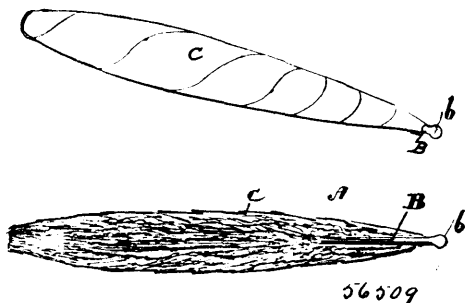
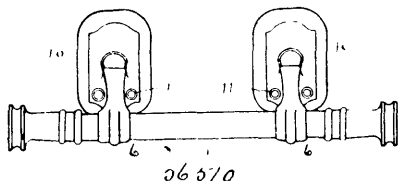


No. 56,509. Cigar. (Cigare.)

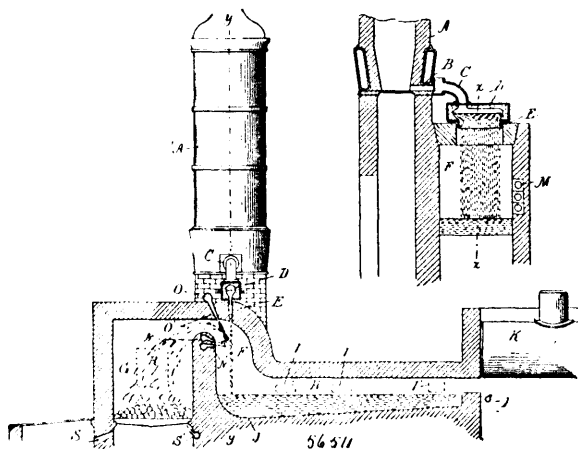
Frederick William Fraser, London, Ontario, Canada, 6th July, 1897; 6 years. (Filed 24th April, 1897.)

Claim.—As a new article of manufacture, a cigar, having a match bound into the butt end and projecting through the apex thereof, and having the igniting head located outside the apex and in proximity therewith, as and for the purpose specified.

No. 56,510. Coffin Handle. (Poignée de cercueil.)

William Klein, Thompsonville, Connecticut, U.S.A., 6th July, 1897; 6 years. (Filed 26th April, 1897.)

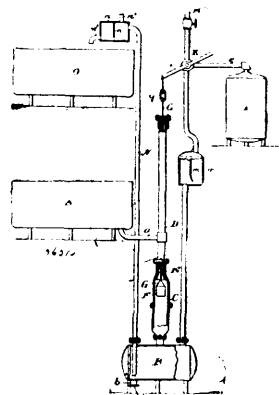
Claim.—A coffin handle, consisting of a hand bar, a pair of thin hard metal arms placed edgewise to the lines of normal lifting strain with parts encircling the hand bar, a hollow soft metal sheathing cast along a narrow portion of the outer edges of the arms to prevent the arms from bending sidewise and provide ornamentation, sheet metal plates of thin hard metal doubled upon themselves so as to form narrow sockets between the walls of the bent portions which embrace the ends of the arms and having laterally-projecting portions with screw perforations, the bent portions forming abutments for limiting the opening movement of the arms, and soft metal escutcheon plates cast over the lugs and about the laterally-projecting perforated portions of the lugs, substantially as specified.

No. 56,511. Apparatus for Manufacturing Steel Casting (Appareil pour la fabrication du coulage en acier.)

The Hawkins Steel Co., assignee of Frederick W. Hawkins, both of Detroit, Michigan, U.S.A., 6th July, 1897; 6 years. (Filed 26th April, 1897.)

Claim.—1st. The herein described process for purifying and refining iron, which consists in conducting the molten metal in a thin sheet into a reverberatory chamber in which it is exposed to the products of combustion from a furnace in a manner to heat the metal and maintain the same at a white heat, in subjecting it therein to the action of a concentrated current of superheated steam and air, thoroughly eliminating the impurities and decarbonizing the metal, substantially as described. 2nd. In an appar-

atus for purifying and refining iron, the combination with a cupola or furnace, of a puddling furnace provided with the reverberatory heating chamber F', and into which the heat products of combustion pass, the hot well D having a discharge spout E into the reverberatory chamber, and communicating with the furnace and tuyers J, O, for producing a concentrated current of superheated steam and air, substantially as described.

No. 56,512. Apparatus for Elevating Liquids by Means of Compressed Air. (Pompe à air pour liquides.)

William Martin Kiddie, Clifton, Arizona, U.S.A., 6th July, 1897; 6 years. (Filed 26th April, 1897.)

Claim.—1st. An apparatus for pumping liquids comprising a closed receiver, a supply pipe therefor and a delivery pipe therefrom, a trap in said delivery pipe, a valve chamber included in said supply pipe, a float in said chamber carrying a check valve, a source of fluid pressure, a cock controlling the flow of fluid pressure to and from the receiver, and a valve rod connected with said float and with said cock, substantially as described. 2nd. An apparatus for pumping liquids comprising a closed receiver, a delivery pipe therefrom, a trap in said delivery pipe, an air escape pipe on said trap, a valve chamber communicating with said receiver, a supply pipe connecting with said valve chamber, a float in said chamber carrying a check valve, a valve rod rising through said supply pipe, a compressed air reservoir communicating with the receiver, and a valve controlling the flow of air and actuated by the valve rod, substantially as described. 3rd. An apparatus for pumping liquids, the combination with a closed receiver, of a valve chamber communicating therewith, a float in said chamber consisting of an inverted vessel or cup, a supply pipe entering the upper end of said chamber, a valve seat at the end of said pipe, a check valve on the float adapted to close against said seat, a source of compressed air, a pipe leading therefrom to the receiver, and a trap in said pipe, substantially as described. 4th. An apparatus for pumping liquids comprising a closed receiver, a valve chamber rising from the upper part of the same, an upright supply pipe rising above the valve chamber to a point above the source of supply, a conical valve seat at the lower end of said pipe within the valve chamber, a conical float valve in the chamber adapted to close against said seat, a delivery pipe leading from the lower part of said receiver to an elevated receiving tank, a source of compressed air, an air pipe having one end open and the other end entering the top of the receiver, a branch pipe connecting said pipe with the source of compressed air, a three-way cock at the junction of the branch and main air pipes, controlling the flow of compressed air in to the receiver, and its escape through the same pipe into the open air, a rod attached to the float valve and rising through and above the supply pipe to a point of attachment with the three-way cock, and a turn buckle in said rod to permit relative adjustment of such valve and cock, substantially as described.

No. 56,513. Elevator. (Elevateur.)

Andrew J. Tipton and William Vantruse, both of Montone, assignee of Isaac C. Gray, Tippecanoe, all in Indiana, U.S.A., 7th July, 1897; 6 years. (Filed 21st May, 1897.)

Claim.—1st. In an elevator, a safety catch device, comprising a carriage frame, oppositely disposed guides for the carriage formed with racks, buffer blocks housed in the frame of the carriage, springs