No. 26,182. Band Cutter for Thrashing Machines. (*Tranche-Hart pour Machines à Battre.*)

John Henry, Charles G. Kenyon, Ardoch, and Robert Woods, Minto, Dak., U.S., 9th March, 1887; 5 years.

Claim.—1st. The combination, in a band-cutter, of the frame arms pivoted thereto, a carrier for the grain bundles, a cylinder journalled above and across the carrier in said arms, knives supported in the cylinder and operating transversely of the carrier, and a cam revolving inside the knife cylinder and engaging the knives to operate them, substantially as herein set forth. 2nd. The combination, in a band cutter, of the carrier frame, a carrier H, *h*, a cylinder A mounted loosely on a shaft C, the supporting arms E, E for said shaft pivoted on the carrier shaft J, knives B fitted in the cylinder A and having studs *b*, a cam D *d* fixed to shaft C and engaging the knife, studs *b*, pulleys and belt P S T driving the cylinder, pulleys R U V driving the cam shaft and driving gearing operating the shaft J, substantially as herein set forth. 3rd. The combination, with the carrier frame F, carrier H, *h*, and the cylinder A, carrying knives B and supported in arms E, E, pivoted in the carrier shaft J, substantially as specified, of the feet W on the arms, substantially as herein set forth. 4th. In a band-cutter, the knife cylinder A, constructed with heads a^1, staves *a* having outwardly turned and notched edge flanges b^1, and secured to heads a^1 and the knives B fitted between the staves, substantially as herein set forth. 5th. In a band-cutter, the knife-cylinder A constructed with staves *a*, having notched edge flanges b^1, heads a^1, sleeves a^3, shaft C, knives B projecting between the edges of the staves and the cam D, *d* on shaft C, substantially as herein set forth.

No. 26,183. Metal Shingle. (*Bardeau Métallique.*)

The Metallic Roofing Company (assignee of Levi H. Montross), Toronto, Ont., 9th March, 1887; 5 years.

Claim.—A metal plate A, having a fold formed as at *a*, to receive the edge of the metal plate B, in combination with the flange *b*, formed on the inner edge of that portion of the plate A extending below the plate B, substantially as described.

No. 26,184. Mechanism for Operating a Roll of Paper having Printed or written on its Surface the Subject matter of any Lecture, etc. (*Mécanisme pour Actionner un Rouleau de Papier Portant Impression ou Ecriture pour Conférences, etc*)

Alexander G. Hunter, Dundalk, Ont., 9th March, 1887; 5 years.

Claim.—1st. The paper N rolled upon suitable spindles and placed within a case B, having an opening Z formed in it, in combination with mechanism designed to impart a travelling movement to the paper N, substantially as and for the purpose specified. 2nd. The paper N rolled upon suitable spindles, and placed within a case B, having an opening Z formed in it, mechanism for imparting motion to the said paper N, in combination with an internally tapered drum W connected to a longitudinally adjustable spindle X, and arranged to engage with springs V, which are attached to mechanism of the machine, substantially as and for the purpose specified.

No. 26,185. Cattle Stanchion. (*Stalle de Bétail.*)

John Priest, Franconia, N.H., U.S., 9th March, 1887; 5 years.

Claim—1st. A stanchion, comprising an upright, a cross-bar secured to the upper end thereof and slotted at its free end, the swinging bar projecting up through the slotted end of the cross-bar, and a catch-bar pivoted between its ends above the slotted cross-bar, the long arm having a slot to receive the projecting end of the swinging handle, substantially as set forth. 2nd. The combination, with the rigidly connected upright and slotted cross-bar, and the catch-bar pivoted above said cross-bar and slotted at its inner end of the upright swinging bar, provided with a plate on its outer edge below the inner end of the catch-bar, to prevent the same from being raised by the horn of a confined animal, substantially as set forth.

No. 26,186. Dumper for Load Litters. (*Bascule pour Monte-Charges.*)

William Sherk, New Hamburg, Ont., 9th March, 1887; 5 years.

Claim.—1st. A cradle D, in combination with the ropes E, F and G, arranged substantially as and for the purpose specified. 2nd. A cradle D, in combination with the ropes E and F, arranged substantially as and for the purpose specified. 3rd. A waggon-rack B, connected to and arranged to be operated by any ordinary load-lifter in combination with the cradle D, detachably connected to the ropes E, F and G, substantially as and for the purpose specified.

No. 26,187. Nut. (*Ecrou.*)

The Elastic Nut Company, Milwaukee (assignee of Justin H. Burdock, Utica), Wis., U.S., 9th March, 1887; 5 years.

Claim.—A nut of steel or analogous elastic material, formed with a longitudinal slit from one end to the other, and with one or more sides of the nut somewhat flattened or driven inward, whereby the nut in its normal condition has a bore at a variance from a true circle at the point or points where said flattening occurs.

No. 26,188. Spark Arrester. (*Garde-Etincelle.*)

William T. Reed, Winnipeg, Man., and Peter Clarke, Toronto, Ont., 10th March, 1887; 5 years.

Claim.—1st. An exhaust pipe, having a central tube extending from a point near the bottom of the smoke box to a point at or near the mouth of the exhaust nozzle, substantially as and for the purpose specified. 2nd. An exhaust-pipe, having a central tube extending from a point near the bottom of the smoke-box to a point at or near the mouth of the exhaust nozzle, in combination with a petticoat extending over the lower mouth of the said tube, substantially as and for the purpose specified. 3rd. An exhaust pipe, having a central tube extending from a point near the bottom of the smoke box to a point at or near the mouth of the exhaust nozzle, in combination with a petticoat extending over the lower mouth of the said tube, and a netting extending over the bottom of the petticoat, substantially as and for the purpose specified. 4th. A straight smoke-stack D, having a corrugated cone E suspended near its top, and corrugations *d* formed within it, substantially as and for the purpose specified. 5th. The corrugated deflecting plate F, the corrugated lease plate H, and corrugated front plate I, arranged as specified, in the smoke-box B below the wire-netting J, in combination with an exhaust pipe A, having a central tube *a* extending from a point near the bottom of the smoke-box B to a point at or near the top of the exhaust nozzle *b*, substantially as and for the purpose specified. 6th. The exhaust pipe A, having a central tube *a*, extending from a point near the bottom of the smoke-box B to a point at or near the mouth of the exhaust-nozzle *b*, in combination with the corrugated cone E suspended in the centre of the smoke-stack D, having corrugations *d* formed in it, substantially as and for the purpose specified.

No. 26,189. Tanning Process. (*Procédé de Tannage.*)

James T. Rhyne, William C. Red and Joel G. Hamilton, Durant, Miss., U.S., 10th March, 1887; 5 years.

Claim.—My improvement in tanning and finishing hides, which consists in the following steps, to wit: first, soaking the hide in clear water, second, removing all gristly or flinty flesh, third, again soaking the hide in fresh water, fourth, beaming and liming, fifth, again soaking in fresh wrter, sixth, unhairing on a smooth, flat table with a steel sleek, seventh, removing lime by thoroughly soaking in water and stoning, eighth, tanning with a mixture composed of water, gambier salt, sulphuric acid and saltpeter, ninth, beaming by hand or passing through pressure rollers, tenth, immersing thoroughly in lye water and using a light edge carrying knife on flesh side, and again placing in fresh water, eleventh, taking out the hides and hanging in the shade until dry, and treating to boiling hot tanner's oil (fish-oil and beeswax) on grain side, and applying to the flesh side a boiling mixture of tar, tallow and tanner's oil (fish-oil and beeswax) and finally colouring in the usual manner, substantially as above stated.

No. 26,190. Combined Tent and Waggon. (*Wagon-Tente.*)

Alfred S. Tomkins, London, Eng., 10th March, 1887; 5 years.

Claim.—In combination, with a waggon A having a tilt roof or the framework B thereof, pieces C and D of canvas or other suitable fabric, forming when unfolded the sides and ends of a tent roof with straps E securing these pieces when folded up in rolls, substantially as and for the purpose herein set forth.

No. 26,191. Appliance for Holding Carriage Windows and other Sliding Sashes at any required Height. (*Appareil pour Soutenir les Stores de Voitures et autres croisées en coulisse.*)

Charles G. Gumpel, London, Eng., 10th March, 1887; 5 years.

Claim.—As an appliance for holding carriage windows and other sliding sashes, in combination, with a vertical bar fixed in the recess below the sash, of a horizontal bar embracing the vertical bar, and carried by the bottom of the sash, said horizontal bar being acted upon by two springs tending to cant it, so as to clutch the vertical bar, while a stud or collar on the sash makes the horizontal bar release its hold when the sash is depressed, substantially as herein described.

No. 26,192. System of Connecting Railways which are separated by Straits or other Waters, with Structures, and apparatus for effecting the same. (*Système de raccordement des chemins de fer interrompus par des détroits ou autres nappes d'eau au moyen de ponts, et appareil pour cet objet.*)

Sir Edward J. Reed, K.C.B., M.P., London, Eng., 10th March, 1887; 5 years.

Claim.—1st. The system of employing for communication through intervening waters, tubes which are placed either in whole or in part between the surface and the bottom, and there supported, and enabled to carry the necessary weights whether of engines or carriages or otherwise, by the means hereinbefore set forth. 2nd. The employment of such tubes, which derive their support for themselves, and for the weights within them, or passing through them from surplus buoyancy, such tubes being in this case being held on by anchoring weights, as herein before described.

No. 26,193. Fastener for Frame Joints. (*Serre-joint de cadre,*)

William Cutts, Toronto, Ont., 10th March, 1887; 5 years.

Claim.—1st. A plate A, pivoted at *a* on one side of the joint of the frame, and having a curved slot *b* made in it eccentric to its pivot *a*, in combination with a headed pin or screw C, located as described,