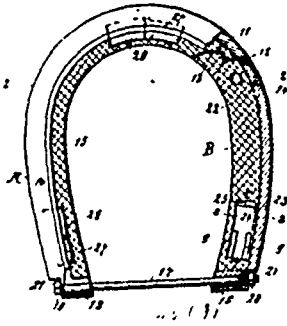
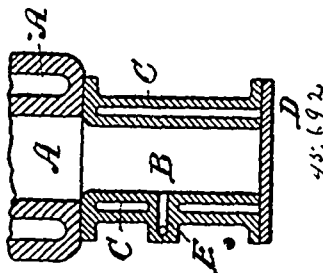


provided with a recess at its pivoted end and the shorter section with a latch head entering said recess, and a rod passing through



apertures in the ends of the said sections, substantially as described. 2nd. A horse-shoe comprising two flanged sections of unequal length and pivoted together, the longer section being provided with a recess, and the shorter section with a latch head entering said recess, detachable toe and heel calks, and a rod passing through sockets in the ends of the sections, substantially as herein shown and described. 3rd. The combination with a horse-shoe provided with an opening extending through the same, from the upper to the tread surface, one end of the opening being dove-tailed in cross-section, of a calk having a dove-tailed rib fitting in the dove-tail portion of the said opening, and a tie block fitting in and filling the portion of the opening not occupied by the rib of the calk, said tie block being inserted from the hoof contacting face of the shoe, thereby locking the calking in place, substantially as and for the purposes described. 4th. The combination with a horse-shoe provided with an opening extending through the same from the upper to the tread surface, one end of the opening being dove-tailed in cross-section, and the end of the other portion of the opening being bevelled from the hoof contacting surface of the shoe downwardly, of a calk provided with a dove-tailed rib fitting the dove-tailed portion of the opening, and a rectangular tie block having one end bevelled and fitting in the portion of the opening not occupied by the rib of the calk and locking the same in place, substantially as herein shown and described.

**No. 45,692. Oil or Hydro-Carbon Motor.**  
(*Moteur à huile ou hydrocarbure.*)



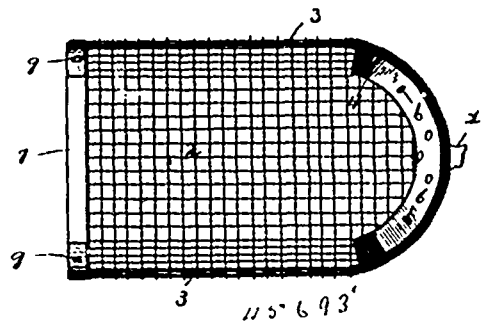
James E. Weyman, George Hitchcock and James A. Drake, all of Guildford, England, 4th April, 1894; 6 years.

*Claim.*—1st. In an oil or hydro-carbon motor, the combination with the vaporizer of a hot or igniting pipe or tube passing through it. 2nd. In an oil or hydro-carbon motor, the combination with the explosion chamber, of a vaporizing chamber surrounding it, substantially as set forth. 3rd. In an oil or hydro-carbon motor, the combination with the explosion chamber, and a vaporizing chamber surrounding it, of a hot or igniting pipe or tube extending through or across the vaporizing chamber, and connecting with the explosion chamber, substantially as set forth. 4th. In an oil or hydro-carbon motor, the combination with the explosion chamber and a vaporizing chamber surrounding it, of a second vaporizing chamber at the end of the explosion chamber and connected with the first vaporizing chamber and explosion chamber, substantially as set forth. 5th. In an oil or hydro-carbon motor, the combination with the explosion chamber, and a vaporizing chamber surrounding part of it, of another vaporizing chamber connected with it and surrounding the remainder of the explosion chamber, substantially as set forth. 6th. In an oil or hydro-carbon motor, the combination with the explosion chamber and two connected vaporizing chambers of a hot or igniting pipe or tube extending through or across one of the vaporizing chambers and connecting with the explosion chamber substantially as set forth. 7th. In an oil or hydro-carbon motor, the combination with the explosion chamber and two connected vaporizing chambers surrounding different parts of it, of another vaporizing chamber at the end of the explosion chamber, substantially as set forth. 8th. In an oil or hydro-carbon motor, the combination with the explosion chamber of two or more vaporizing chambers, one or more of which may be arranged around or in the

cylindrical wall of the explosion chamber, substantially as set forth. 9th. In an oil or hydro-carbon motor, the combination with the explosion chamber and a vaporizing chamber at its end, of a hot or igniting pipe or tube extending through or across the vaporizing chamber, substantially as set forth. 10th. In an oil or hydro-carbon motor, the combination with the explosion chamber and a vaporizing chamber surrounding it, of a non-return admission valve, substantially as set forth. 11th. In an oil or hydro-carbon motor, the combination with the explosion chamber and a vaporizing chamber, partly surrounding it, of a non-return admission valve, substantially as set forth. 12th. In an oil or hydro-carbon motor, the combination with the explosion chamber and a vaporizing chamber at its end, of a non-return admission valve, substantially as set forth. 13th. In an oil or hydro-carbon motor, the combination with the explosion chamber and a vaporizing chamber surrounding it of a detachable cover closing the ends of the explosion and vaporizing chambers, substantially as set forth. 14th. In an oil or hydro-carbon motor the combination with the explosion chamber a vaporizing chamber surrounding it and another vaporizing chamber at its end of a detachable cover closing both the vaporizing chambers, substantially as set forth. 15th. In an oil or hydro-carbon motor the combination with the explosion chamber and two vaporizing chambers surrounding different parts of its cylindrical wall of a cover for closing the ends of the explosion and vaporizing chambers, substantially as set forth. 16th. In an oil or hydro-carbon motor the combination with the explosion chamber and more than two vaporizing chambers surrounding different parts of its cylindrical wall of a cover for closing the ends of the explosion and vaporizing chambers, substantially as set forth.

**No. 45,693. Combined Shovel and Sifter.**

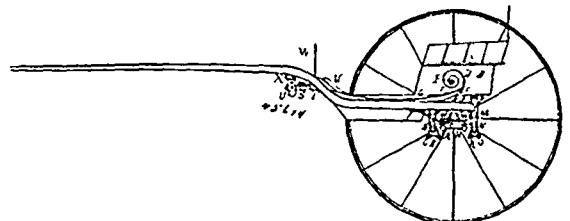
(*Pelle et tamis combinés*)



Charles Tanner, Staunton, Virginia, U.S.A., 4th April, 1894; 6 years.

*Claim.*—1st. The combination with a reticulated body part, composing the bottom and side and rear walls, of a shovel, of a rib around the upper edge of the side and rear walls, and plates upon opposite sides of the rear wall enveloping it and the rib, of a false bottom having side walls and everted flanges adapted to overlap the top and front edges of the side walls, and the front edge of the bottom to retain the false bottom in place within the shovel, substantially as specified. 2nd. In a shovel, the combination with a reticulated body, composing the bottom and side and rear walls, of a pair of plates upon the opposite sides of the rear wall, a stiffening rib around the top of the side and rear walls, an edge guard on the front edge of the body part, a handle secured to the rear plates, a false bottom provided with everted flanges adapted to be retained within the shovel and to entirely cover the reticulated part of said shovel, the whole co-operating, when the false bottom is in place, to present an entirely solid interior surface to the shovel, substantially as specified.

**No. 45,694. Road Cart. (*Désobligeante*.)**



Aloysius Brohmann, Mildmay, Ontario, Canada, 4th April, 1894; 6 years.

*Claim.*—1st. The combination of the iron bar H swinging in the two clevises K, K, and the two hooks M, M, in which the two clevises K, K hang, substantially as and for the purposes set forth. 2nd. The combination of side bar G, and coiled springs D, substantially as and for the purposes hereinbefore set forth.