

needed with the trigger and operating, when the trigger is released, to return it and the elevator to their normal positions, substantially as described. 12th. In a magazine fire-arm, the combination of a magazine C provided with an automatic feed for the cartridges, a chamber E into which the magazine C leads, a chamber G containing a laterally elongated bore L partly closed at its forward end, and communicating at its rear end with the chamber E, and a yielding tongue *f* in the base of the bore L, a pivotal cam N in the side of the said bore, a magazine C₁ communicating at its rear end with the open forward end of the bore L, an elevator D in the chamber E provided with a bore normally communicating at opposite ends with the magazine C₁, and bore L, a trigger connected with the elevator, and operated by pressure to raise the elevator in the chamber E to carry the cartridge contained in its bore to the barrel, and firing-mechanism, to actuate the said firing-mechanism to explode the cartridge, a spring I₂ connected with the trigger, and operating when the trigger is released, to return it and the elevator to their normal positions, and a lug *b* on the trigger to engage with the cam N, substantially as described. 13th. In a magazine fire-arm, the combination of a magazine C provided with an automatic feed for the cartridges, a chamber E into which the magazine C leads, a chamber G₁ containing a laterally elongated bore L partly closed at its forward end, and communicating at its rear end with the chamber E, a magazine C₁ communicating at its rear end with the open forward end of the bore L, an elevator D provided with the pins *p* in the chamber E, and having a bore normally communicating at opposite ends with the magazine C₁, and bore L, a trigger comprising connected sliding plates F extending through the chamber E on opposite sides of the elevator, and provided with inclined slots *a* through which the pins *p* extend, and a finger-piece F₂, a spring I₁ in the chamber G₁ connected with the trigger, and firing-mechanism actuated by pressure upon the trigger, the whole being constructed and arranged to operate substantially as described. 14th. In a magazine fire-arm having an elevator D in a chamber E, and a trigger operating by pressure to raise the elevator in its chamber, and adapted when released to lower the elevator to its normal position, the combination, with the barrel G and chamber E, of a needle I supported to be reciprocated in suitable bearings, a confined spring I₁ engaging with the needle, a cam K having guides in its opposite sides, and fingers *i*, upon opposite sides of the needle, and extending into the guides in the said cam, and into the path of the trigger, whereby, when the trigger is pressed, it engages with the said fingers to force back the needle and compress the spring I₁ until released to drive the needle forward, substantially as and for the purpose set forth. 15th. In a magazine fire-arm having an elevator D in a chamber E, and a trigger operating by pressure to raise the elevator in its chamber, and adapted when released to lower the elevator to its normal position, the combination, with the barrel G, and chamber E, of a needle I supported to be reciprocated in suitable bearings, a spiral spring I₁ surrounding the needle, sliding collars *k* and *k*₁ confined upon the needle, and confining the spring I₁ between them, a cam K having guides in its opposite sides, and fingers *i* upon opposite sides of the needle, and extending into the guides in the said cam, and into the path of the trigger, whereby, when the trigger is pressed, it engages with the said fingers to force back the needle and compress the spring I₁ until released to drive the needle forward, substantially as and for the purpose set forth. 16th. In a magazine fire-arm having an elevator D in a chamber E, and a trigger operating by pressure to raise the elevator in its chamber, and adapted when released to lower the elevator to its normal position, the combination, with the barrel G, and chamber E, of a reciprocating needle I having a recess near its rear end containing rubber *h* surmounted by a tongue *a*, a cross-bar *c* extending transversely through the said recess and tongue, a spiral spring I₁ surrounding the needle, sliding collars *k* and *k*₁, having guides *k*₂ to enter grooves *y* and *y*₁ in the sides of the needle, and confined upon the needle and confining the spring I₁ between them, a cam K having guides in its opposite sides, and fingers *i* upon the projecting ends of the cross-bar *c* extending into the guides in the said cam, and into the path of the trigger, substantially as and for the purpose set forth. 17th. In a magazine fire-arm having an elevator D in a chamber E, and a trigger operating by pressure to raise the elevator in its chamber, and adapted when released to lower the elevator to its normal position, the combination, with the barrel G and chamber E, of a reciprocating needle I having a recess near its rear end containing rubber *h* surmounted by a tongue *a*, a cross-bar *c* extending transversely through the said recess and tongue, a spiral spring I₁ surrounding the needle, sliding collars *k* and *k*₁, having guides *k*₂ to enter grooves *y* and *y*₁ in the sides of the needle, and confined upon the needle and confining the spring I₁ between them, a cam K having guides in its opposite sides, and fingers *i* upon the projecting ends of the cross-bar *c* extending into the guides in the said cam, and into the path of the trigger, substantially as and for the purpose set forth. 18th. In a magazine fire-arm, the combination, with the stock having a magazine C of an automatic feed for the cartridges comprising a laterally confined spiral spring B extending into a chamber formed in one side of the stock, and communicating with the magazine C, and provided with a finger *g*₂ extending through a slot *s* in the stock, substantially as described. 19th. In a magazine fire-arm, the combination, with the stock having a magazine C, of an automatic feed for the cartridges, comprising a spiral spring B extending into a pivotal housing *r*₂ in a chamber *r* formed in one side of the stock, and communicating with the said magazine, a spring *r*₁ behind the housing *r*₂, a head *q* at the forward end of the spring B, and a finger *g*₂ connected with the head *q*, and extending through a slot *s* in the stock, substantially as described. 20th. In a magazine fire-arm, the combination, of a stock A containing a magazine C, and provided with slots *s*₁ and *s*₂, and a chamber *r* in one side communicating with the said magazine, and provided with a, a spiral spring B extending into a pivotal housing *r*₂ in the chamber *r*, and hollowed out on its outer side, a spring *r*₁ behind the housing *r*₂, a head *q* at the forward end of the spring B, and a finger *g*₂ connected with the head *q*, and extending normally through the slot *s* in the stock, substantially as described. 21st. In a magazine fire-arm, the combination of a stock A containing a magazine C, and provided with a slot *s* closed with rubber strips *s*₁, a slot *s*₂, and a chamber *r* in one side communicating with the said magazine, and provided with a recess *a*, a spiral spring B extending into a pivotal housing *r*₂ in the

chamber *r*, a spring *r*₁ behind the housing *r*₂, a head *q* at the forward end of the spring B, and a finger *g*₂ connected with the head *q*, and extending normally through the slot *s* in the stock, substantially as described. 22nd. In a magazine fire-arm having a chamber E, the combination, with the barrel G, of a magazine C communicating from its rear end with the forward end of the chamber E to receive the shells of cartridges after their explosion in the gun, and provided towards its forward end with an opening *e*, and a bevelled side *c* at the said opening, substantially as and for the purpose set forth. 23rd. In a magazine fire-arm having a chamber E, the combination, with the barrel G, of a magazine C communicating from its rear end with the forward end of the chamber E to receive the shells of cartridges after their explosion in the gun, and provided towards its forward end with an opening *e* having an adjustable cover *d*, and a bevelled side *c* at the said opening, substantially as and for the purpose set forth.

No. 29,341. Folding Cot. (*Lit plant.*)

John C. Porter, New York, U.S., 13th June, 1888; 5 years.

Claim.—1st. As a new article of manufacture, a folding cot consisting of a main body formed of the side bars A, A, and cross pieces B, B, the folding legs E, folding holding arms F, springs C and slats D, all arranged substantially as shown and described. 2nd. The legs E hinged to the main side bars A, and provided with the round *b*, in combination with the hinged holding arms F, notched at *d*, and provided with the stops *f*, substantially as and for the purposes set forth. 3rd. In a folding cot, the main frame composed of the side beams A, A, cross bars B, B supporting the springs, and the slats held upon the same, and the folding legs E pivoted to the side bars A, and provided with the rounds *b*, in combination with the holding arms F, each pivoted to the main side bars A on a line with the pivots of the legs E, and notched at *d*, and provided with the stop pins *f* between the notch *d* and the pivot of the holding arms, substantially as described.

No. 29,342. Chafing Dish. (*Réchaud.*)

Pierre A. Bégin, Ottawa, Ont., 13th June, 1888; 5 years.

Reclame.—1o. Dans un réchaud activé par une lampe à l'huile, le vaseau B munie d'un tuyau conique central H ayant la couverture C, tel que décrit pour les fins sus-mentionnées. 2o. La combinaison dans un réchaud activé par une lampe à l'huile, de la théière A, cheminée D, vaseau B, tuyau H et couverture C, le tout tels que décrit pour les fins sus-mentionnées.

No. 29,343. Harrow. (*Herse.*)

George Gillies, Gananoque, Ont., 14th June, 1888; 5 years.

Claim.—1st. A harrow frame consisting of two sections, each section composed of two parallel bars bent to intersect at the ends, and hinged together in V-form, as set forth. 2nd. A harrow frame consisting of two sections hinged together in V-form, said sections provided with a fender J at the front, as set forth. 3rd. A harrow having a tooth at the joint of two sections hinged together, as set forth. 4th. A harrow consisting of two sections hinged together, each section composed of two parallel bars provided with teeth, one of which bars having a round hole or eye, and the corresponding bar of the opposite section a square hole or eye, and a pintle rod having a round portion to enter the round eye, and a square portion to enter the square eye, and a tooth-holder and tooth clipped to said pintle rod, as set forth. 5th. The combination in a harrow of two sections, a pintle connected with said sections, a tooth-holder seated on said pintle, a tooth seated on said tooth-holder, and a clip clamping said pintle, tooth-holder and tooth together, substantially as set forth.

No. 29,344. Seaming Machine.

(*Machine à agraffer les feuilles de métal.*)

Francis A. Walsh, Milwaukee, Wis., U.S., 14th June, 1888; 5 years.

Claim.—1st. In a machine for seaming sheet metal vessels, a roller former having a seaming groove at an acute angle to its axis, and means, substantially as described, for actuating said roller former with relation to a vessel, whereby the operation of seaming is accomplished, as set forth. 2nd. In a machine for seaming sheet metal vessels, a roll or former having a seaming groove at an acute angle to its axis, and a finishing face approximately parallel to said axis, and means, substantially as described, for actuating said roll or former with relation to a vessel, whereby the operation of double seaming may be accomplished, as set forth. 3rd. In a machine for seaming sheet metal vessels, a roll or former having a seaming groove at an acute angle to its axis, a finishing face approximately parallel to said axis, and a shoulder at an angle to the finishing face, and means, substantially as described, for actuating said roll or former with relation to a vessel, whereby the operation of seaming is accomplished, as set forth. 4th. In a machine for seaming sheet metal vessels, a roll or former made in two sections, said sections so constructed and arranged that a groove at an acute angle to the axis of the roll or former is left between the opposing surfaces of said sections, and means, substantially as described, for actuating said roll or former with relation to a vessel, whereby the operation of seaming may be accomplished, as set forth. 5th. In a machine for seaming sheet metal vessels, a roll or former made in two sections so constructed and arranged that a groove at an acute angle to the axis of the roll or former is left between the opposing surfaces of the sections, and means, substantially as described, for holding one of said sections against rotation, and for actuating said roll or former with relation to a vessel, whereby the operation of seaming is accomplished, as set forth. 6th. In a machine for seaming sheet metal vessels, a roll or former provided with a seaming groove, and bevelled on one side of this groove to form a finishing face, and means, substantially as described, for actuating said roll or former, whereby the operation of seaming is accomplished, as set forth. 7th. In a machine for seaming sheet metal vessels, a bifurcated rock shaft, a stud or support adjustable in the bifurcations of the shaft, a seaming roll or former