

**No. 15,151. Improvements on Car Brakes.***(Perfectionnements aux freins des chars.)*

Aldis H. Marden, Cambridge, Mass., U. S., 21st July, 1882; for 5 years.

*Claim.*—The iron cross beam A, in combination with the heads B B and clamp C.**No. 15,152. Improvements on Brick Kilns.***(Perfectionnements aux fours à brique.)*

Stephen J. Plant, York, Ont., 22nd July, 1882; (Extension of Patent No. 13,560.)

**No. 15,153. Improvements on Brick Kilns.***(Perfectionnements aux fours à brique.)*

Stephen J. Plant, York, Ont., 22nd July, 1882; (Extension of Patent No. 13,560.)

**No. 15,154. Improvements in the Manufacture of Napped Hats.***(Perfectionnements dans la fabrication des chapeaux à poil ras.)*

William A. Baglin, Brooklyn, N.Y., and George Yule, Newark, N.J. U.S., 22nd July, 1882; for 5 years.

*Claim.*—1st. The process for making bats consisting in forming the bat upon a cone at several successive operations, the material of the bat being deposited upon different parts of the cone at different times in figures of predetermined shape. 2nd. The process for removing a bat from the forming cone consisting in the application of steam or air pressure to the interior of the forming cone. 3rd. The method for securing or uniting a nap bat to a body felt consisting: first, in forming the nap-bat upon an exhausted cone of suitable shape to fit the body felt; second, in applying the body felt to the nap-bat while upon the forming cone and pressing them both together; third, in removing the body felt and nap-bat from the cone together, and fourth, in sticking and scalding the same together in the usual manner. 4th. The process for preparing hat body felts for union with nap bats formed in one piece consisting in shrinking the felts to an approximately uniform size and blocking them to secure an approximately uniform shape. 5th. As a new article of manufacture, a nap-bat formed in one piece of suitable shape to fit the body felt to which it is to be applied, and adapted to be stuck thereto and scalded without any clipping or fitting. 6th. As a new article of manufacture, the annular conical nap-bat formed in one piece and adapted to be stuck to the brim of a hat without clipping and tearing. 7th. As a new article of manufacture, a nap-bat consisting of material of different colours deposited in different parts of the bat in distinct locations, patterns or figures. 8th. The carrier for hat bodies consisting of a hollow cone A provided with means as flange *a* for supporting it, and a finger ring at the apex or equivalent device for carrying it. 9th. In combination with the conical carrier A, the presser B constructed and operated to press the hat body to the shape of the carrier. 10th. In combination with the forming cone D, a guard cone as E, for covering the tip of the cone D when depositing for upon its lower parts. 11th. The guard cone L perforated only at certain points in figures of ornamental shape and operated in combination with the forming cone D, by placing the guard cone inside the latter. 12th. The process for forming and sticking napping bats consisting of forming the napping bat within a hollow cone and in sticking the hat body to the napping bat while in the cone. 13th. The combination, in a hardening and sticking machine, of a cone for supporting the bat, a rubber or rubbers, and mechanism for traversing the cone and rubbers in relation to one another, for operating upon all sides of the cone successively. 14th. In combination with a hollow forming cone, a rubbing cone having a yielding surface adapted to conform to the hat body inside the forming cone, and vibrated or rotated within the hat body while in the cone. 15th. The method for applying napping bats to both sides of a hat body brim consisting in forming the body felt upon or in a suitable cone, applying the hat body to the same and in forming a brim bat upon or in a suitable cone and applying such brim-bat to the brim of the hat body while in contact with the body bat upon or in the cone where it was formed. 16th. The method for forming a combined brim-back and body bat consisting in depositing both at once upon a suitably-shaped perforated surface the body bat being shaped to exactly fit the hat body, and the brim-bat being exactly shaped to fit the brim and adapted to place upon the hat body, when in contact with the body-bat, upon its forming cone. 17th. As a new article of manufacture, a napping bat made in one piece and formed in one piece and formed of suitable shape to fit the body and both sides of the brim of a hat. 18th. A perforated cone for forming a nap-bat having one part thereof adapted to form a bat fitted to the body of a hat, and one part thereof adapted to form a bat fitted to one side of the brim of the hat. 19th. The method for sticking napping bats to hat bodies consisting in pressing the same together between flat surfaces, one or both of which has a vibrating rubbing or equivalent movement. 20th. The method for sticking napped bats to hat bodies consisting in supporting the nap-bat and hat body together in a dry condition upon a cone and subjecting them to the action of rubbers. 21st. The method for sticking nap bats to hat bodies upon a cone consisting in confining the same between the cone and a flexible shield or covering and subjecting the shield to the action of rubbers. 22nd. The method for sticking nap bats to hat bodies consisting in supporting the nap-bat and hat body together upon a cone, and subjecting them to the action of suitable rubbers. 23rd. The method for sticking nap-bats to hat bodies consisting in supporting the nap-bat and hat body together upon a cone, introducing the heat and moisture of steam within the cone, and subjecting the nap bat and hat body to the action of rubbers. 24th. The method for sticking nap-bats to hat bodies, consisting in applying the hat-body to the nap-bat, and subjecting them both simultaneously to the operation of dry heat and suitable rubbers.

**No. 15,155. Improvements on Metallic Packing for Valve or other rods.***(Perfectionnements aux garnitures métalliques pour les tiges des soupapes et autres.)*

Edwin P. Monroe, New York, N. Y., U. S., 22nd July, 1882; for 15 years.

*Claim.*—1st. The packing ring or rings having a cylindrical inner surface to fit to the rod to be packed, and a spherical or zone shaped outer bearing surface contained within a suitable receptacle to support the said ring or rings in operative position, the said spherical bearing surface permitting the said packing ring or rings to rock and move freely and be self-adjusting to the movement and wear of the rod. 2nd. A packing for valve or other rods, the packing ring and the packing receptacle having a curved bearing surface between them, whereby the said ring is permitted to rock freely and universally in the receptacle according to the requirements of the rod, and also to be compressed by movement in a longitudinal direction over the rod to compensate for wear. 3rd. In a packing ring having a zone-shaped or spherical external bearing surface and the receptacle therefore combined with a spring to press the said ring into the receptacle, to thereby wedge it in close contact with the rod passing through said ring. 4th. The combination of the rod, the packing ring and the packing ring receptacle with the stuffing box cover the packing ring receptacle having a bearing on the stuffing box cover and being free to slide laterally on said bearing, to follow any lateral motion of the rod and packing. 5th. The combination of the valve box or chamber A, rod B, support C, coiled spring F, follower G, packing rings H I, packing ring receptacle J, covers M O and bolts Q. 6th. The combination of the valve box or chamber A, rod B, support C and lining D. 7th. The combination of the packing receptacle and the stuffing box cover having bearing surfaces in juxtaposition, so as to allow of the sliding of the former upon the latter, and a ring of babbitt or anti-frictional metal inserted between said bearing surfaces. 8th. In a metallic packing for valve or other rods, the combination with the packing rings of a tapering coiled metallic spring having at each end two or more of its coils or turns brought into contact, to form abutments or bearings. 9th. In a metallic packing for valve or other rods, the combination of the packing rings and the tapering coiled spring and the follower interposed between said spring and rings. 10th. In a metallic packing for valve or other rods, the stuffing box cover M provided with the brass lining P. 11th. In a metallic packing for valve or other rods, the combination of the stuffing box cover and the sheet metal jacket or envelope.

**No. 15,156. Improvements in Pulley Blocks.***(Perfectionnements aux chapes des moufles.)*

Joseph W. Norcross, Lockport, N. Y., U. S., 22nd July, 1882; for 5 years.

*Claim.*—1st. The combination of the wooden sides or cheeks, the metallic frames or straps secured to the outer surfaces of said cheeks, the lugs extending from the outside frames or straps beyond the inner edges of the cheeks, the inside metallic straps extending through the lugs, the cap provided with slots to catch over the ends of the inside straps and the key for locking the parts together. 2nd. The combination of the wooden sides or cheeks, the outside metallic frames or straps, the lugs extending from the outside frames or straps beyond the inner edges of the cheeks, the inside metallic straps extending through the lugs, the cap provided with slots to catch over the ends of the inside straps, the tapering pin *h* provided with grooves to engage with the edges of the holes or slots in the inside straps; and the key *i* for locking the parts together. 3rd. The combination of the metallic frames or sides, the inside straps the lugs *b b* projecting from said frames or sides extending through said lugs, the hubs or bearings formed on the frames or sides extending inward towards the inside straps, the centre pin which forms the axle of the sheave, and the key or keys for locking the block together.

**No. 15,157. Improvements in the Manufacture of Gas.***(Perfectionnements dans la production du gaz.)*

Samuel W. Serrell, (in trust for Myron H. Strong, Sidney Cornell, Henry M. Pierson and Walter E. Lawton,) Plainfield, N. J., U.S., 22nd July, 1882; (extension of patent No. 7677.)

**No. 15,158. Improvements on Mechanical Forges.***(Perfectionnements aux forges mécaniques.)*

Peter Learn, Bertie, Ont., (assignee of Charles Hammelmann, Buffalo, N. Y., U.S., 22nd July, 1882; (extension of patent No. 8405.)

**No. 15,159. Improvements on Mechanical Forges.***(Perfectionnements aux forges mécaniques.)*

Peter Learn, Bertie, Ont., (assignee of Charles Hammelmann, Buffalo, N. Y., U. S., 24th July, 1882; (extension of patent No. 8405.)

**No. 15,160. Improvements on Coating Metallic Articles with Vulcanized Rubber.***(Perfectionnements dans le procédé pour enduire les objets métalliques de caoutchouc vulcanisé.)*

William Garrity, Malden, and Nicholas Avery, Boston, Mass., N. S., 24th July, 1882; for 5 years.

*Claim.*—1st. The process of coating metallic articles with vulcanized rubber, the same consisting in first coating the metallic article with muriate of tin, then applying thereto a layer of a composition