

them, and retained by the caps *c*, *d*, so as to produce a friction at the ends of the attachment against the sides of the casting, for the purpose of affording a certain amount of resistance to either the vertical deflection or backward movement of the link. 4th. The combination of the vertical lever *l* and the horizontal rod *r*, with the head of the draw-bolt, in such a manner that the rod is pushed forward by the lever when the casting through which it passes is drawn forward with respect to the draw-bolt to which the lever is attached, and pushed by the contrary movement, for the purposes of clamping the pin with the front end of the rod by the forward position of the casting, and of releasing when the same is pushed back to the extent of the play, provided with the casting and the follower *F*, in contact with the buffer spring by means of the small screw *s* in the follower and the corresponding groove in the draw bolt, as described.

### No. 23,098. Water Regulator for Windmills. (*Régulateur d'Eau pour Grues Hydrauliques.*)

Anson M. Otis, York, Nev., U. S., 7th January, 1886; 5 years.

**Claim.**—1st. The combination, with a pivoted lever, of a tank suspended from one end of the same, a weight on the other end, a rod on said lever for throwing the pumping mechanism, such for example as a windmill out of gear, a tube for conducting water into the suspended tank, a stationary tank, a tube for conducting the water from the suspended tank into the stationary tank, and an automatically-operating valve for closing the end of the tube within the stationary tank when said tank is filled, substantially as herein shown and described. 2nd. The combination, with a pump and a pivoted lever having one end weighted of a tank suspended from the other end of the lever, mechanism connected with the lever for throwing the pumping device out of gear, a stationary tank, a tube for conducting the water from the suspended tank into the stationary tank, which tube projects into the stationary tank, an angle lever pivoted on the stationary tank, a valve on the end of said lever for closing the end of the tube in the stationary tank, a box or small tank on the upper end of the angle-lever, and a flexible tube connecting said box or small tank, with the bottom of the stationary tank, substantially as herein shown, and described. 3rd. The combination, with the tank *N*, of an inlet pipe, a valve for closing it, an angle-lever to which the valve is secured, a tank *R* on the outer end of the lever, and a flexible tube connecting the tanks *N* and *R*, substantially as herein shown and described.

### No. 23,099. Machine for Separating Dust from Air. (*Machine à Séparer la Poussière de l'Air.*)

Ernest Kuehno, Chicago, Ill., U. S., 7th January, 1886; 5 years.

**Claim.**—1st. In machines for separating dust from air, the exterior rotating case *A* lined with fabric *a*, or alternately lined with strip of fabric *a* and brushes *b*, which will hold the dust brought in contact therewith and prevent the air from passing outward, in combination with a stationary conveyor *J*, blast chamber, *G*, dead air chamber *K* and rotary conveyor *M*, as and for the purposes hereinbefore specified. 2nd. The combination of the rotating case *A*, lined substantially as specified, with the blast chamber *G* and the conveyor *J* for separating the dust from the air, and the chamber *K*, brush *N*, trough *L* and conveyor *M* for removing the dust from the machine, substantially as hereinbefore specified. 3rd. The conveyor *J*, combined with the exterior rotating case, lined as specified, for retaining the dust deflected onto it, and the brush *N* for removing the dust from the lining, as and for the purpose hereinbefore set forth.

### No. 23,100. Oil Stove. (*Poêle à Huile.*)

Charles T. Ham, Rochester, N. Y., U. S., 7th January, 1886; 5 years.

**Claim.**—1st. The combination, in a lamp-stove, of a wick-burner and burner cone, a close air-chamber arranged below the burner, and communicating with the underside of the burner-cone and supplying air thereto, and an elevated perforated air-chamber adapted to contain a body of air, and which surmounts the air inlet opening of the closed air-chamber, and permits the entrance of air only through its perforations, substantially as set forth. 2nd. The combination in a lamp-stove, of a wick-burner and burner-cone, a closed air-chamber communicating with the under side of the burner-cone and supplying air thereto, a perforated air-chamber which surmounts the air-inlet opening of the closed air-chamber and permits the entrance of air only through its perforations, and a deflector arranged within said perforated air-chamber and adapted to direct the air toward the air-inlet opening of the closed air-chamber, substantially as set forth. 3rd. The combination, with a wick-burner *a* and burner-cone *c* of the closed air-chamber *B* having an air-inlet opening *f*, a perforated chamber *F* provided with a top plate *h* and a bolt *x*, whereby the chamber *F* is secured to the chamber *B*, substantially as set forth. 4th. The combination, with the flame chamber *D* having a flanged bottom plate *C*, of the air-chamber *B* provided on its upper side with a flange *j* and lug *k*, between which the rear edge of the flanged bottom plate *C* is confined, substantially as set forth. 5th. The combination, with the base and the movable top portion of a lamp-stove, of supporting-bars secured respectively to the base and top portion, and made adjustable with reference to each other, whereby the rear end of the top portion of the stove is supported in its normal position when the supporting-bars are engaged with each other and permitted to drop when said bars are disconnected, substantially as set forth. 6th. The combination, with the base and the movable top portion of a lamp-stove, of a supporting-bar *E* secured to the top portion, and a supporting-bar *M* attached adjustably to the base, substantially as set forth. 7th. The combination, with the base and the movable top portion of a lamp-stove, of a supporting-bar *L* secured to the top portion, and a supporting-bar *M* provided with a slotted foot *N* attached to the base by a screw *n*, and a socket *m* in which the lower end of the bar *L* is held, substantially as set forth.

### No. 23,101. Wind Wheel. (*Moulin à Vent.*)

John T. Eden, Odell, Neb., U. S., 7th January, 1886; 5 years.

**Claim.**—1st. The combination, in a wind wheel, of the sails pivoted between their ends, and having one end or arm heavier than the other, the vane plates pivoted to the vane-rod, a counter-balance and connections between the counter-balance, the sail and vane plates, whereby an outward movement of the heavy arm by a centrifugal force will effect an elevation of the counter-balance, substantially as set forth. 2nd. The combination of the hollow shaft, the wheel secured on the shaft and having its sails pivoted between their ends, and made heavier at one end than at the other, a toothed pinion journaled to the wind-wheel, bars secured to the sails and having rack teeth geared with the toothed pinion, a sliding rod operating through the hollow shaft and provided at its outer end with rack teeth geared with the toothed pinion wheels on the framing geared with the sliding rod, a counter-balance and the wheels on the framing, substantially as set forth. 3rd. The combination of the pivoted sails, having one arm heavier than the other, the bars secured to such sails and having rack teeth on its inner portion, a pinion journaled on the wheel and meshed by the rack bar, the sliding rod, a toothed wheel on the framing geared with said rack bar, a counter-balance and a rack bar, or bars, secured to the counter-balance and geared with the toothed wheel on the framing, substantially as set forth. 4th. The combination of the wind-wheel having the pivoted sails, the toothed pinion journaled on the wheel, the bar secured to the sails and having rack teeth geared with the toothed pinion, the sliding bar having racks geared with the toothed pinion, the wheels *D* journaled on the framing of the mill, and connected with the inner end of the sliding rod *P* connected with the wheels *D* and having the plate *B* on their lower ends, and the counter-balance having uprights *S* provided near their upper ends with slots *s* fitted over the edge of the plate *P*, substantially as set forth. 5th. The combination of the wind-wheel, the wheel *B*, the rods *J* connected with the sails of the wind-wheel and geared with such wheels *D*, the bars *P* connected with the wheels *D* and having a plate *P*, the counter-balance *C* having uprights *S* formed with slots *s* fitted over the plate *P*, and the cord *T*, substantially as set forth.

### No. 23,102. Duplex Time Ticket.

(*Billet de Temps en Double.*)

William W. Currie, Smith's Falls, Ont., 7th January, 1886; 5 years.

**Claim.**—A duplex time ticket arranged with the various tables of figures and headings, substantially as herein described and shown, consisting of an original and duplicate ticket, printed on one sheet of paper, and folded so as to register, as and for the purpose herein set forth.

### No. 23,103. Sash Frame, Holder and Casing for Carriages, Cars, etc. (*Cadre de Chassis, Arrêtée-Croisée et Cage de Chassis pour Voitures, Chars, etc.*)

Albert Ayers, Rahway, N. J., U. S., 7th January, 1886; 5 years.

**Claim.**—The combination, with a frame or casing *A*, having a curved groove *F* provided with a throw-over *G* in the bottom of its throw-over sash-groove *B*, of a sash-frame *D* provided with spring friction holders *E* sliding in the said grooves *F*, substantially as herein shown and described, whereby the sash will be kept from rattling and rubbing and will be held securely in any position, as set forth.

### No. 23,104. Self-Holding Pulley Block.

(*Chape de Poulie à Suspension Automatique.*)

Charles Allen, Woodstock, Ont., 7th January, 1886; 5 years.

**Claim.**—1st. A grooved pulley *D*, in combination with a ratchet wheel *F* and rope *G*, to one end of which a weight is attached, or power applied for operating a pawl and beam, substantially as set forth. 2nd. A beam *H*, in combination with a pawl or click *T* and spring *L*, for operating a rope clutch, substantially as set forth. 3rd. A rope clutch *K* pivoted on a beam *H*, and operated to hold the rope and weight attached to one end thereof at any required elevation, substantially as set forth. 4th. A lever *M*, in combination with a connecting bar *o* and cord or strap *P*, for operating a beam to which a rope clutch is attached, to remove the whole or part of the pressure of the rope clutch from off the rope, substantially as set forth. 5th. A beam *H*, in combination with a pawl or click *I*, and spring *L* for operating said pawl, so that the latter will always remain engaged with the teeth of a ratchet wheel, substantially as set forth. 6th. In a pulley block, the pulley *D*, ratchet wheel *F* and rope *G*, in combination with the pawl *I*, beam *H*, spring *L* and rope clutch *K*, substantially as shown and described and for the purpose specified. 7th. In a pulley block, the pulley *D*, ratchet wheel *F*, rope *G*, pawl *I*, beam *H*, spring *L* and rope clutch *K*, in combination with a lever *M*, connecting bar *o* and cord or strap *P*, substantially as shown and described and for the purpose specified.

### No. 23,105. Stop and Lock for Pawl and Ratchet Mechanism. (*Arrêt et Enrayage pour Mécanisme d'Encliquetage.*)

John N. Williams, Stapleton, N. Y., U. S., 7th January, 1886; 5 years.

**Claim.**—1st. In combination with a ratchet, and a pawl adapted to operate the same, a stop or projection arranged to engage the said pawl at the desired limit of its stroke, substantially as set forth. 2nd. In combination with a ratchet, and its operating pawl, an adjustable stop for limiting the stroke of said pawl, substantially as set forth. 3rd. In combination, a pawl and ratchet mechanism, a stop or projection terminating at a point near the periphery of the ratchet, for simultaneously stopping the pawl and locking the ratchet. 4th. The combination of the pawl, the ratchet wheel, and the standard having an adjustable extension, as set forth.