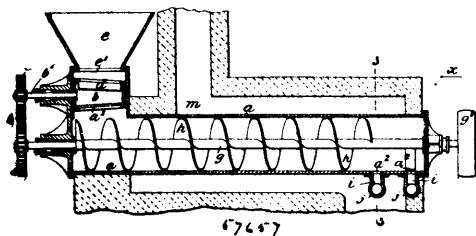


aperture, operating connections within the case between said stud and spindle, and a transparent cover secured over the recess, whereby the indicator-plate is confined within a tight enclosure, substantially as described.

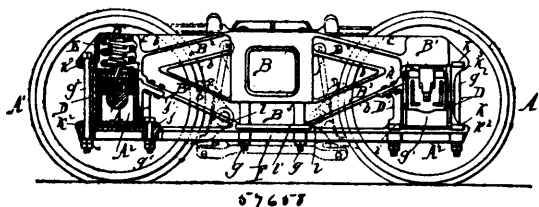
**No. 57,657. Artificial Fuel. (Combustible artificiel.)**



The Patent Agglomment Fuel Syndicate Company, 26 Wind Street, Swansea, Wales, assignee of Herbert C. B. Forester, Pen-y-bryn, Sketty, Wales, 2nd October, 1879; 6 years. (Filed 22nd September, 1897.)

**Claim.**—1st. The herein-described process of manufacturing artificial fuel, which consists in first crushing or reducing coal or the like solid carbonaceous bodies to a finely-divided condition, and mixing therewith in suitable proportions the herein-specified hydrocarbons, and incorporating same by heating them in the presence of each other in a heated vessel closed so as to prevent escape of volatiles therefrom and consequently under pressure, and thereafter removing the mass from said vessel, and while in the presence of its own gases or vapours pressing said mass into solid form, substantially as and for the purposes set forth. 2nd. In the manufacture of artificial or patent fuel, a closed retort or pug-mill provided with means to heat same, and mechanism in the interior thereof to agitate and pass the fuel material through said retort, in combination and acting in conjunction with a closed-in press adjacent to and in direct and closed connection with said retort, the whole apparatus being so closed at all points and connections as to prevent any escape of volatiles or vapours even when under considerable pressure, substantially as and for the purposes hereinbefore described and illustrated. 3rd. In the manufacture of artificial or patent fuel, a closed retort or pug-mill, adapted to be heated in any suitable manner, provided with means to continuously introduce the fuel material into, and means to continuously pass same out again from, said retort without permitting escape of volatiles or vapours from said retort, even when under considerable pressure, in combination with mechanism, such as hereinbefore specified, operating in the interior of said closed retort to pass the said fuel material through said retort, and simultaneously mix said material, substantially as and for the purposes hereinbefore described. 4th. In the manufacture of artificial or patent fuel, the improved apparatus consisting of heated chamber *a*, the rotatable valve *b*, provided with cavity *d* adapted to coincide with opening *e*<sup>1</sup> in the hopper *e*, and inlet *a*<sup>1</sup> in the chamber *a*; the rotatable shaft *g*, and the conveyer *h*, the inlet pipe *i* communicating between the chamber *a* and compressing cylinder *j*, and the ram *k* operating in the cylinder *j*, substantially as specified. 5th. The new or improved artificial compound of coal or other solid carbonaceous bodies and viscous or liquifiable hydrocarbons incorporated, heated and pressed in the manner and for the purposes hereinbefore described.

**No. 57,658. Car Truck. (Chassis de chars.)**

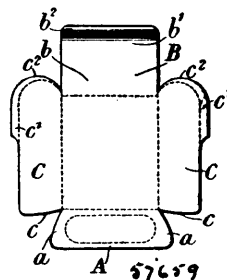


The Gould Coupler Company, New York, State of New York, assignee of Willard F. Richards, Buffalo, New York, both in the U.S.A., 2nd October, 1897; 6 years. (Filed 20th September, 1897.)

**Claim.**—1st. A side frame for car trucks having a central portion or panel, pedestals arranged at the ends of the frame, upper and lower arch bars arranged between said panel and said pedestals and converging toward the pedestals, and a tie bar connecting the lower ends of the pedestals and provided with lugs or lips which bear against the inner jaws of the pedestals, substantially as set forth. 2nd. A side frame for car trucks having a central portion or panel, pedestals arranged at the ends of the frame, upper and lower

arch bars arranged between said panel and said pedestals and converging toward the pedestals, a tie bar connecting the lower ends of the pedestals and provided with lugs or lips which bear against the inner jaws of the pedestals, and with similar lugs or lips which bear against opposite sides of the central panel of the frame, substantially as set forth. 3rd. The combination with the cast metal side frames, each having a central horizontal pocket extending outwardly to the face of the frame and pedestals arranged at the ends of the frame, of tire bars connecting said pedestals, a transom composed of flanged bars seated at their ends in said pockets, and vertical bolts passing through the tie bar of each side frame, the bottom of its pocket and the lower flanges of said transom bars, substantially as set forth.

**No. 57,659. Sheet Metal Box. (Boîte en feuille de métal.)**

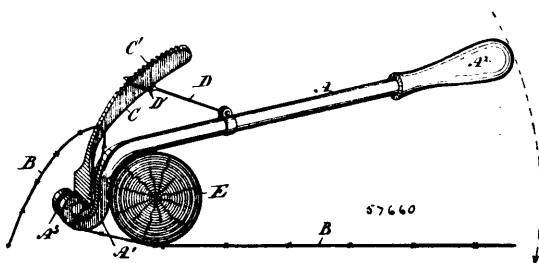


Tito L. Carbone, No. 343 Calle Sarandi, Monte Video, Sout 1. America, 2nd October, 1897; 6 years. (Filed 24th September, 1897.)

**Claim.**—A sheet metal box consisting of two pieces, one piece having sides and ends bent up from the bottom to form the body of the box and another piece forming the lid, connected to the body by its curved rear-edge lying in a groove formed in the front margin of the back and its two tongues being engaged between the groove and the overlapping wings of the sides, substantially as described.

**No. 57,660. Fence Wire Stretcher.**

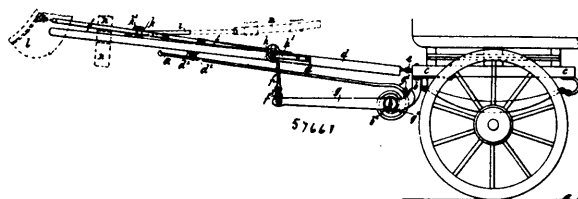
(Tendeur de cloture en fil de fer.)



George A. Kaufmann, Tavistock, Ontario, Canada, 2nd October, 1897; 6 years. (Filed 24th September, 1897.)

**Claim.**—1st. A wire stretcher, comprising a hand lever *A*, having a bifurcated end *A*<sup>1</sup>, a clamp lever *C*, having a curved end fitting coincidentally in said curved end *A*<sup>1</sup>, and provided with notches *C*<sup>1</sup> near the other end, and a holdfast rod *D* hinged at one end to lever *A*, and provided with a link *D*<sup>1</sup> at the other end and engaging said notches, as set forth. 2nd. The combination of the hand lever *A*, clamp lever *C*, and holdfast rod *D*, operating as described.

**No. 57,661. Harness. (Harnais.)**



Thos. H. Briggs, Bradford, Ontario, Canada, 2nd October, 1897 6 years. (Filed 24th September, 1897.)

**Claim.**—1st. The combination of adjustable springs *a*, and levers *g*, carried by brackets *b* applied to the fore-carriage; spring deflect-