

No. 16,645. Improvements on Sewing Machines. (*Perfectionnements aux machines à coudre.*)

Reuben M. Rose, Brooklyn, N.Y., U.S., 11th April, 1883; (Extension of Patent No. 8643.)

No. 16,646. Machine for Sharpening Horse Shoes. (*Machine à aiguiser les fers à cheval.*)

Robert S. Bailey, West Concord, Vt., U.S., 12th April 1883: (Extension of patent No. 8808.)

No. 16,647. Improvements on Carriage Perches. (*Perfectionnements aux ronds d'avant-train des voitures.*)

Luther D. Haskell, Jr., Beverly, Mass., U.S., 12th April 1883; for 5 years.

Claim.—1st. The improved carriage perch having the bed *d* and body *a* rabbeted or dovetailed together. 2nd. The perch *A* having its upper and lower sections rabbeted or dovetailed together, in combination with the axle *D* and bolster *B*.

No. 16,648. Improvement on Fruit Dryers. (*Perfectionnement des séchoirs à fruits.*)

William DeK. Moody, Brantford, Ont., 12th April 1883; for 5 years.

Claim.—1st. The narrow flues *L* having valves *M N* to admit or shut off the heat to hot air chamber *F*. 2nd. The hot air chamber *F* having valves to distribute the heated air horizontally between the ways *E*. 3rd. The valves *H* at the bottom of stalk *B*, which are regulated as required to carry off the vapour.

No. 16,649. Improvements on Waggon. (*Perfectionnements aux wagons.*)

Thomas B. Mackey, Dallas, Texas, U.S., 12th April 1883: for 5 years.

Claim.—1st. In a running gear for carriages and waggon, the combination, with the axle provided with collars *f*, of the stationary and rotary disks *DD'* and the interposed anti-friction rollers *e* mounted on arms projecting from disks *E*, which are mounted on bolts constituting axles for the rotary disks *E D*, and the horizontal wheels *I g* in the boxes *G*. 2nd. The combination, with the boxes of the front section of the running gear, of the bands secured to, and passing around the boxes of the front cross-bar.

No. 16,650. Journal Oil Box lid for Railway Cars. (*Couvercle de boîte à graisse pour les essieux des wagons de railroads.*)

The Hewitt Box Lid Company, (assignee of Francis C. L. G. Susemihl and Herbert H. Hewitt,) Detroit, Mich., U. S., 12th April 1883: (Extension of patent No. 8,638.)

No. 16,651. Improvement on Switch Openers. (*Perfectionnement des mécanismes des aiguilles.*)

James H. Kennedy and Thomas P. Hall, Toronto, Ont., 12th April 1883; for 5 years.

Claim.—1st. The combination of slides *n*, levers *h*, shaft *a* and eccentric *c*, with the switch rails and shifting bar, said slides being arranged in the path of dogs on the train in command of the attendants. 2nd. The combination of slides *n*, bars *o*, levers *h*, gearing *i j*, shaft *a*, eccentric *c* and the switch bar *b*, said slides being in the path of dogs in command of the train men. 3rd. The levers *h* geared with the shaft *a* by the duplex and reversely arranged gears *i j*. 4th. The slide bars *o* having inclines at the ends for the escape of the slides from the dogs. 5th. The levers *h* having curved ends *c*, in combination with slides *n* on the bars *o* having inclines at the ends. 6th. The combination of dogs *q* on the trucks, with the slides *n* and shifting gear, said dogs being mounted on sliding stocks *t* having cushion springs *u*. 7th. The switch rails connected to their bed by rock arms *z*. 8th. The combination of dogs *q* on the trucks, with the slides *n*, bars *o* and shifting gear, said slides being grooved on the side *d* bearing on the bars *o*.

No. 16,652. Improvement on Log Feeders and Turners. (*Perfectionnement des alimentateurs et roule-billots des scieries.*)

Henry M. Loud, Oscoda, Mich., U. S., 12th April 1883; for 5 years.

Claim.—1st. The combination, with the saw carriage and a set of inclined skids or ways descending to the level of the saw carriage, and having stop projections at their lower ends, of a rotary shaft located beneath the level of the skids near the stop projections and having arms for lifting the logs over said stop projections one by one. 2nd. The combination, with the vertically moving canting bar and its intermediate driving gear and a rotary log delivering shaft with arms, and its immediate driving gear, of an adjustable driving gear in common to both, the foregoing devices and combined with them so as to operate the rotary shaft by one movement and to be disconnected therefrom, and operate the canting bar by the other movement.

No. 16,653. Improvement on Snow Ploughs. (*Perfectionnement des charrues à neige.*)

Robert Johnson, Rama, Ont., 12th April 1883; for 5 years.

Claim.—1st. The combination of a series of wings *B C D* arranged on a centre board *A*.

No. 16,954. Improvements on Fire-Escapes. (*Perfectionnements aux sauteurs d'incendie.*)

Joseph R. Winter, Chambersbury, Penn., U.S., 12th April 1883; for 5 years.

Claim.—1st. The inner rail *B* having flanges *C* and secured by means of bolts passing through said flanges. 2nd. The combination of the permanent rail *B*, the pivoted rungs *G* and the rail *E* having shield or casing *J*. 3rd. The combination, with the fire-escape ladder, of the shield or casing *J* secured to the outer rail *E* of said ladder and having edges *K* forming handles. 4th. The combination, with the rail *B* permanently secured to a wall *A*, of the rail *E* and pivoted rungs *G* arranged alternately on opposite sides of said rails. 5th. The combination of the folding ladder *B E G* having shield or casing *J*, the support *L* and the releasing wire *M* having branches *N*. 6th. The combination of the rail *B*, pivoted rungs *G*, rail *E*, horizontal rods *U V* secured respectively to the wall of the structure and to rail *E*, the diagonal braces *W* and the pivoted rungs *S* forming a folding platform. 7th. The improved fire-escape consisting of the folding ladder *B E G* having shield or casing *J*, jointed brace *I* and folding platform *R*, the support *L*, releasing wires *M N* and alarm mechanism *O P Q*. 8th. The combination, with the fire-escape ladder *B E G*, of the ladder *Z* having stops *a b* and bent lower rung *G*, and the swinging guard bar *Y* hinged to the roof.

No. 16,655. Improvements on Roller Skates. (*Perfectionnements aux patins à roulettes.*)

George D. Burton, Boston, Mass., U. S., 12th April 1883; for 5 years.

Claim.—1st. The skate body provided with bearing pedestals near its ends, combined with two rollers in line with one another and having their bearing boxes mounted in the said pedestals, and pivots for receiving the endwise pressure of the axles of the rollers. 2nd. The skate body and bearing pedestals connected therewith, in combination with two rollers in line with one another at the ends of the body, and bearing boxes for the axles of the rollers having an annular chamber surrounding the said axle, a chamber at the end of the axle and the balls in the said chamber to afford an anti-friction bearing for the axle. 3rd. The combination of the skate body, its bearing pedestals, bearing boxes in the latter, with the rollers in line with one another and comprising a central portion surrounded by an elastic band, and a rounded tire enclosing the said band.

No. 16,656. Improvement on Fire-Escapes. (*Perfectionnement des sauteurs d'incendie.*)

Joseph H. Ford, Toronto, Ont., 12th April, 1883; for 5 years.

Claim.—1st. An iron ladder having its top end adjustably connected to the side of a building, in combination with platforms hinged to the side of the building near the window sills. 2nd. As an improved fire-escape, the platforms *A* hinged near the window sills *B*, in combination with a ladder *C*, the upper end of which is provided with strong staples fitting onto the vertical guiding bars *D*, and the supporting bars *E* extending out from the side of the ladder for supporting the platforms.

No. 16,657. Improvements on Horse Collars. (*Perfectionnements aux colliers de cheval.*)

Christopher G. Calo, Albany, N. Y., U. S., 12th April, 1883; for 5 years.

Claim.—1st. The combination, with the hollow sections *A A'* made of papier-mâché or rather similar fibrous material, of the plugs *a a'* and the frame *F* secured in the ends of the sections by screws or bolts, whereby the ends of the said sections are reinforced and provision made for attaching the fastening devices. 2nd. The combination, with the sections *A A'* hinged together at their lower ends, and the plate *D* provided with the loops *d* and secured to the upper end of the section *A*, of the frame *F*, the plate *D* having slots *d'*, the arms *f f'*, the plate *g*, the arm *h*, the spring *i*, the stop *i'* and the catches *G* provided with the thumb-piece *g*.

No. 16,658. Improvements on Washing Machines. (*Perfectionnements aux machines à laver.*)

John Fox, Oskaloosa, Iowa, U.S., 12th April 1883; for 10 years.

Claim.—1st. The base plate *C* having upright *D* and provided with transverse ribs *E E*, between which a detachable upright *F* may be secured.

No. 16,659. Improvements in Fire-Escapes. (*Perfectionnements aux sauteurs d'incendie.*)

John Sintzel, Hamilton, Ont., 12th April, 1883; for 5 years.

Claim.—1st. The combination of the ropes *b c* and tube *D*. 2nd. The combination of the ropes *b c*, tube *D*, hooks *E* and fire-proof coating *F*.

No. 16,660. Process for Transferring the Grain Marks of Wood and other Configurations. (*Procédé d'imitation du grain du bois et autres objets.*)

John R. Cross, New York, N.Y., U.S., 12th April, 1883: (Extension of patent No. 2634.)

No. 16,661. Methods for the Manufacture of Hygienic Foods. (*Méthode de préparation des aliments hygiéniques.*)

James Fish and Francis C. Ireland, Lachute, Que., 12th April, 1883; for 5 years.