

No. 23,317. Manufacture of Frame or Horn Plates for Rolling Stock. (*Fabrication des Plaques de Garde pour Matériel Roulant.*)

Samson, Fox, Harrogate, Eng., 2nd February, 1886; 5 years.

Claim.—1st. The mode or process of manufacturing frame or horn plates for rolling stock, which consists in first cutting a suitable plate to approximately the form of the indented frame or horn plate, afterwards heating the said plate, then pressing or forcing it by means of a male die into and through a female die, thereby imparting to it the desired form and flanging it and afterwards causing it to be held between pressors or holders to prevent warping or buckling, substantially as described. 2nd. As a new article of manufacture, a flanged frame or horn plate for rolling stock formed of a single plate by pressing or stamping, substantially as described.

No. 23,318. Apparatus for the Manufacture of Horn Plates for Rolling Stock. (*Appareil pour la Fabrication des Plaques de Garde pour Matériel Roulant.*)

Samson Fox, Harrogate, Eng., 2nd February, 1886; 5 years

Claim.—1st. A machine or apparatus for the manufacture of frame or horn plates for rolling stock comprising a male die, a female die and means for operating one or both of said dies so as to force a plate into and through the female die, in such manner as to impart the required form to such plate and to flange the same, substantially as hereinabove described and illustrated. 2nd. In a machine or apparatus for the manufacture of frame or horn plates for rolling stock, the combination of a male die, a female die, means for operating one or both of said dies so as to force a heated plate into and through the female die, in such manner as to impart the required form to such plate and to flange the same, and means for receiving the flanged plate and holding with a sufficient grip or squeeze to prevent warping or buckling whilst admitting of the contraction due to cooling, substantially as described. 3rd. In a machine or apparatus for the manufacture of frame or horn plates for rolling stock, the combination of a male die *a*, a female die or matrix *b* and means for operating one or both of such dies, as described. 4th. The holding or gripping blocks or plates *d*, *d'* and *f*, *f'*, with anti-friction balls between them, substantially as described and for the purpose specified.

No. 23,319. Pulverizing Machine. (*Machine à Broyer.*)

John B. Waring, New York, N.Y., U.S., 2nd February, 1886; 5 years.

Claim.—1st. In a pulverizing machine, the combination of a chamber into which the material to be pulverized is introduced, loose pulverizing rollers, a carrier and rollers journaled in the carrier and serving to propel the pulverizing rollers, substantially as specified. 2nd. In a pulverizing machine, the combination of a chamber into which the material to be pulverized is introduced, loose pulverizing rollers, a carrier, rollers journaled in the carrier and guards comprised in the carrier for preventing the loose rollers from dropping from the top to the bottom, substantially as specified. 3rd. In a pulverizing machine, the combination of a chamber having concave interior surface for receiving the material to be pulverized, loose pulverizing rollers having a convex periphery corresponding to the concave interior surface of the chamber, a carrier and rollers having a concave periphery corresponding to the convex surface of the pulverizing rollers, substantially as specified. 4th. In a pulverizing machine, the combination of a chamber into which the material to be pulverized is introduced, loose pulverizing rollers, a carrier, rollers journaled in the carrier and guards and a disk attached to the carrier, substantially as specified. 5th. In a pulverizing machine, the combination of a rotary chamber into which the material to be pulverized is introduced, pulverizing rollers arranged within the chamber, and adapted to revolve in the same direction as that in which the chamber rotates. 6th. In a pulverizing machine, the combination of a rotary chamber into which the material to be pulverized is introduced, pulverizing rollers arranged within the chamber, a carrier, rollers journaled to the carrier and serving to propel the loose rollers, all the said rollers being adapted to revolve in the same direction in which the chamber rotates, substantially as specified. 7th. In a pulverizing machine, the combination of a rotary chamber into which the material to be pulverized is introduced, pulverizing rollers arranged within the chamber, a carrier for the pulverizing rollers, a belt from the chamber to a pulley on a shaft, and a belt from another pulley on the shaft to a shaft on which the said carrier is mounted, substantially as specified. 8th. The combination of the rings *a*, *a'*, the ring *ab* and the bolts *a*, substantially as specified. 9th. In a pulverizing machine, the combination, with a horizontally rotating chamber, of hollow trunnions on said chamber upon which said chamber rotates, and through which materials to be pulverized may be received and discharged. 10th. In a pulverizing machine, the combination, with a horizontally rotating chamber, of trunnions on said chamber upon which said chamber rotates, and through which material to be pulverized may be received and discharged, as described.

No. 23,320. Fuse Cutter. (*Ciseaux à Fustes.*)

John M. Martin, San Francisco, Cal., U.S., 2nd February, 1885; 5 years.

Claim.—The combination implement described, comprising the levers *A*, *B* pivoted together at one end, the levers *A* having the punch *G* at its free end, the cutting blade *C* located adjacent to its pivoted end, and the part *E* located just below the cutting blade, and the lever *B* having the cutting portion *K* to receive the knife *C*, and the part *F* located below the same and adapted to register with part *E*, and the blade *D* located in the lower end of the lever *B*, as set forth.

No. 23,321. Horse Shoe. (*Fer à Cheval.*)

James H. Jackson, Keady, Ont., 2nd February, 1886; 5 years.

Claim.—1st. A horse shoe having its cross section substantially in the form of an oblong diamond, and shaped so as to fit closely to the hoof, the inner side of the shoe flaring outwardly, substantially as and for the purpose specified. 2nd. A horse shoe having its cross section substantially in the form of an oblong diamond, and shaped so as to fit closely to the hoof, the inner side of the shoe flaring outwardly as also the heel calks *a* and toe calks *b*, substantially as and for the purpose specified.

No. 23,322. Sheep Rack. (*Râtelier de Bergerie.*)

Edgar A. Legate, Charlemont, Mass., U.S., 2nd February, 1886; 5 years.

Claim.—1st. The combination, with the frame *A*, of the platform *B*, provided with longitudinal flanges, hinged racks for long feed, and grain troughs *C*, substantially as set forth. 2nd. A rack for feeding sheep composed of the frame *A* provided with openings in its longitudinal sides, and sliding doors for closing said openings simultaneously, one side at a time, hinged racks, an elevated platform provided with longitudinal flanges to serve as stops to the said racks, and grain troughs arranged on opposite sides of the said elevated platform, all arranged substantially as and for the purposes set forth.

No. 23,323. Window Screen Roller. (*Rouleau de Rideau de Fenêtre.*)

Simon N. Tarnoy, Auburn, Ind., U.S., 2nd February, 1886; 5 years.

Claim.—1st. The combination of the strip *at*, the screen, the concave roller *C*, having ratchet *D*, bearing *F* and pawl, substantially as described. 2nd. The screen and roller, the lever *d*, having a lip or projection *d'*, in combination with the ratchet *D*, bearing *F*, having shoulders at right angles to its main portion, the pawl *E*, having the projection *E'*, pivoted to said shoulder, and the hub *h*, substantially as described. 3rd. The combination of the concave roller *C*, the lever *d*, provided with a catching projection *d'* integral therewith, the ratchet *D*, pawl *E*, and hub *h*, substantially as described and specified and for the purpose set forth.

No. 23,324. Grate Bar. (*Barreau de Grille.*)

William Solt, Sr., and William D. Klin, Freeland, Penn., U.S., 2nd February, 1886; 5 years.

Claim.—1st. The ventilating bar *A*, having side walls *B*, *B'*, slots or ventilating openings *a*, and mortises *b* between the slots, in combination with the perforated plate grate sections having depending flanges *F*, extensions or projections *f*, and tenions *g*, as set forth. 2nd. The ventilating bar *A*, having side walls *B*, *B'*, slots or openings *a*, mortises *b*, between the slots, and bearing plates *C*, at the end of the bar, all cast in one piece, said plates having a ledge *e*, provided with blocks or lugs *f*, and the integral middle finger *D*, in combination with the perforated plate, grate sections having depending flanges *F*, projections or extensions *f*, and recesses *h*, in the underside of the end grate sections, as set forth. 3rd. The ventilating bar *A*, U-shaped in cross section comprising two side walls or flanges *B*, and having its top open facing the slot *a*, and mortises *b*, braces or cross pieces connecting the side walls, as set forth. 4th. The ventilating bar *A*, in combination with the bearing plates *C*, extending transversely across the ends of the bar, and of greater length than the width of said bar, and recesses or depressions provided in the underside of the bearing plates on each side of the point of juncture with the said bar, as set forth.

No. 23,325. Belt for Pulleys. (*Courroie de Poulie.*)

Walter H. Avis, York, Ont., 2nd February, 1886; 5 years.

Claim.—1st. A belt, composed of a series of cords woven together, substantially as specified. 2nd. A woven belt, in which the warp is composed of a series of cords, and the weft of a metal wire, substantially as and for the purpose specified.

No. 23,326. Rein and Strap Supporter. (*Porte-Rêne et Porte-Courroie.*)

David Mitchell, Burlington, Vt., U.S., 3rd February, 1886; 5 years.

Claim.—A rein or strap supporter, consisting of a base plate *A* having means of fastening to a leather *B*, and fingers *a*, *a'* inwardly curved from near the ends of the plate, substantially as set forth.

No. 23,327. Pruning Shears. (*Ciseaux de Jardinier.*)

Isaac M. McKay, Rocklin, Cal., U.S., 3rd February, 1886; 5 years.

Claim.—Shear levers *a*, *b*, having extension arms *a'*, *b'*, blade *d* pivoted positively to lever *b*, back of pivot *c*, and also pivoted movably to end of arm *a'*, and blade *d'* pivoted positively to end of arm *b'*, and also pivoted movably to lever *a*, back of pivot *c*, whereby said blades have reverse shear motion, substantially as described.

No. 23,328. Apparatus for Manufacturing Water Gas for Illuminating and Heating Purposes. (*Appareil de Fabrication du Gas à l'eau pour l'Eclairage et le Chauffage.*)

James C. Duffield, London, Ont., 3rd February, 1886; 5 years.

Claim.—1st. The above described arrangement for dividing the fuel bed by means of two or more generators connected with each other, whereby the same amount of fuel is separated, instead of be-