

No. 16,791. Improvements on Horse Collars.*(Perfectionnements aux colliers de cheval.)*

John H. Snyder and William Brodie, Muskegon, Mich., U. S., 4th May, 1883; for 5 years.

Claim.—1st. The combination of two hames having pads united to the same through only a portion of their length, leaving the upper ends of the hames free, with a jointed curved bar connecting the hames by hinged connections. 2nd. The combination of the hames with the curved bar C formed in two parts and united by a suitable fastening. 3rd. The curved bar C formed in two parts, the parts being provided respectively with the plates *d* and *d*₁ and the hook *c*. 4th. The curved bar secured to the hames by hinged joints, the pintles of which extend backward and form the trace hooks, in combination with the pads and their adjustable connecting strap.

No. 16,792. Improvements in the Manufacture of Paper Pulp.*(Perfectionnements dans la fabrication de la pâte à papier.)*

George H. Mallary, London, Eng., 4th May, 1883; for 5 years.

Claim.—1st. In a machine for cutting or scraping fibres from wood blocks, the tilting bars *r* arranged in slots or apertures in the rotating disk, and operating in combination with the cutting or scraping blades and other parts. 2nd. In a machine for scraping or cutting wood for the production of fibrous materials, the employment of a device or devices for ensuring the proper position of the wood in relation to the blade or cutter which acts thereon. 3rd. The combination, with the tilting bar, of the spring or other device arranged to hold the same in an elastic or yielding manner. 4th. The air passages arranged in combination with the central pipe or tube *g*, and with the scraping blades *c* and tilting bars *r* in such a manner as to conduct the air from the said pipe to the said blades and tilting bars.

No. 16,793. Improvements in Paper Bags.*(Perfectionnements aux sacs en papier.)*

Daniel Shirley, New Market, Va., U. S., 4th May, 1883; for 5 years.

Claim.—The combination, with the bag, of a flexible strip extending around the same as a re-enforce, said strip being provided with the gummed extension.

No. 16,794. Improvement on Anchors.*(Perfectionnement des ancrés.)*

Lewis H. Rhoades, Bay Centre, W. T., U. S., 4th May, 1883; for 5 years.

Claim.—1st. The improved anchor having the shank made in two parts *b*, also having divided or branched flukes *c*, said shank and flukes being connected by the arms *d* which merge in points *e* and form the flukes. 2nd. The eye *a* for the cable, connected to the shank *b* by the elbows *c*, in combination with the divided or branched flukes *e* and connecting arms *d*.

No. 16,795. Improvement on Envelopes.*(Perfectionnement des envelopes.)*

Knott H. Pedrick, Lynn, Mass., U. S., 4th May, 1883; for 5 years.

Claim.—The middle portion A having the short end flaps *a a* which are folded inward and provided with adhesive material on their outer faces, an inner flap B having the cut-away portion *e* and folded down upon the middle portion A so as to cover nearly the entire face of the same, and secured to the end flaps, and an outer flap *c* folded down upon the inner flap and extending flush with the edges of the inner portion A, the said construction producing an article having three unbroken plies of uniform thickness except where the side flaps and cut-away portion *e* are located, and affording a smooth unbroken body of uniform thickness upon either side of which a clear and regular impression can be made by a printing press.

No. 16,796. Improvements on Tubular Lanterns.*(Perfectionnements aux lanternes tubulaires.)*

James Moncur, Owen Sound, Ont., 4th May, 1883; for 5 years.

Claim.—In combination with the tubes B B and D, the disk C provided with a spring bail E frictionally passing through staples K and having pendent springs G and spring wires A bent to encompass wire guides J or the tubes B of the lantern.

No. 16,797. Improvements on Knock-Down Tables.*(Perfectionnements aux tables brisées.)*

Frederick H. De Tray and Reuben D. Vermilya, McLure, Ohio, U. S., 4th May, 1883; for 5 years.

Claim.—1st. The combination, with the table frame, the sides and ends of which have strap bails upon their inner sides, of the detachable top having hinged hooked arms upon its under side extending through the strap bails of the frame, and suitable keys or wedges driven between the hooked ends of the hinged arms and the under sides of the strap bails. 2nd. The knock-down table frame consisting of the legs connected in pairs by the end pieces F and having outwardly projecting hooked arms H and recesses N, in combination with the side pieces J having strap bails K provided with latterly projecting studs M and the keys L. 3rd. The knock-down table consisting of knock-down frame E F J provided with strap bails O and pins Q, in combination with the detachable top plate A having hinged hooked arms C and recesses R, and the keys or wedges P.

No. 16,798. Improvements on Railway Track Layers.*(Perfectionnements aux machines à poser les voies de fer.)*

John Turner, Grosse Isle, Mich., U. S., 4th May, 1883; for 5 years.

Claim.—1st. A track laying car provided with a longitudinal track upon its floor, and an elevated longitudinal track of broader gauge, which latter projects beyond the end of said car, in combination with an auxiliary car, running upon said elevated track and provided with a hoisting apparatus. 2nd. In combination with a platform construction car of the ordinary character and provided with side pockets and a longitudinal track, the overhanging brackets adapted to support a track upon the track laying car.

No. 16,799. Improvements in Flour Mills.*(Perfectionnements aux moulins à blé.)*

Harley M. Rounds, Clear Lake, Iowa, and Richard K. Noye, Buffalo, N. Y., U. S., 4th May, 1883; for 5 years.

Claim.—1st. The combination of a pair of rollers, each composed of several sections having the spaces between the working faces increasing in fineness, and the working faces increasing in length in the several successive pairs of sections, a separate feed and discharge compartment, and a separate sifting device for each pair of sections. 2nd. The combination of a pair of rollers each, composed of several sections having the spaces between the working faces increasing in fineness in the several pairs of sections, a separate feed and discharge compartment for each pair of sections, means whereby a differential peripheral rate of speed is imparted to the rollers, and a separate sifting device for each pair of sections. 3rd. The combination of a pair of rollers, each composed of several sections having the spaces between the working faces increasing in fineness, and the working faces increasing in length in the several successive pairs of sections, and a separate feed and discharge compartment for each pair of sections. 4th. The combination of a pair of rollers, each composed of several sections having the spaces between the working faces increasing in fineness in the several successive pairs of sections, means whereby a differential rate of speed is imparted to the rollers, a separate feed and discharge compartment for each pair of sections, means whereby the spaces between the working faces of the several pairs of sections can be increased or reduced, and a separate sifting device for each pair of sections. 5th. The combination of a pair of rollers, each composed of several sections having the spaces between their working faces increasing in fineness, and the working faces increasing in length in the several successive sections, a separate feed and discharge compartment for each pair of sections, and separating sieves corresponding in number with the several pairs of sections and increasing in width as the sections increase in length. 6th. The combination of a pair of rollers, each composed of several sections having the spaces between the working faces increasing in fineness in the several successive pairs of sections, means whereby a differential rate of speed is imparted to the rollers, a separate feed and discharge compartment for each pair of sections, separators whereby the product from each pair of sections is separately sifted, and an elevator whereby the coarse product of each separation is delivered to the next following pair of roller sections. 7th. The combination of a pair of rollers, each composed of several sections having the spaces between the working faces increasing in fineness in the several successive pairs of sections, means whereby a differential rate of speed is imparted to the rollers, a separate feed and discharge compartment for each pair of sections, separators whereby the product from each pair of sections is separately sifted, an elevator whereby the coarse product of each separation is delivered to the next following pair of roller sections, and a discharge whereby the coarse residue of the last separation is separately discharged. 8th. The combination, with the rollers B B₁ and journal boxes N O, of the levers R, screw-threaded rods *r*, standards S, screw nuts *s* and springs *q*.

No. 16,800. Improvements on Saw Sets.*(Perfectionnements aux fers à contourner.)*

Emanuel Larson, South Pueblo, Col., U. S., 4th May, 1883; for 5 years.

Claim.—1st. The combination of the plate A, pivot B and bevelled gear wheels Q P provided with the projections R P₂ and actuated by the crank shaft *q*, whereby the saw is moved and set. 2nd. The combination, with the base A, pivot B and wheels P Q, of the rubber washer *c* and nut *d*. 3rd. The combination, with the base A having extensions A₅ provided with flanges B₅ and carrying friction rollers *c*₅, of the saw clamp carrying flanges B₅ extending parallel to flanges B₅. 4th. The combination, with the base A and pivot B, of the bar E, screw K, double bar J J₂ and clamp H H₂. 5th. The combination, with the double bar J J₂ and clamp H H₂, of the springs L M and their followers *m*. 6th. The combination, with the plate A, of the saw clamp consisting of the two jaws H H₂, the lower of which is provided with trunnions *h* at its ends, and the screws G whereby the saw is adjustably held while being moved and set. 7th. The combination, with the double bar J J₂ and saw clamp H H₂, of the screw K and the slotted bars V and screws *v*.

No. 16,801. Improvements on Pad-Holders.*(Perfectionnements aux porte-buvards.)*

William J. Coughlin, Lowell, Mass., U. S., 4th May, 1883; for 5 years.

Claim.—1st. The combination of the elastic sheet B permanently bent upward near its ends at B₁ B₂ at about right angles, and provided with hooks B₁₁ B₁₁₁ and a handle A adapted to enter said hooks and to be held in position by the elasticity of said plate. 2nd. In a pad-holder consisting of an elastic sheet B permanently bent upward near its ends at B₁ B₂ and provided with hooks B₁₁ B₁₁₁ at its end edges, in combination with a handle A formed of wire bent into a quadrangular form.

No. 16,802. Improvements on Speed Indicators.*(Perfectionnements aux indicateurs de la vitesse.)*

Thomas Blanchard, Stoughton, Mass., U. S., 4th May, 1883; for 5 years.

Claim.—1st. The bracket L, shaft N, segment O, shaft S, spur wheel