tank for water or other liquid, of a chambered valve D which has openings or passages J, K for the ingress and egress of the liquid of the tank and of air, and is provided with a stem P suitably guided, all so that when said valve is seated said discharge is closed, and, when raised, said discharge is open, and from the then ingress of liquid from the tank, said valve is again seated, emptying its contents into said discharge, substantially as described for the purpose specified. 3rd. The combination, with the outlet or discharge of a tank for water or other liquid, of a chambered valve which has openings or passages J and K for the ingress and egress of the liquid of the tank and of air, and the port M of the air passage made downwardly inclining, and all otherwise constructed and arranged that, seated, said discharge is closed, and, raised, said discharge is opened, and from the then ingress of liquid said valve is again seated, emptying its contents into said discharge, substantially as described for the purpose specified. 4th. The combination, with a tank for liquid, an outlet pipes for the liquid and a valve to said outlet pipe, of two pivoted lever for operating said valve, one of said levers being constructed to slide at its pivotal point and to act on the other lever to open the valve when moved in one direction, and when moved in the other direction to be shifted at its pivotal point, substantially as described. 5th. A crank lever N having arm *d* connected to a valve, of a tank for wateror other liquid, and arm *l* rounded at its outer end, in combination with an operating crank lever Q having arms *t* and *u*, its arm *t* at its outer end rounded, and an elongated fulcrum-bearing *w*, substantially as described for the purpose specified. 6th. The pivoted lever N having long arm *d* and short arm *l* rounded at its free end, in combination with a lever Q having its short arm *t* rounded at its free end and formed with an elongated fulcrum-bearing *w*, whereby said levers are adapted to be operated, substantially as described. 7th. The combination, with a tank for liquid and outlet pipe for the liquid, a float valve for closing said outlet pipe provided with an air inlet pipe and a liquid inlet, the liquid inlet being located at such point that, when the valve is unseated, the liquid will pass from the tank into said valve, and, when seated, the liquid will pass therefrom into the outlet pipe of the pipe, substantially as described.

No. 19,761. Apparatus and Case for Embalming Dead Bodies. (*Appareil et Boite pour Embaumer les Corps.*)

Arthur S. Lovett, Erie, Penn., U.S., 8th July, 1884; 5 years.

Claim.—1st The combination, in a case for enclosing and embalming dead bodies, of a gas-tight bottom B with a flexible gas-tight cover A provided with a frame C secured to the lower edge thereof, adapted to be clamped to the bottom B or removed therefrom, the packing D and clamps *b*, *b*1, all operating together substantially as and for the purpose set forth. 2nd. The combination, in a gas-tight case, for treating dead bodies, of the flexible cover A, the gas-tight bottom B, the packing D, the bellows J, the escape cock *g* and escape pipe G1, all constructed and operating substantially as and for the purpose set forth. 3rd. The combination, in a case for embalming dead bodies, of the following elements: a bottom B mounted upon folding legs E, E, a flexible gas-tight cover A arranged to be clamped to the bottom B, and means for supplying gas to and expelling the same from said case, all arranged and operating substantially as and for the purpose set forth.

No. 19,762. Railway Signal. (*Signal de Railroute.*)

Bert Buys and Frank Wilcox, Reese, Mich., U. S., 8th July 1884; 5 years.

Claim.—The combination of the vertical shaft A, for operating a visual signal, the horizontal plate C forming a step for the shaft and carrying a series of fixed electrical contacts connected with a telegraph line, and an arm carrying a contact point and attached to said shaft, and constructed to both operate said shaft and signal and move said contact point over the fixed contacts as the visual signal is moved, substantially as described.

No. 19,763. Textile Fabric. (*Tissu Textile.*)

Morris H, Pulaski, Philadelphia, Tenn., U.S., 8th July, 1884; 5 years.

Claim.—1st. As a new article of manufacture, a web of embroidery having the scalloped or curved edges of the embroidered part weakened, as described, as and for the purpose intended, substantially as described. 2nd. As a new article of manufacture, a web of embroidery having the edges of each embroidery strip perforated, scored, indented or cut contiguous to and around the curves, and scallops constituting the lower edge of each embroidered strip of such web, as and for the purpose intended, substantially as described. 3rd. As a new article of manufacture, the within-described separable web of embroidery indented, scored or perforated contiguous to and around the curves or scallops of the edge of each strip of embroidery composing such web, whereby each of said strips is readily separable from the main fabric around said scallops of said edges, and when so detached each strip is practically cut out around the curves, scallops of the edge of the embroidery, substantially as described. 4th. A separable web of embroidery consisting of strips of embroidery, the lower edge of each of said strips being a series of scallops, curves, or ellipses, and having surrounding such curves, ellipses, or scallops, a weak frangible line, whereby each strip may be detached from the web in a finished condition, with its scallops, curves, or ellipses cut out ready for use, substantially as described.

No. 19,764. Carriage Spring. (*Ressort de Voiture.*)

Henry W. Hamille, Norfolk, N.Y., U.S., 8th July, 1884; 5 years.

Claim—The combination of the end springs A, A1, side bars *c*, *c*1 and side springs B, B1, connected and arranged as set forth for the purpose described.

No. 19,765. Pump. (*Pompe.*)

John A. Butler, Brantford, Ont., 12th July, 1884; 5 years.

Claim.—1st. In a submerged pump, the combination of cylinder A, with valve D, and water-passage G having valve H at the bottom of it, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of handle N, with fulcrum M working between lugs in cap K, also set screw O, substantially as and for the purposes hereinbefore set forth. 4th. The drip valve Q, having valve R, substantially as and for the purposes hereinbefore set forth.

No. 19,766. Carriage Thill Coupling.

(*Armon de Limonière de Voiture.*)

Nelson A. Primus, Somerville, Mass., U.S., 12th July, 1884; 5 years.

Claim.—1st. The combination of a clip and bearing piece B provided with a screw tension C extending from it, as shown, with the journal carrier D and the journal E, arranged as represented, such carrier having the screw tenon extending through it, and also having the journal projected within the bearing piece, and all being substantially as represented. 2nd. The combination of the bearing plate H, its screw I and nut K, with the bearing piece B and with the carrier D and the journal E arranged with and adapted to the bearing piece, substantially in manner as set forth; the said plate H being to operate, as described, against the elastic or rubber block G placed against the thill iron head and in the bearing piece and against the plate H in the manner as specified.

No. 19,767. Horse Collar Fastener.

(*Croissant de Collier de Cheval.*)

Edward S. Platt, Norham, Ont., 12th July, 1884; 5 years.

Claim.—1st. A metallic casing upon each end of a horse collar, parted below, conforming to the outline of the collar and secured thereto, said casings having each a solid face, one of which is provided with buttons having recessed necks adapted to enter into slots in the face of the opposite part, and being locked therein by the narrower lower portion of said slots engaging the shoulder of said buttons. 2nd. The casing A having a face A1 and provided with slots *a*, wide at the top and narrow below, and the casing B having a face B1 provided with buttons *b* having shoulders *b* adapted to enter the wider part of the slots *a* or to be engaged and retained by the narrower lower portion thereof, all substantially as described and for the purpose set forth.

No. 19,768. Spring Bed. (*Sommier Elastique.*)

Peter Fraser, Hamilton, Ont., 12th July, 1884 5 years.

Claim.—1st. In a bed bottom, the inner portion of the sides and ends A, B formed with a recess *a* and projections *b*, *c*, substantially as and for the purpose specified. 2nd. In combination with the sides and ends A of a bed bottom, of the staples B inserted therein, so as to leave a space *a* for the top coil of the spring to slide in behind the staples, substantially as specified. 3rd. The combination of the spring C, frame provided with recesses *a*, projections *b*, *c*, slots D and stationary and swinging post H, substantially as and for the purpose specified. 4th. The combination, with a frame A constructed with recess *a*, projections *b*, *c*, of the spring C, slots D and webbing I, to fill the blanks between the spaces, substantially as described.

No. 19,769. Hame. (*Attelle.*)

James McCurdy, Belleville, Ont., 12th July, 1884; 5 years.

Claim.—1st. In an automatic hame fastener, the combination of the lock *c*, jaws *d*, spring *g* and tube or socket *f*, substantially as and for the purpose hereinbefore set forth. 2nd. The nipple *j*, in combination with the lock *c*, jaws *d*, spring *g* and tube or socket *f*, substantially as and for the purposes hereinbefore set forth.

No. 19,770. Improvement in the Manufacture of Sausages. (*Perfectionnement dans la Fabrication de la Saucisse.*)

Francis C. Ireland, Lachute Mills, Que., 12th July, 1884; 5 years.

Claim.—1st. The invention of a new kind of sausage made from meat and desiccated wheat, in the proportions substantially as set forth, which causes the wheat to counteract the more indigestible portions of fatty meat, so as to produce a sausage more digestible and palatable that the affinity of any other known mixture in sausages.

No. 19,771. Bicycle. (*Bicycle.*)

Thomas H. Robinson, Toronto, Ont., 12th July, 1884; 5 years.

Claim—1st. A reach A provided with necks C and bent downwardly between the said necks, the heads B to receive the said necks, in combination with the swivel-joint placed in the reach A and arranged to connect the front wheels of two bicycles together, substantially as and for the purpose specified. 2nd. In a reach arranged to connect the front wheels of two bicycles together, a swivel-joint so arranged that it cannot revolve entirely around, substantially as and for the purpose specified. 3rd. In combination, with the curved reach A arranged to connect together the front wheels of two bicycles, the curved plates F provided with straps and adjustably connected to the reach A by the clips G, substantially as and for the purposes specified. 4th. The forked bars E connecting the neck C to the sleeve *b*, in combination with the swivel-jointed reach A, substantially as and for the purpose specified.

No. 19,772. Machinery for Knitting Rattan.

(*Machine pour Tricoter le Rotin.*)

Edward L. Taft and Henry M. Rich Athol, Mass., U.S., 12th July, 1884; 5 years.

Claim.—1st. The combination of the stationary strand guide K and the looper F, the series of standards *e*1, slides *g*1, U shaped tongues *k*1,