

scribed. 2nd. In an underground conduit for electrical conductors, the combination, of the inner casing and the outer casing concentrically arranged, of a flexible cord spirally arranged between the two, and a non-conducting insulating compound filled between the coils of the cord, substantially as described. 3rd. In an underground conduit for electrical conductors, the combination, of the conduit made in sections, substantially as described, of a coupling for the ends thereof, comprising an annular packing about the joint, a coupling ring made in two parts clamped upon the joint with a chamber within and an insulating material filled in said chamber, substantially as described. 4th. In an underground conduit for electrical conductors, made in sections, each section comprising an inner and outer casing and an annular non-conducting filling between, of an insulation between the sections, such as the ring P, substantially as described. 5th. In an underground conduit for electrical conductors, the combination, of the conductor made in sections, each section comprising an inner and an outer casing, and an annular non-conducting filling between, on an insulation between the sections, consisting of the ring P, having the flanges Q, of the coupling G, clamped upon the meeting ends of the sections, and the filling G, within said coupling ring, substantially as described. 6th. In an underground conduit for electrical conductors, a service box comprising a casing R, the detachable frame S¹, therein, the plate T, and contacts T¹, T², thereon, substantially as described.

No. 40,564. Process of Making Electrical Conduit Sections. (*Procédé pour la fabrication des sections de conduit électrique.*)

James Fulton Cummings, Detroit, Michigan, U.S.A., 6th October, 1892; 6 years.

Claim.—1st. The herein described process of manufacturing conduit sections of electrical conductors, consisting in concentrically arranging two tubes, with spacing blocks between forming spaces from end to end, and then in forcing a non-conducting compound into the annular space between, substantially as described. 2nd. The herein described process of manufacturing conduit sections for electrical conductors, consisting in spirally winding a casing with a non-conducting flexible cord, inserting the casing thus wound into a larger casing, of a diameter equal to that of the inner tube, and its winding and then in forcing into the space between a liquid non-conducting compound and allowing said compound to harden, substantially as described.

No. 40,565. Dumping Waggon. (*Tombereau.*)

Lewis Stewart Browning, Montreal, Quebec, Canada, 6th October, 1892; 6 years.

Claim.—1st. In a dumping cart, the combination, with the body, shafts and axles, of pedestals formed of upper and lower telescopic casings, and spiral springs contained therein, the said body and shafts being connected to the upper casing, the former pivotally and the lower casing to the axle, as shown and described. 2nd. In a dumping cart, the combination, with the body and axle, of spring pedestals interposed between the axle and the body, resting on the former and pivoted at their rear faces to the latter and having sockets formed in their front to receive the ends of the shafts, all as herein set forth. 3rd. In a dumping cart, the combination, with the body of the cart, and spring pedestals placed under the ends of the shafts, of a pivot spindle passing through pedestals, and ears projecting downward from body of cart, and a locking device securing body to shafts, all substantially as herein set forth. 4th. In a dumping cart, the combination, with spring pedestals interposed between the body and the axle, and the pivot pin carried in such pedestals, of levers K, mounted on such pivot pin with long arms connected with tail board of cart, and short arms slotted to receive pins projecting from pedestals, all as herein set forth. 5th. In a dumping cart, the combination, with the body, of the spring pedestals interposed between it and the axle, levers K, K, mounted on pivot pin H, and connected with tail board. A of cart and pedestals, levers O, O pivoted to bottom of cart, and locking device holding down cart in front, all as and for the purposes described. 6th. In a dumping cart, pedestals interposed between the body of the cart and the axle which passes through and carries them, formed with inner and outer sliding shells holding springs, having on their upper ends, in front, sockets to receive ends of shafts, and in rear ears through which passes pivot pin, all as herein set forth. 7th. The combination, with the body A, pivoted to spring pedestals B, B, mounted on axles C, C, of the springs N, N, connected with said body and the pedestals. 8th. The combination, with the pivoted dumping body A, shafts F, and suitable bearing plates, of a curved expansion spring arranged to assist the return of said body to its normal position after dumping, as shown and described.

No. 40,566. Method of Making Dynamite.

(*Méthode de fabriquer la dynamite.*)

William Young Recheester, Ottawa, and John McArthur, Nepean, both of Ontario, Canada, 6th October, 1892; 6 years.

Claim.—1st. In a compound of gum camphor, carbonate of ammonia, alcohol or rectified spirits, water and whitening, substantially in the proportions for the purposes set forth.

No. 40,567. Hot Water Heater. (*Calorifère à eau.*)

Edward Gurney, Toronto, Ontario, Canada, 6th October, 1892; 6 years.

Claim.—1st. In a hot water heater, composed of a series of horizontal water sections, an ash pit separated from the furnace by a grate made of two plates similarly perforated and arranged so that one plate may be adjusted to close or partially close the perforations in the other grate, substantially as and for the purpose specified. 2nd. In a hot water heater, composed of a series of horizontal water sections, an ash pit separated from the furnace by a grate made of two plates similarly perforated and arranged so that one plate may be adjusted to close or partially close the perforations in the other plate, in combination, with a door having an air space formed in it between two plates, the outer plate being perforated near the bottom of the door and the inner plate near its top, the latter perforations being preferably covered with fine gauze, substantially as and for the purpose specified. 3rd. In a hot water heater, composed of a series of horizontal water sections, an ash pit separated from the furnace by a grate made of two plates similarly perforated and arranged so that one plate may be adjusted to close or partially close the perforations in the other plate, in combination, with a series of water sections having large openings J, formed in each section and arranged one above the other so as to form straight fire flues above the furnace, substantially as and for the purpose specified. 4th. In a hot water heater, composed of a series of horizontal water sections, an ash pit separated from the furnace by a grate made of two plates similarly perforated and arranged so that one plate may be adjusted to close or partially close the perforations in the other plate, in combination, with a series of water sections having large openings J, formed in each section and arranged one above the other so as to form straight fire flues above the furnace, and of a perforated door located between the furnace and the bottom of the lower section, substantially as and for the purpose specified. 5th. In a hot water heater, composed of a series of horizontal water sections connected together by vertical water channels outside of the said horizontal sections, a water section having a horizontal water way formed around its outer circumference and connecting the two outer vertical channels, a horizontal water way leading from the central vertical water channel and connected by two or more curved hollow arms to the circumferential water space, the curved arms forming the large openings or smoke flues, substantially as and for the purpose specified.

No. 40,568. Type Bar. (*Barre de caractères.*)

Roswell Heazeltine St. John, Cleveland, Ohio, U.S.A., 6th October, 1892; 6 years.

Claim.—1st. A type bar blank composed of a hard body and a yielding edge, substantially as described. 2nd. A type bar, consisting of separate pieces fasted together, one of said pieces constructed to have characters impressed thereon, substantially as described. 3rd. A type bar blank, having a body of hard material and a strip of soft material secured to the edge thereof, substantially as described. 4th. A type bar formed of different pieces of metal detachably fastened together, and characters on one edge of said bar, substantially as described. 5th. A type bar, consisting of a body part having a projection at its edge, and a strip of compressible material engaged and securely held by said projection, substantially as described. 6th. The method herein described of forming a type bar with characters upon the edge thereof to print a line of type, consisting in producing or forming characters on said bar by means of pressure, substantially as described. 7th. A type bar blank for printing a line of type, constructed with material in which the characters can be formed by pressure, substantially as described. 8th. In the art of printing, the method of producing a line of characters on a strip of metal, consisting in assembling a series of matrices and then bringing the matrices and the strip of metal together under pressure, substantially as described.

No. 40,569. Extension Ladder. (*Echelle à rallonge.*)

William J. Robertson and John Baptist Genin, both of St. Albans, Vermont, U.S.A., 6th October, 1892; 6 years.

Claim.—1st. In an extension-ladder, a ladder-section having rungs arranged in pairs connected to the section upon opposite sides thereof and an extensible ladder-section located between the rungs forming the pairs, in combination with a pivoted support consisting of a transverse horizontal connecting-bar, having at each end a U-shaped seat to sustain the rung of the extensible ladder-section at both its ends and on the same plane with the rungs of the respective pairs, substantially as and for the purpose described. 2nd. In an extension-ladder, a ladder-section having rungs arranged in pairs and connected thereto upon opposite sides and an extensible ladder, section located between the rungs forming the pairs, in combination with a pivoted wire support consisting of a transverse connecting-bar having a U-shaped seat at each end an operating-rod connected to the support and a rope and pulley for raising the extensible ladder-section, substantially as and for the purpose specified.