

with which the slot is adapted to engage, and the actuating mechanism connected by suitable gearing with the measuring or indicating mechanism. 8th. The combination with the valve shaft and the valve casing, of a gland and packing whereby the carburetting fluid is confined to the valve casing and prevented from escaping to the meter. 9th. The combination with the valve set horizontally in the valve casing, of a vertical slotted valve stem connecting with the mechanism, whereby the valve is positively operated by the meter without the use of cog wheels, bands, pulleys or other similar gearing. 10th. The combination with a horizontal valve having recesses on its face, and a valve seat provided with suitable ports, of a shield secured to the valve stem. 11th. The combination of the rotary shaft provided with a horizontal arm, with a swivelled head attached to an arm on the rotating shaft of the meter, whereby the measuring devices are actuated positively and the usual gearing dispensed with.

No. 15,866. Gas Governor. (*Régulateur à gaz*.)

John C. Fisk and George S. Woodruff, Grand Rapids, Mich., U. S., 27th November, 1882; (Extension of Patent No. 8143.)

No. 15,867. Improvement in Bureaux.

(*Perfectionnement dans les commodes*.)

George F. Richardson and Edward K. Patten, Utica, N.Y., U.S., 27th November, 1882; for 5 years.

Claim.—1st. The combination, in a bureau or other similar article of case work, of receptacles or compartments arranged alternately on opposite sides, so that, when opened, the contents of each receptacle will be readily accessible, and, when closed, the spaces between each receptacle will be filled by the opposite receptacles.

No. 15,868. Improvements in Trestles.

(*Perfectionnements aux tréteaux*.)

Daniel E. Teal, Oneida, N.Y., U.S., 27th November, 1882; for 5 years.

Claim.—1st. A knock down trestle composed of posts provided with straps, or tie-rods adapted to be set at various points in the length thereof and a cross beam extended from post to post and supported by the adjustable straps of the post. 2nd. The combination of the post A and cross beam B provided respectively with a shoulder or shoulders *a a*, and the strap or tie-rod *c* removably connected with said shoulders. 3rd. The combination of the posts A provided, at their outer side, with notches *a a* at various points of their height, the cross beams B and braces C provided respectively, at their under side, with the notch *a*, and the straps *c c* hooked in two of the notches of the post, and in the notch of the cross beam and its brace respectively. 4th. The combination of the sill S provided with holes *d*, the posts

A provided with dowels *l* and with notches or shoulders *a a*, the cross beam B and braces C provided with notches or shoulders *a a*, and the removable straps *c c* embracing the post and the cross beam and its brace, and adapted to engage the shoulders thereof. 5th. The combination of the post A provided with stud bolts *h h* and nuts *i*, and the metal straps *f f* provided, at their extremities, with an eye *g* and adapted to be connected thereby to said stud bolts, diagonally to each other. 6th. The combination of the posts A provided with notches *a a*, the beam B and brace C provided respectively with the notch *a*, the adjustable straps *c c* engaged with said notches, the plate K placed over the notches of the post, the metal straps *f f* provided with eyes *g* and the bolts *h h* connecting said plate and straps detachably on the post. 7th. The combination of the posts A provided with holes *l l* and the rods *m* having their ends *n* bent at right angles and detachably connected with the holes *l*. 8th. In combination with the posts A and cross beam B, the track stringer E having on its side the clip or shoe *o* with flanges *p* engaging opposite sides of the post, and the stay *r* adjustably connected to the beam B.

No. 15,869. Improvements on Hasp Locks.

(*Perfectionnements aux serrures à morillon*.)

John E. Youngs, Bridgeport Ct., U.S., 27th November, 1882; for 5 years.

Claim.—The combination of case I, spring Q, spring P and spring K provided with bolts.

No. 15,870. Improvements on Sash Balances. (*Perfectionnements aux contre-poids des châssis*.)

Charles E. Bogle, Milton, Calvin B. Bertolette, Morristown, and William J. Moodie, Philadelphia, Penn., U. S., 27th November, 1882; for 15 years.

Claim.—1st. In a window sash, the lower sash M provided with the pulleys *e e*, in combination with the stationary pulleys F, the weight and the rope or chain having one end fastened to the casing. 2nd. The combination with the two sashes of the pulleys, the weights G and the chains or ropes extending from one sash to the other. 3rd. The combination, with the upper sash and the lower sash, each provided with pulleys, of the stationary pulleys in the casing, a chain extending continuously from one sash to the other, and the weights G carried by said chain. 4th. The combination, with the window sash and a cord having two strands *d d* connected with the sash, of the pulley *g* detachably secured to the sash and the removable holding strips or beads *a*. 5th. The combination, with the window sash, of the removable holding strips or beads arranged to form a way for the sash.