bracket or arms and the springs, substantially as and for the purposes hereinbefore set forth. 4th. The lubricating roller formed and adapted to receive the supply of lubricant at a point intermediate between its two ends, and right and left screw-threaded or grooved respectively from that point towards its ends, as and for the purposes set forth.

No. 24,731. Combination in a Two-Wheeled Cart. *(Combinaison dans un Voiture à Deux Roues.)*

Nicholas W. Sherman and James R. Dickey, Coldwater Branch, Mich., U.S., 13th August, 1886; 5 years.

Claim.—1st. In a two-wheeled vehicle, the combination, with a shaft bar having an opening, as described, of a spring mounted in said opening, substantially as and for the purpose set forth. 2nd. In a two-wheeled vehicle, the combination, with slotted cross-bar, spring mounted on loose links or shackles therein, and spring bar, of the seat and seat bars, the latter being secured to the shafts by loose links, and to the spring bar by knuckle joints, as set forth. 3rd. The combination, with the spring, spring bar and seat bar mounted thereon, of the foot-rest and straps curved under and secured to the front side of the spring bar, as shown and for the purpose set forth. 4th. In a sulky, the combination, with the slotted shaft bar and spring mounted loosely therein, of the spring bar surmounting said spring, the seat bars, knuckle jointed to the spring bar and loosely connected to the shafts, and the foot-rest strap connected at one end to the seat, and at the other to the front of the spring bar.

No. 24,732. Sheathing and Lath Machine. *(Machine à Boiserie et à Latte.)*

Henry Coburn, John H Murry and Addison A. Adair, Indianapolis, (assignees of Edwin M. Byrkit, Michigan City,) Ind., U. S., 13th August, 1886; 5 years.

Claim.—1st. The mandrel *m* enclosed in the box *b*, and sleeve *s* clamped upon such boxing and secured by suitable means, the driving-pulley *p* mounted on one end of such mandrel, the tool *s* mounted upon the other end of such mandrel, and the nuts *n* working upon the threaded end of such mandrel, all combined substantially as described. 2nd. A mandrel enclosed in a suitable boxing and adapted to revolve therein, the boxing clamped by a suitable sleeve formed in halves, the two parts secured together by suitable screws or bolts, the loosening of which will allow the mandrel and its boxing to be adjusted along the line of such sleeve, substantially as described. 3rd. A mandrel having a driving-pulley mounted upon one end, and a revolving tool upon the other, enclosed in a suitable boxing in which the mandrel revolves, the boxing confined in a sleeve provided with means of clamping the sleeve upon the mandrel, without interfering with the revolution of the mandrel in its boxing, all combined substantially as described. 4th. The frame *f* carrying the horizontal shaft *s*, *h*, the cross-piece *f1*, threaded to receive the screw-rods *s*, *c*, on either end, the geared wheels *g*, *g1*, mounted so as to engage with each other, and operate the screw-rods *s*, *c*, when the shaft *s h*, is revolved, whereby the cross-piece *f1*, and the mechanism connected therewith, may be raised or lowered in a vertical plane, the mandrels *m* inclined toward each other, and adjustably connected to such central cross piece by means of a screw 5 operating in a slot 6, all combined substantially as described. 5th. The mandrels *m* having the boxing *b*, the sleeve I enclosing such boxing, the driving-pulley *p* mounted upon the upper end thereof, the saws s mounted on the lower end thereof, and adjustably connected with the cross-piece *f1*, in combination with a similar mandrel mounted upon the opposite end of the same cross-piece, and also adjustable, the frame *f*, and mechanism for lowering and raising the cross-piece *f1* in a vertical plane, all combined substantially as described. 6th. The framework *f*, provided with bearings, for the shaft *s*, *h*, upon which is mounted the gear wheels *g* meshing with the gear wheels *g1*, secured to the upper end of the vertical screw-rods *s*, *c*, the cross-piece *f1* carrying the mandrels *m* inclined toward each other, the mandrel and cross-piece having a movement in a vertical plane and operated by the screw-rods *s*, *c*, the mandrel connected with such cross-piece so as to be adjustable thereon, in the line of its length, the screw-rods r working in the neck of such mandrels to regulate such adjustment, all combined substantially as described. 7th. In a lath and sheathing machine, a pair of mandrels adjustably secured to a portion of the frame, which is capable of a vertical adjustment, these mandrels oppositely inclined to each other, and carrying saws of different diameters, for cutting the opposite sides of dovetailed grooves in sheathing lath, a table upon which the material rests while being operated upon, a shaft supported below such table carrying a series of under cutting saws, for cutting the kerfs in the under side of the sheathing lath, this under cutting mechanism adjustable horizontally as to length, and vertically as to depth of cut, all combined substantially as described. 8th. In a sheathing and lath machine, a framework having a table upon which the material rests, a series of saws of different diameters removably mounted on mandrels oppositely inclined to each other, and adjustably connected to a portion of the frame, so as to be raised or lowered by means of suitable screw and gear mechanism, a shaft beneath the table having a bearing at one end, in a support movable vertically in the side of the frame, with means for securing the same at any desired point, and supported near the centre by means of a hanger, also allowing a vertical adjustment of such shaft, a series of saws mounted upon such shaft at right angles to its length, and passing up through openings in the table to cut the kerf in the under side of the sheathing material, with suitable screw mechanism for lowering such under cutting saws, all combined substantially as described. 9th. In a sheathing and lath machine, a framework having a table for supporting the material near its centre, a series of saws for cutting dovetailed grooves in one side of the sheathing arranged upon mandrels oppositely inclined to each other, and a series of saws mounted upon a horizontal shaft beneath the table, for cutting the kerfs upon the other side of the material, both sets of saws adjustable vertically and horizontally, and operating upon both sides of the material at the same time, in combination with suitable driving mechanism, substantially as described.

No. 24,733. Dental Cotton Holder. *(Porte Coton de Dentiste.)*

Arthur C Runyan, Bangor, Me., U.S., 14th August, 1886, 5 years

Claim.—In a cotton-holder for dentists' use, the combination of a tube having perforated fastening plates, and having screw-threaded ends, caps fitting upon the screw-threaded ends, and having milled sides and central perforations, and a coiled spring within the tube having followers at both ends, the cotton being confined between the followers of the spring, and the perforated screw caps, as and for the purpose shown and set forth.

No. 24,734. Hub Runner. *(Patin de Voiture à Moyeu.)*

Harold Holland, Lynn, Mass., U.S., 14th August, 1886; 5 years.

Claim.—1st. In a device for mounting a carriage or wheeled vehicle on runners, the combination of the axle A, clip M and clamp N, said clamp having the flange Q, provided with the slot *t*, for receiving a stud or projection on the runner, substantially as described. 2nd. The runner B, provided with the hub K, shoe C and stud P, combined and arranged to operate substantially as set forth. 3rd. The axle A, provided with the clip M and clamp N, said clamp having the slotted flange G, in combination with the runner B, provided with the hub K, stud P and key A, substantially as described. 4th. In a device for mounting a carriage or wheeled vehicle on runners, the hub K mounted in the runner B, outside of a vertical line drawn through the shoe C, in combination with the axle A, and means for securing the runner to the axle, substantially as set forth.

No. 24,735. Hub Runner. *(Patin de Voiture à Moyeu.)*

Harold Holland, Lynn, Mass., 14th August, 1886, 5 years.

Claim.—1st. In a device for mounting a wheeled vehicle or carriage on runners, the axle A, provided with the clip M and bolt L, said bolt being adapted to be projected and secured in position to engage ab on said axle, and also to be withdrawn and secured in such position, as to prevent it from engaging said hub, substantially as described. 2nd. In a device for mounting a carriage or wheeled vehicle on runners, the clamp N, provided with the stud *d*, flange Q and bolt L, in combination with the axle A, clip M and nuts *v*, *v*, substantially as set forth 3rd. In a device for mounting a carriage or wheeled vehicle on runners, the hub K provided with the socket S, for receiving a bolt mounted on the axle of the carriage, to prevent said hub from entirely revolving on said axle, when the carriage is mounted on runners, substantially as described. 4th. In a device for mounting a carriage or wheeled vehicle on runners, the hub K, provided with the socket S, in combination with the axle A, provided with the clip M, clamp N and bolt L, combined and arranged to operate substantially as set forth. 5th. In a device for mounting a carriage or wheeled vehicle on runners, the axle A, provided with the nut *l*, clip M and nuts *v*, *v*, the clamp N, provided with the flange Q, stud *d* and key *k*, the bolt L provided with the holes 10, 12, and the hub K provided with the socket S, constructed, combined and arranged to operate, substantially as described.

No. 24,736. Incubator. *(Incubateur.)*

Jacob R Meschter, Philadelphia, Pa., U. S., 14th August, 1886; 5 years.

Claim.—1st. In an incubator, a regulator to control the temperature, consisting of hot water receptacle E3, supported in, and surrounded by the water in the hot water circulator, a U-shaped vessel having legs G, *g*, mercury G3, a rarified atmosphere in leg G, above the mercury and exposed to the atmosphere, a burner to keep the water warm, a valve to control the flame of said burner, and devices controlled by the height of the column of mercury, to automatically actuate said burner valve, substantially as and for the purpose specified. 2nd. In an incubator, the combination of a hot water circulating boiler, a burner to heat said boiler, a valve to control the size of the flame from said burner, and a regulator, automatically operated by the varying changes in joint temperatures of the atmosphere exterior to the incubator, and water in said boiler, to control said valve, said regulator consisting of a balanced lever, column of mercury, a rarified atmosphere supporting said mercury, and a receptacle to contain said mercury and rarified atmosphere, supported in water of the temperature of that in the circulating boiler, substantially as and for the purpose specified. 3rd. In an incubator, the boiler A having chambers B and B1, and consisting of hollow floors and walls *b*, passages *b1*, *b2*, pipes C, apertures *c*, and means to create a circulation of the hot water, substantially as and for the purpose specified. 4th. In an incubator, the boiler A having chambers B and B1, and consisting of hollow floors and walls *b*, passageways *b1*, *b2*, pipes C, apertures *c*, pipes E, E4, having nozzle *e*, and means to create a circulation of the hot water, substantially as and for the purpose specified. 5th. In an incubator, the combination of chambers B, B1, and doors I to close the latter of said chambers, and make it comparatively air-tight, substantially as and for the purpose specified. 6th. In an incubator, the combination of the circulation boiler A, having chambers B, B1, doors I to close the latter of said chambers, and make it comparatively air-tight, and case H, having doors H1, substantially as and for the purpose specified. 7th. An incubator provided with a brooding yard and chamber, substantially as and for the purpose specified. 8th. A frame to support the eggs in an incubator, consisting of a frame M, having cross-bars *m*, a soft flexible bottom *m*, substantially as and for the purpose specified. 9th. In an incubator, a removable absorbent pad of asbestos adapted to hold the required amount of water, to keep the hatching chambers in a moist atmosphere, substantially as and for the purpose specified. 10th. The combination of tray O, porous pad O1, frame P, and egg frames M having soft bottoms *m*, substantially as and for the purpose specified.