielding foot of a buffer, an abrading covering loosely mounted on the flexible foot, and extending beyond the margin of the foot, substantially as described. 4th. A detachable abrading covering for buffers, having its connections to hold it to the foot attached directly to the inner face of said covering, substantially as described. 5th. An abrading covering for the foot of a buffer, combined with connections attached to its inner face within the margin thereof, for connecting it to the foot, substantially as described. 6th. An abrading covering for buffers, having its flexible connections to hold it to the foot attached directly to the inner face of said cover, substantially as described. 7th. In combination with the abrading covering, provided with connections on its inner face, a foot having notches or holes to receive the connections, substantially as described. 8th. An abrading covering for buffers, having a reinforcement on its inner face, and connections for holding it to the foot integral with said reinforcement, substantially as described. 9th. An abrading covering for buffers having an annular reinforcing strip secured upon the inner face at the margin, and immediately adjacent thereto, substantially as described. 10th. An abrading covering for buffers having a marginal reinforcement on its inner face, with connecting tongues formed on the inner edge of said reinforcement, combined with the foot having notches or holes, substantially as described. 11th. An abrading covering for buffers, combined with a buffer foot, and holding connections between the cover and the foot, the said holding connections being arranged to draw obliquely to the surface of the cover and in line with the rotation of the foot, substantially as described.

No. 32,439. Buffer Covering.

(*Couverture de lissoir de cordonnerie.*)

Sidney W. Winslow, (assignee of Andrew W. Rogers), Beverly, Mass., U.S., 3rd October, 1889; 5 years.

Claim.—1st. A flexible abrading covering for buffers, having abrading material on both sides, so as to be reversible, as shown. 2nd. Attaching connections for the reversible abrading covering, removably secured to said covering. 3rd. Flexible attaching connections secured to the covering, and projecting outwardly from the periphery thereof. 4th. The reversible covering for buffers, consisting of two discs placed back to back, with abrading material on the other face of each. 5th. A double-faced abrading covering removably connected to the buffer foot. 6th. An abrading covering for the foot of a buffer, formed of tongues cut circumferentially out of the material of the covering.

No. 32,440. Buffer Covering.

(*Couverture de lissoir de cordonnerie.*)

Sidney W. Winslow, (assignee of Andrew W. Rogers), Beverly, Mass., U.S., 3rd October, 1889; 5 years.

Claim.—1st. An abrading covering for the foot of a buffer used to finish the surface of boot and shoe soles, having attaching connections formed by being cut out from the material of the covering within the margin thereof. 2nd. A reversible abrading covering having its attaching connections, formed out of the material of the covering within the margin thereof. 3rd. Attaching connections for the said covering formed of tongues cut circumferentially out of the material of the covering itself.

No. 32,441. Paper Cutter.

(*Machine à trancher le papier.*)

The American Roll Paper Company, (assignee of Charles K. Pickles), St. Louis, Mo., U.S., 3rd October, 1889; 5 years.

Claim.—1st. In a paper-cutting machine, the combination of a fixed knife, and arms gravitating toward the knife, and adapted to support the paper roll, substantially as set forth. 2nd. The combination in a paper-cutting machine, of a knife, gravitating arms, with bearings adapted to receive the gudgeons of the roll upon which the paper roll is supported, and standards preventing the backward swing of the gravitating arms, substantially as and for the purpose set forth. 3rd. The knife of a paper-cutting machine made with a spring at its inner side, adapted to raise the edge of the paper from the knife, substantially as set forth. 4th. The combination in the knife of a paper-cutting machine, of the spring 13, and recess 12, substantially as and for the purpose set forth.

No. 32,442. Buffer. (*Lissoir de cordonnerie.*)

Sidney W. Winslow, co-administrator with Freeman W. Winslow of the estate of Freeman Winslow, (assignee of Sidney W. Winslow and Freeman W. Winslow), Beverly, Mass., U.S., 3rd October, 1889; 5 years.

Claim.—1st. An abrading covering for boot and shoe buffers, the same consisting of a disc composed of a sheet of thin material having an abrading surface, and a non-abrading edge combined with connections for holding it to the foot, and the foot attached by said connections to the covering between the centre and margin thereof, substantially as described and for the purpose set forth. 2nd. As an article of manufacture, an abrading covering for boot and shoe buffers, consisting of a disc composed of a sheet of thin material having an abrading surface, and a non-abrading edge, attaching connections and countersinks between the centre and margin of said covering, adapted to receive the attaching connections to hold it to the foot, substantially as described. 3rd. An abrading covering for boot and shoe buffers, consisting of a disc composed of a sheet of thin material moulded with countersinks at intervals on its working surface between the centre and the margin, combined with a foot, and connecting devices inserted through the countersinks in said covering and through the foot, substantially as described.

No. 32,443. Preparation of Watermarks and Waterprints. (*Préparation du filigrane.*)

James Husnik, Prague, Austria, 3rd October, 1889; 5 years.

Claim.—1st. The method of obtaining semi-transparent figures, signs or drawings in paper, by pressing said paper with matrices of chromogelatine, substantially as described and set forth. 2nd. The method of preparing drawings for the purposes hereinbefore mentioned, consisting in tracing the lights only instead of the shades, substantially as described and set forth. 3rd. A gelatine relief for producing watermarks or prints, prepared in the manner and for the purposes hereinbefore described.

No. 32,444. Steam Engine. (*Machine à vapeur.*)

Joseph W. Dennis and Frank A. Shoemaker, Buffalo, N.Y., U.S., 3rd October, 1889; 5 years.

Claim.—The combination with the cylinders of an intermediate chamber which communicates with the inner ends of the cylinders, and which is at one side provided with an opening closed by a removable cover, and at the opposite side closed and provided with a central shaft bearing, and an annular valve seat containing an annular exhaust port surrounding said bearing, and ports leading to the ends of the cylinders, a shaft arranged in said bearing, a crank secured to said shaft, a valve mounted on said shaft between the crank and the valve seat, and piston connected with said crank, substantially as set forth.