

The general form of construction of the base or stand by which the upper part can be adapted to a variety of household requirements, also the mode of arrangements by which the air of the room is drawn through the base or stand without passing through the fuel by which mode or arrangement the room is afforded an additional ventilation; 3rd. The method of and arrangement for introducing air for combustion to the upper part of the fuel tube by means of the air and ash perforated tube with its support; 4th. The use and arrangement of a perforated frustum of a cone placed at the bottom of the fuel tube; 5th. The method of using Argand burners with their arrangements on the perforated disc; 6th. The use of a close domed glass shade for the purposes of heating and lighting; 7th. The arrangement for the introduction of fresh warmed air into the apartment; 8th. The boiler arrangement described.

No. 4297. DONALD D. CATTANACH, Providence, R. I., U. S., 23rd January, 1875, for 5 years: "Oil Treating Process." (Procédé de traitement des huiles.)

*Claim.*—The process of treating linseed oil and kindred oils by subjecting the oil to agitation in the presence of air or light and air, or the specified equivalent oxidizing agent in the manner described with or without the preliminary purification of the said oil as set forth; 2nd. The gum or gum-like substance made from linseed oil or kindred oils in the manner described.

No. 4298. MOSES HUTCHINSON, Norfolk, N. Y., U. S., 23rd January, 1875, for 5 years: "Heating Drum." (Poele sound.)

*Claim.*—A heating drum in which the upper and lower sections or heads are provided with horizontal flues, connected or united together by vertical pipes, the combination with such parts of the partitions arranged in the upper and lower heads for interrupting the passage of the gases on their way to the exit pipe in the upper section and causing them to circulate before escaping through the lower and upper flues as described.

No. 4299. THOMAS A. EDISON, Newark, N. J., U. S., 23rd January, 1875, for 5 years: "Improvements in Electric Telegraphs." (Perfectionnements dans les télégraphes électriques.)

*Claim.*—1st. A signalling apparatus composed of a circuit closing spring and segmental weight, as set forth; 2nd. A telegraphic alarm and signalling apparatus made of one or more levers with circuit closing surfaces contained within a box and a key or finger-piece outside the box, as set forth; 3rd. The combination with the segmental circuit closing weight of the switch *f*, for the purposes set forth; 4th. The combination with the circuit closing segmental weight of the ratchet wheel *l*, escapement *n*, pendulum *o*, and spring *10*, for the purpose set forth; 5th. The receiving instrument composed of a drum and stylus for chemical paper, an electromagnet and armature-lever stop, and a circuit closer, insulated from the drum when the parts are at rest for the purposes set forth; 6th. The combination with the circuit closing cylinder *u* and key *v* of the springs *z*, held up by the struts *32*, and stop *10*, actuated by frame *v*, as set forth.

No. 4300. THOMAS PEACOCK and JOHN C. PEACOCK, London, Eng., 23rd January, 1875, for 5 years: "Gas Cooking Apparatus." (Appareil de cuisine à gaz.)

*Claim.*—The general form, construction and arrangement of cooking stove and boiling apparatus with their combinations of non-conducting cases, the mode of introduction and regulation of supply of gas and the system of regulated withdrawal of the products of combustion from the lowest part of the cooking space; the special construction of concentric burners for the combustion of air and gas; the packing of the lids of the sauce pans; the form and construction of the kettle for boiling water.

No. 4301. WILLIAM A. LAMB, Orleans, N. Y., U. S., 23rd January, 1875, for 5 years: "Improvements on Waggon Seats." (Perfectionnements aux sièges de wagons.)

*Claim.*—1st. The cylindrical bolt *C*, secured by shoulders *a* in the seat box, in combination with its projection *E*, and the incline *F* of the body bearing box *B*, whereby the partial turning of the bolt will draw and lock and hold the seat and body together, as set forth; 2nd. The combination in a seat lock of the partially rotating bolt with the rubber retainer *I*, and the bearing box *B*, whereby the bolt projection is retained in its locked position with the fixed incline, as set forth; 3rd. The combination of the cylindrical shouldered bolt *C*, and its projection *E*, with the bearing-boxes *B*, *B'*, the incline *F*, the side opening *G*, in the fixed box and the rubber retainer for locking and unlocking vehicle seats as set forth.

No. 4302. MOSES GOLDMAN, Syracuse, N. Y., U. S., 23rd January, 1875, for 5 years: "Pocket Candlestick." (Bougeoir de poche.)

*Claim.*—1st. The candle *s*, provided with compartments *C*, *C'*, *C''* placed in front thereof for a removable candle stick and a cap on the outer end covering the end of the case *A* when closed, and the match safe *f*, fitting in a space over the candle safe, all arranged within the cylindrical case *A*, as shown and constructed, and operating as described; 2nd. In combination with the candle safe *h*, the removable candle-stick *e*, having a receptacle for waste wax or tallow fitting the space *d* constructed as shown; 3rd. The spring clamp, consisting of the cap *n* and spring *S*, within a shank attached to the cap *n*, in combination with a pocket light; as described; 4th. In combination with the spring clamp, the extension braces *o*, *o'*, as set forth.

No. 4303. JOHN W. MORGENEIER, Sheboygan, Wis., U. S., 23rd January, 1875, for 5 years: "Varnish for Coating Photographic Negatives and Glasses." (Vernis pour enduire les négatifs et les verres de photographie.)

*Claim.*—A varnish for producing matt or ground glass surface on photographic negatives and glass, composed of absolute alcohol gum, sandarac, turpentine, oil of lavender, gum camphor, sulphuric ether and pure rain water, the whole compounded as set forth.

No. 4304. GEORGE RAMSDALL, Detroit, Mich., U. S., 23rd January, 1875, for 5 years: "Process of Making Wood Gas." (Procédé de fabrication du gaz de bois.)

*Claim.*—1st. The process of making wood gas or gas from vegetable substances by the successive operations executed as follows: first, by subjecting the substance to heat in a retort; second, conveying the gaseous products thence through water; third, conveying the gaseous products therefrom through hydro-carbon contained in a separate vessel, all as described; 2nd. In combination with the pipe *f*, the double drip composed of drip-boxes *L* and *M*, pipe *l* and pump *N*, as described; 3rd. The float *G*, with open bottom and central tube provided with dome shaped partitions *m*, perforations *h*, and downward conduits *11*, in combination with the pipe *f*, as set forth.

No. 4305. JOHN J. HIGGINS, New York, U. S., 23rd January, 1875, (Extension of Patent No. 4151) for 5 years: "Automatic Umbrella Runner." (Douille automatique de parapluie.)

*Claim.*—In combination with the stick *C* and springs *c*, *c'*, of an umbrella, the runner composed of the inner tube *A* and outer tube *B*, all constructed and arranged to operate, as set forth.

No. 4306. JOHN J. HIGGINS, New York, U. S., 25th January, 1875, (Extension of Patent No. 4151) for 5 years: "Automatic Umbrella Runner." (Douille automatique de parapluie.)

No. 4307. HENRY H. RHODES, San Jose, Cal., U. S., 25th January, 1875, for 10 years: "Railroad Car Axle." (Essieu de wagon de rail-route.)

*Claim.*—The combination of the grooved sleeve *C*, the sections of the axle *A* and *B*, and the ring *F*, moulded in place, as set forth.

No. 4308. WILLIAM GOODING, Detroit, Mich., U. S., CHARLES SPALDING and ARTHUR WINCHESTER, Windsor, Ont., 25th January, 1875, for 5 years: "Coal Elevator." (Élévateur à charbon.)

*Claim.*—1st. The trussed span and folding bridge laterally moveable upon an elevated railway, and provided with rails for a hoisting and conveying car as described; 2nd. The combination of the frames *C*, *C'*, trussed span *E*, and folding bridge *E'*, with an elevated railway as described; 3rd. The combination of the shaft *D*, pinions *c*, *c'*, and toothed rack *e*, with the frames *C*, *C'*, and an elevated railway as set forth; 4th. The combination with the frames *C*, *C'*, of the beams *Q*, notched plates *R*, and adjustable inclined bars *S*, as set forth; 5th. The combination of the frame *F*, and gate *C*, provided with the pulley *10*, with the span *E*, and folding bridge *E'*, as set forth; 6th. The combination of the latches *h*, with the car *G*, and of the hooks *i*, with the bulk heads *11*, *11'*, as set forth; 7th. The car *G*, provided with the shaft *I*, spools *L*, drum *m*, ratchet *n*, pawl *o*, rack shaft *p*, arm *p'*, rod *p''*, ropes *N*, *N'*,