

as described, of the sleeve *g* having an external screw thread, and provided with a pin or plug *h* bearing against the rear end of the drill, and the screw thread *h* fitting over and adapted to propel the sleeve *g*, the pawl *m*, lever *n* and cam *p* on the crank shafts *e*, all operating substantially as and for the purpose set forth.

### No. 29,864. Manufacture of Sofas or Lounges. (*Fabrication des sofas ou canapés*)

Daniel Hibner and Solon L. Doolittle, Berlin, Ont., 15th September, 1888; 5 years.

*Claim*.—The combination of the back leg *a*, the centre post *f*, the end post *k*, the top rails *e* and *h*, and the stay rails *g*, *z*, substantially as and for the purpose hereinbefore set forth.

### No. 29,865. Extinguishing Lamp.

(*Lampe à éteignoir*)

George E. Dehany, Liverpool, Eng., 15th September, 1888; 5 years.

*Claim*.—1st. In a lamp, an automatic extinguishing tube or ferrule sliding by gravity on the burner tube beneath the dome, and of such a length that it cannot leave the tube so long as the dome is in position, substantially as described. 2nd. In a lamp, having two or more burners, the combination, with each wick tube, of an automatic extinguishing tube or ferrule sliding by gravity on the said wick tube beneath the dome, and of such a length that it cannot leave the wick tube so long as the dome is in position, substantially as described.

### No. 29,866. Bit Piece. (*Bitrequin*)

George Gavin and Lawrence W. Cromer, Eureka, Nev., U. S., 15th September, 1888; 5 years.

*Claim*.—1st. The combination, with a bit stock, having a vertical bit socket and a T-shaped slot leading from the end of the stock and communicating with its socket, of a spring actuated bolt adapted to slide over the horizontal member of the slot and into the vertical member of the same, substantially as set forth. 2nd. The combination, with a bit stock having a vertical socket, a vertical slot leading into the said socket, and a T-shaped slot extending from the end of the stock communicating with the socket and terminating below the aforesaid horizontal slot, and a longitudinal bore intervening the wall of the socket, and the outer face of the bit stock containing the aforesaid slots, of a spring actuated bolt sliding in the said bore, and a screw attached to the said bolt sliding in the said horizontal slot, all combined to operate substantially as and for the purpose specified.

### No. 29,867. Spring Hoe Attachment for Cultivators, Seed Drills, etc. (*Attelage des dents aux scarificateurs, semoirs, etc.*)

Charles R. Hartman, Vincennes, Ind., U. S., 15th September, 1888; 5 years.

*Claim*.—1st. The herein described attachment, consisting of the bracket formed with the downward projection, the fulcrum head at its rear upper end, the forward curved arm having the opening in its upper end, and the side shoulders, the connecting links, the curved lever, the rod and the spiral spring, all constructed and arranged as herein set forth. 2nd. The attachment, consisting of the bracket formed with the downward projection, the fulcrum head, the forward arm having the opening in its upper end, and the side shoulders, the fulcrum links, the connecting links formed with the lugs on their inner sides, the curved lever, the rod having the threaded upper end and the nut and the spiral spring, substantially as set forth. 3rd. The combination, with a Shank foot piece or drill tooth of the usual construction, and its beam, of the herein described attachment, consisting of the bracket formed with the downward projection, the fulcrum head, the forward arm having the opening in its upper end, and the side shoulders, the fulcrum links, the connecting links formed with the lugs on their inner sides, the curved lever, the rod having the threaded upper end and the nut and spiral spring, substantially as set forth.

### No. 29,868. Chamois Holder. (*Porte-chamois*)

Andrew T. Veeder, Schenectady, N. Y., U. S., 15th September, 1888; 5 years.

*Claim*.—1st. As an article of manufacture, a chamois holder, consisting of a rod or bar having a right angular spur and keeper erected from each end, the spurs being pointed and edged on one side, substantially as described. 2nd. The combination, with a bar *A*, of end spurs *C* and bracket arms *B* erected therefrom, and stems provided with spur seats and vertically adjustable in the ends of the bracket arms, substantially as described.

### No. 29,869. Vehicle Spring. (*Ressort de voiture*)

Henry C. Swan, Oshkosh, Wis., U. S., 15th September, 1888; 5 years.

*Claim*.—1st. A flexible packing *k*, having two free ends and a bearing in two concave sections *l*, *k*, in combination with the rock shaft arms *h*, *h*, of a vehicle spring, as and for the purpose specified. 2nd. In a vehicle spring, the combination, with the rock shaft *h*, cranked at *h*, of the hooks *L* and equalizing lever *M*, the former pivoted between the ears *m*, *m* of the latter, as and for the purpose set forth. 3rd. In vehicle springs, the spring *F* coiled on a vertical bolt, the box *E* placed over said spring, and an equalizing lever attached to said box to prevent side motion in the manner set forth. 4th. In vehicle springs, the lever *M* having a journalled cross-bar at one end, and at the other a box *E* and ears *m*, *m*, to adapt it to be used, as described.

### No. 29,870. Swing Saw. (*Scie oscillante*)

James Martin, South Brooklyn, N. Y., U. S., 15th September, 1888; 5 years.

*Claim*.—1st. In a swing saw, the combination, with the swinging frame which carries the saw, and the driving shaft about which said frame rocks, of guides and sliding boxes adapted to provide for a free up and down movement of said shaft, and one or more stationary lower guide-rail attachments constructed to support the swinging frame and to direct it and its attached saw out of consonance with the curvilinear movement, due to the swinging motion of said frame, substantially as specified. 2nd. This combination of the upper stationary guides *B*, the sliding boxes *C* having a free up-and-down movement, the driving shaft *L*, the swinging frame *A* with its attached saw *J*, the guide-rail attachments or devices *D*, and the swinging frame carriers or wheels *E*, essentially as and for the purpose or purposes herein set forth. 3rd. The combination, with the vertically swinging saw carrying frame *A*, having a rising and falling centre of motion about which said frame rocks, of the guide-rail attachments or devices *D*, made adjustable to vary their angle or level, and the swinging frame carriers or wheels *E* adapted to run or travel upon said adjustable guide-rail devices, substantially as specified. 4th. The combination, with the vertically swinging saw-carrying frame *A*, having a rising and falling centre of motion, about which said frame rocks, of the independent frame *G* adjustable up and down, the swinging frame *A*, the wheels, rollers, or carriers *E* attached to said independent frame, and serving to support the swinging frame and adjustable guide-rail attachments or devices *D*, essentially as described.

### No. 29,871. Process of Hulling, Cleaning and Separating Grain. (*Mode de battage, nettoyage et séparation des grains*)

Frederick Melkersman, St. Charles, Mo., U. S., 15th September, 1888; 5 years.

*Claim*.—1st. The hereinbefore described process of hulling, cleaning and separating grain, which consists in first removing a large proportion of the hulls from all the grain, then separating the disconnected hulls, then washing and moistening the grain, then straining and drying it, then removing the remaining hulls and inner skins from the grain, and finally separating the disconnected hulls and skins, substantially as herein set forth. 2nd. The hereinbefore described process of hulling, cleaning and separating grain, which consists in first removing a large proportion of the hulls from all the grain, then separating the disconnected hulls, then washing and moistening all the grain, then separating the good grain from the imperfect grain during the process of washing, and then drying the grain and removing and separating the remaining hulls therefrom, substantially as herein set forth.

### No. 29,872. Nose Warmer or Protector.

(*Cache nez*)

William A. Sentman, Britton, Dak., U. S., 15th September, 1888; 5 years.

*Claim*.—1st. A nose protector, having the wire frame *A*, comprising the central front piece *B*, the bottom pieces *C* diverging therefrom, and the rear side pieces *D*, all arranged in the form herein set forth, and covered by a suitable fabric, substantially as described. 2nd. A nose protector, having the wire frame *A*, comprising the central front piece *B*, the bottom pieces *C* diverging therefrom, and the rear side pieces *D*, constructed from a single piece of wire and arranged in the form herein set forth, and the fabric covering therefor having the side extensions *E*, substantially as described.

### No. 29,873. Running Gear for Vehicles.

(*Train de voiture*)

Adam Bock, Murrensborough, Penn., U. S., 15th September, 1888; 5 years.

*Claim*.—1st. The combination, with the axle, spaced elliptical springs clipped upon the same, a cross-bar uniting the springs, and thill irons projected from said cross-bar, of a fifth wheel having the lower section attached to the said cross-bar, a second short cross-bar secured to the upper section of the wheel, a king pin passing through said cross-bars, and arms radiating from the upper cross-bar and the upper section of the wheel, substantially as shown and described. 2nd. The combination, with the axle, spaced elliptical springs clipped upon the same, a main cross-bar uniting the springs, and thill irons projected from said cross-bar, of a fifth wheel having the lower section attached to the said cross-bar, a second short cross-bar secured to the upper section of the wheel, a king bolt passing through said cross-bars, a bifurcated guide rod pivoted upon the king bolt and attached to the lower wheel section, and arms radiating from the short cross-bar, the king bolt and wheels, substantially as and for the purpose specified. 3rd. The combination, with the axle, spaced elliptical springs clipped upon the same, a main cross-bar uniting the springs, thill irons projected forwardly from said cross-bar, and step-carrying bars projected rearwardly therefrom, of a fifth wheel having the lower section attached to said cross-bar, a second short cross-bar secured to the upper wheel section, a king bolt passing through said cross-bars, a bifurcated guide arm pivoted upon the said king bolt and attached to the lower wheel section, braces connecting the wheel and springs, and supporting arms radiating from the short cross-bar, the king bolt and wheels, substantially as shown and described.

### No. 29,874. Safety Car. (*Char de sûreté*)

Thomas G. Gillilan, Union, Oregon, U. S., 15th September, 1888; 5 years.

*Claim*.—1st. The combination, with a railroad car having an opening in its roof, closed with the door *B* having a projecting cover *b*, of