No. 34,038. Gas Meter. (*Compteur à gaz.*)

Robert Mitchell and Charles Lawson, Montreal, Que., 2nd April, 1890; 5 years.

Claim.—1st. In a gas meter, the diaphragm normally separate from the frame, and fastening devices by which it can be attached to the meter frame, as herein set forth. 2nd. In a gas meter, the diaphragm composed of the front plate, expansible leather sides and back plate with apertures therein, and plate normally covering same, as and for the purposes set forth. 3rd. In a gas meter, the diaphragm composed of front and back plates, each provided with return flanges, leather sides with edges laid on such flanges, and lengths of wire or metal wound round over such leather, as and for the purpose described. 4th. The combination, with the front plate F of the diaphragm, of the centre N with outer pin *n*, eyes O, O^1, and bush P, as and for the purposes set forth. 5th. The combination, with the valve plate Q, with openings therein, of plates Q^1 covering such openings attached to valve plate, so as to be removable at will, and carrying valves and gratings. 6th. In a gas meter, ports from inlet pipe to supply and from exhaust into outlet pipe, of proportionately less sectional area than such pipes, as and for the purposes set forth.

No. 34,039. Hame Staple and Trace Tug Clip. (*Anneau d'attelle pour les trails et mancelles.*)

Edwin M. Crossan and Merritt L. Devers, Bethany, Mo., U. S., 3rd April, 1890; 5 years.

Claim.—1st. A hame staple and trace tug clip, formed integral with each other, and consisting of the staple A, and the parallel plates C, substantially as described. 2nd. A hame staple, having formed integral therewith plates parallel with each other and arranged at an angle to the staple and provided with perforations, substantially as and for the purpose described.

No. 34,040. Frame for Wire Mats.

(*Bordure pour les paillassons.*)

Thomas Midgley, Beaver Falls, Penn., U.S., 3rd April, 1890; 5 years.

Claim.—1st. A mat, having a body or centre portion formed of wire work, combined with a border or bounding portion formed of bent wire and connected to the body or centre portion. 2nd. A mat, having a body or centre portion formed of wire work, combined with a border or bounding coil of wire connected to said body or centre part. 3rd. A mat, having a body or centre portion formed of wire work, combined with a bounding part, also formed of wire and interlaced with the edges of the body or centre portion. 4th. A mat, having a body or centre portion formed of wire work, combined with a continuous bounding coil of wire secured to the body part and forming rounded corners. 5th. A wire mat formed entirely of wire, and consisting of a central portion and a frame or border, the said frame or border being formed by coiling a piece of wire around the outer edges of the central portion.

No. 34,041. Frame for Wire Mats.

(*Bordure pour les paillassons.*)

Seymour Rogers, Beaver Falls, Penn., U.S., 3rd April, 1890; 5 years.

Claim.—1st. In a wire mat, a body part composed of a series of parallel coils united by hinge rods, in combination, with a bounding coil or coils extending entirely around the mat, and arranged transversely to the body coils on two sides of the mats, and in which the hinge rods are interlooped with the ends of such body coils and bounding coils. 2nd. In a wire mat, a body part formed of a series of parallel coils connected together, in combination, with a continuous bounding coil arranged transversely to the body coils and along their ends, and wire rods extending through the body coils and entirely across the body of the mat, and connecting the bounding coils on diametrically opposite sides of the mat to the body coils. 3rd. In a wire mat, the body portion formed of a series of parallel coils of wire, combined with a series of staple-shaped hinge-rods connecting the adjacent coils together, and in which said staple-shaped hinge-rods are inserted from opposite sides of the mat. 4th. In a wire mat, the flexible body part composed of wire coils, in combination, with a bounding coil surrounding the edges of the body part and arranged partly parallel to and partly transverse with respect to the body coils, and a hinge rod of shorter width than the width of the mat, located at the end of the mat for uniting the parallel portions of the bounding coil to the end coil of the body part. 5th. In a wire mat, the body part formed of a series of parallel coils, combined with staple-shaped hinge rods connecting the parallel coils, and a flexible bounding coil arranged transversely to the body coils and interwoven both with the ends of the said body coils, and looped ends of the staple-shaped hinge rods. 6th. In a wire mat, a body part formed of wire work combined with bounding coils D extending along two diametrically opposite edges of the body part and bent around the corners toward each other, and made to meet, or substantially meet, on the other edge of the body part, a splice tube or piece E, arranged partly within each of the ends of the bounding coils, and a connection between the said bounding coils on each side of the splice tube and the body part. 7th. In a wire mat, the body part formed of parallel coils of wire united by hinge rods, in combination with, bounding coils D, interlaced with the ends of the body coils, and having their end portions parallel to the ends of the body part, and secured thereto by connecting rod or hinge wire G. 8th. In a wire mat, the body part formed of parallel coils of wire united by hinge rods, in combination with bounding coils D interlaced with the ends of the body coils, and having their end portions parallel to the ends of the body part, and secured thereto by connecting rod or hinge wire G, and united by a splice tube E.

No. 34,042. Manufacture of Vinegar.

(*Fabrication du vinaigre.*)

John F. Peasgood, Woodyatt, Eng., 3rd April, 1890; 5 years.

Claim.—The manufacture of tomato vinegar in the manner hereinbefore described, wherein I dispense with the process of fermentation.

No. 34,043. Compound Ingot for the Manufacture of Solid or Hollow Seamless Plated Wire. (*Lingot composé pour la fabrication du fil de fer galvanisé solide ou creux sous soudure.*)

John L. P. Spooner, Providence, R.I., U. S., 3rd April, 1890; 5 years.

Claim.—The method of making a seamless plated ingot, consisting of first melting the fine metal in a suitable mold into a fluid state, then immersing a hollow or solid core of base metal into the molten fine metal and allowing it to cool, whereby the fine metal will be united directly to the core by fusion.

No. 34,044. Baby Tender. (*Chariot d'enfant.*)

Milo A. Richardson and Rosell L. Richardson, New York, N.Y., U.S., 3rd April, 1890; 5 years.

Claim.—1st. In a baby tender, the combination, with a circular base, of a seat carried thereby and mounted eccentrically thereon at a point back of the centre of the base. 2nd. In a baby tender, the combination, with the base, of a body ring rigidly carried thereby, a seat suspended from said ring and an elastic connection between said seat and ring, whereby the seat may be moved independently of the ring. 3rd. In a baby tender, the combination, with the base, of a body ring carried thereby, a seat suspended from said ring, and an adjustable connection between said ring and seat, whereby the latter can be adjusted relatively to the ring. 4th. A baby tender, consisting of a base constructed of an elastic ring, rungs secured thereto and provided with casters, a body ring supported by and rigidly connected to the base by legs projecting from said rungs, a seat, and adjustable elastic suspenders flexibly connected to the body ring and seat for supporting the latter.

No. 34,045 Carriage Curtain Fastening.

(*Suspension des stores de voitures.*)

The Star Manufacturing Company, (assignee of Samuel P. Scott,) Hillsborough, Ohio, U.S., 3rd April, 1890; 5 years.

Claim—1st. In a carriage curtain fastening device, the combination of the base and the movable head having a bore with the pin provided with lugs on its ends, the collar on said pin having notches adapted to engage said lugs and the controlling spring all concealed within the bores of the head and base, substantially as described. 2nd. The combination of the base and pin attached thereto, having lugs on its outer end with a movable head having a closed bore, the collar placed on said pin and secured in the bore of the head and provided with slots engaging the lugs of the pin, and the coiled spring surrounding the pin and bearing against the collar and base, substantially as and for the purpose set forth. 3rd. The combination of the base A, having a central opening and an angular flange, as described, the pin secured thereto, having lugs on its upper end, and the coiled spring surrounding the outer portion of the pin, with the slotted collar D playing on said pin and the head E, having a bore in which collar D is seated, and fitted over the end of the pin, substantially as and for the purpose herein described.

No. 34,046. Rail. (*Rail.*)

Eichard De S. Bacot, Columbia, Thos. R. Heyward and Wm. N. Heyward, Hardeeville, S.C., U.S., 3rd April, 1890; 5 years.

Claim.—1st. In a rail, the combination of a flange and web section constituting the base and a grooved ball fitted thereto by means of webs integral with the ball and concave in the wake of the bolts projecting from each side of the ball clamping the base section, and having a space *c*, between the top of the web section and the bottom of the groove, substantially as described. 2nd. In a rail, the combination of a flange and web section constituting a base, having diagonally cut ends for forming the joints, and a grooved ball with projecting webs or jaws fitting over the base section, whereby, when a joint is formed, the sections are secured together and an unbroken base section is provided for the support of the ball. 3rd. In a rail, the combination of a flange and web section constituting a base, having a groove on each side of the web and a grooved ball fitting over the base, and having webs or jaws concave in the wake of the bolts, the extremities of which fit into the grooves on each side of the base section, and having a space *c* between the top of the base section and the bottom of the groove in the ball, as described. 4th. As a new article of manufacture, a ball for a rail having a central groove, and two downwardly projecting webs or jaws integral with the ball, concave in the wake of the bolts, and adapted to be fitted over the web of a flange and web section, the groove being of sufficient depth to leave a space *c* when applied to the base section, substantially as described. 5th. In a rail, the combination of a flange and web section constituting the base, and a grooved ball fitted thereto by means of webs integral with the ball, concave in the wake of the bolts projecting from each side of the ball and clamping the base section.

No. 34,047. Car Coupling. (*Attelage de chars.*)

George A. Sanders and Samuel J. Willett, (assignees of Nelson Newman,) Springfield, Ill., U.S., 3rd April, 1890; 5 years.

Claim.—1st. The combination of the draw heads, having the pairs of coupling pins U, R, one in advance of the other, the spring pressed link holders K arranged in the draw heads, and having the trans-