

Claim.—A phosphorescent composition consisting of monosulphide of calcium, combined with carbonate of lime, magnesia and silex.

No. 15,327. Improvements on variable bench planes. (*Perfectionnements aux rabots à table variables.*)

Amos Fales, Denver, Col., U. S., 17th August, 1882; for 5 years.

Claim.—1st. In a variable bench-plane constructed with a stock A, changeable cutter E and separate changeable front and back form plates H I, the said form plates being independently attached to the stock. 2nd. The stock A constructed with a ledge or bracket D, projecting from one side thereof and of sufficient width to support all the different width of cutters used with the laterally acting wedge G, to clamp the cutters on the ledge, and with the vertical flange F to one side of which the front and back form plates are attached. 3rd. The separate form plates or moulds H I, each constructed with the horizontal extended body or form K, the vertical flange G for attaching to the stock flange F, and the ledge or shoulder J for holding them accurately in line under the flange F. 4th. The combination, with the stock A, of the cross bar J and gauge stop K, the former being horizontally adjustable in the stock, and the latter mounted and vertically adjustable in the cross bar. 5th. The auxiliary stock L and its removable cutter-holder O and mould forms P, in combination with the main instrument.

No. 15,328. Improvements on Stop Motions for Looms. (*Perfectionnements aux mécanismes cesse-mèche des métiers à tisser.*)

Frederick O. Tucker, Hartford, Ct., U. S., 17th August, 1892; for 5 years.

Claim.—The porked bar G in combination with the feeler shaft F, the cam H and the lever J, said bar and feeler shaft being connected to the frame D adapted to be attached to the lay, and said cam and lever being connected with the arm C adapted to be attached to the breast beam of a loom.

No. 15,329. Improvements on Stock Cars. (*Perfectionnements aux chars à bestiaux.*)

Louisa Hay, Ottawa, Ont., 17th August, 1882; for 5 years.

Claim.—1st. The arrangement of a passage 6 extending from end to end on one side, or partly on one side and partly on the other side, stalls extending across the car heading towards said passage, each stall provided with a gate to separate the animals and closing the entrance to the adjoining stall, said stall divided into two sections, or divisions, by passage 4 the doors thereto being at the middle of the side of the car, and each section provided with a hay rack, feeding trough, grain trough and water supply fed through the roof of the car. 2nd. A series of stalls divided by fixed partitions provided with gates H hung to swing, to close the adjoining stall, when empty, and, when occupied, dividing the cattle by locking to the side of the car. 3rd. The over head grain supply trough 13 located over passage 6 and provided with perforated sliding bottom and tubes discharging into the feed troughs, access to said troughs being through the roof provided with a trap door to each trough.

No. 15,330. Improvements on Metallic Packing and Supports for Valve Rods. (*Perfectionnements aux garnitures métalliques et aux supports des tiges de soupapes.*)

Edwin P. Monroe, New York, U. S., 17th August, 1882; for 15 years.

Claim.—1st. The valve and valve stem connected therewith and adapted to permit independent movement of the valve to and from its seat combined with the elliptical springs F G adapted to be held in place between the said valve and valve stem, whereby the said valve stem is supported and its packed bearing relieved of its weight. 2nd. The elliptical springs F G combined with the connecting pieces H forming therewith a rectangular frame adapted to fit over the exhaust chamber of a valve and be held in proper position thereby, to provide a support for the valve rod. 3rd. In a packing for piston rods and similar articles, a packing receptacle connected with the cylinder head, or other partition, by a ball joint, or spherical bearing surface, combined with packing having a universal rocking movement in the said receptacle, is permitted to rock to accommodate lateral deviations of the packed rod, whereby the said receptacle and the packing to rock to accommodate angular deviations of the said rod and receptacle relative to one another. 4th. The packing receptacle connected with the cylinder head and having a curved, or inclined outer surface, combined with the vertical piston rod and the metallic packing located in the end of the said receptacle and wedged into close connection with the outside of the rod and the inside of the receptacle, whereby water flowing along the packed rod is prevented from passing between the rod and packing or entering the receptacle. 5th. The packing and its receptacle, combined with the coupling to attach the said receptacle to the cylinder head, and an overhanging portion, or shield, to cover and protect the joint between the said receptacle and its coupling. 6th. The rod, its packing and the receptacle therefor, and the spring M to press the said packing to its seat or bearing, combined with the independent spring S to press the receptacle to its bearings in the partition that the packed rod is to enter. 7th. The combination of the rod, its packing and the receptacle therefor, and the spring M to press said packing into its receptacle and also to press said receptacle to its bearing in the coupling. 8th. The packing provided with a spherical bearing surface and the receptacle therefore combined with the coupling for the said receptacle, the said coupling and receptacle having a spherical bearing surface, whereby the said packing may have a universal movement to enable it to accompany and properly fit the packed rod in its deviations from a true rectilinear movement. 9th. The packing and its receptacle connected with the partition through which the packed rod enters by a joint permitting movement of the said receptacle relative to the partition combined with the shield Q to cover and protect the said joint.

No. 15,331. Improvements on Rosettes for Bridles. (*Perfectionnements aux bosselles des brides.*)

Rolandis Sloat, Butler, Ind., U. S., 17th August, 1882; for 5 years.

Claim.—The main portion composed of the screw-threaded ring a and back plate a, the fastening staple B having its ends b b passed through the plate a and turned down against said plate, and the ornamental screw-threaded and removable outer cap C adapted to be screwed to the main part A, so as to conceal the fastening B.

No. 15,332. Improvements on Heaters for Steam Engines. (*Perfectionnements aux réchauffeurs des machines à vapeur.*)

Clement Hollands, Kintail, Ont., 17th August, 1882; for 5 years.

Claim.—1st. The combination of the valve B and the pipe D. 2nd. The combination, with the valve B and the pipe D, of the pipe I.

No. 15,333. Improvements in the Method of, and Apparatus for Preventing Induction in Telegraphic and Telephonic Systems. (*Perfectionnements dans la méthode d'empêcher le courant d'induction dans les systèmes télégraphiques et téléphoniques, et appareil pour cet objet.*)

François Van Rysselberghe, Schaerbeck, Belgium, 17th August, 1882 for 5 years.

Claim.—1st. The method of rendering non-perceptible in the telephone, the currents used for telegraphy, be they primary, derived or induced, by making the emission and extinction of said currents gradual. 2nd. In telephonic and telegraphic systems, the application and use of condensers installed in derivation upon the inducing wires. 3rd. In telegraphic and telephonic systems, the application and use of electro-magnets intercalated at the transmission station between the battery and the wire, or between the battery and the earth. 4th. In telegraphic and telephonic systems, the application and use of rheostal keys. 5th. In telephoning systems, the application and use of diaphragms or other equivalent devices, for creating upon all the wires a confused noise.

No. 15,334. Improvements on Machines for Jointing and Sharpening Circular Saws. (*Perfectionnements aux machines à ajuster et affûter les scies rondes.*)

William R. Parsons, Morrisburg, Ont., 17th August, 1882; for 5 years.

Claim.—1st. In combination with the rails A A and carriage B provided with feed screw F and means for clamping the saw, the axially adjustable bar C having a tangentially fixed flat smooth steel plate E, whereby said plate, when in contact with a rotating saw, the teeth will be jointed and, when the saw is moving at slow speed, and case hardened by frictional contact with said plate, when running at a high speed. 2nd. The combination, in a machine for jointing, sharpening and case hardening the teeth of circular saws, of the base rails A A provided with check blocks H H at one end, and feed screw F passing through a block at the opposite end, and carriage B having an axially adjustable transverse bar C provided with a smooth faced friction plate E, whereby said plate can be adjusted to suit large or small saws, and fixed by set screws D.

No. 15,335. Improvements on Apparatus for Drying and Pulverizing Offal. (*Perfectionnements aux machines de dessiccation et de trituration des rebuts de viande.*)

John F. Gabbins, Chicago, Ill., U. S., 17th August, 1882; for 5 years.

Claim.—1st. An apparatus for drying and pulverizing refuse matter, consisting of a steam jacketed cylinder and a rotary shaft composed of concentric pipes and intermediate trussing, provided with broad teeth, or fingers, located in the lower part of the chamber and adapted to be rotated at a high speed, whereby it is caused to throw or project the material in a separated condition through the open interior of the chamber. 2nd. The drying apparatus, consisting of the steam jacketed cylinder A, shaft F located in the lower part thereof, and armed with teeth or blades, scrapers J and mechanism for imparting a travelling motion to the scrapers. 3rd. In a drying apparatus, a heater or agitator shaft composed of two concentric pipes F and G and intermediate braces or trussing. 4th. The agitator shaft consisting of concentric pipes F G, braces or trussing d and end pieces e. 5th. In a drier, a yielding or elastic reciprocating scraper provided with a rack, in combination with a pinion and means for rotating the pinion alternately in reverse direction. 6th. In combination with the rack bar K and scraper connected therewith, the pinion L, pulleys O O and P, belts Q R and fingers S S, whereby the belts alternately passed upon pulley P. 7th. The scraper J consisting of the arms pivoted to an intermediate support and separated and pressed outward by a spring W. 8th. In combination with the pivoted scraper arms J, the intermediate threaded stem h and nuts f a. 9th. In a drier, a shaft composed of concentric pipes and intermediate trusses and armed with broad teeth, or arms, whereby the shaft is adapted to be rotated at high speed, thereby to cause the material to be projected from the shaft into the open space of the containing chamber. 10th. The scraper J provided with adjustable steel plates J₁. 11th. The drier consisting of steam jacketed chamber A provided with feed and discharge openings, shafts B having teeth H spirally arranged thereon, scraper J and means for imparting a travelling motion to the scrapers.