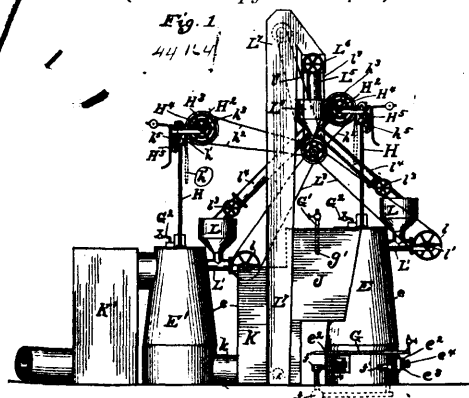


of a link guider comprising a body provided on its inner face with tubular portions having slotted lateral extensions, sides having openings receiving the lateral extensions and provided with cross pieces arranged in the slots of the extensions, and springs arranged in the tubular portions and attached to said cross pieces, and means for swinging the link guider outward to an inclined position in advance of the draw-head and for returning the same beneath the draw-head, substantially as described. 7th. In a car coupling, the combination, with a car having a draw-head, of a link guider comprising a body provided with lateral extensions, sides mounted on the extension, and springs connecting the sides, and means for swinging the link guider outward to an inclined position in advance of the draw-head at the same time raising the coupling pin and for returning the same beneath the draw-head, dropping the coupling-pin in its draw-head, substantially as described. 8th. In a car coupling, the combination, with a car having a draw-head, of a link guider comprising a body, yielding sides adapted to be forced outward, and springs connecting the sides, and means for swinging the link guider outward to an inclined position in advance of the draw-head and for returning the same beneath the draw-head, substantially as described. 9th. In a car coupling, the combination, with a car having a draw-head, of a link guider hingedly connected with the car and arranged below the draw-head and adapted to be swung outward in advance of the draw-head, a rock shaft journaled on the car and having an arm connected to the link guider, said rock shaft being provided at its ends with handles, a coupling pin, and a rock shaft journaled on the car and arranged above the first mentioned rock shaft and provided with a central arm connected to the coupling pin and at its ends with handles arranged for movement independent of the handles of the first mentioned rock shaft and arranged to be engaged by the handles of the first mentioned rock shaft, substantially as and for the purpose set forth. 10th. In a car coupling, the combination, with a car having a draw-head, of a link guider hingedly connected with the car and arranged below the draw-head and adapted to be swung outward in advance of the draw-head, a rock shaft journaled on the car and having an arm connected to the link guider, said rock shaft being provided at its ends with handles, a coupling pin, a rock shaft journaled on the car and arranged above the first mentioned rock shaft and provided with a central arm connected to the coupling pin, and at its ends with handles arranged for movement independent of the handles of the first mentioned rock shaft and arranged to be engaged by the handles of the first mentioned rock shaft, a chain arranged above the rock shafts for holding the coupling pin elevated, and a latch arranged below the rock shafts, and adapted to engage the last mentioned one to hold the link guider beneath the draw-head and to prevent the coupling pin from rising, substantially as described. 11th. In a car coupling, the combination of a car having a draw-head, a link guider hingedly connected with the car and located beneath the draw-head and having its upper end wedge-shaped, and means for swinging the link guider outward to an inclined position in advance of the draw-head, substantially as described. 12th. In a car coupling, the combination, with a car having a draw-head, of a coupling pin, a casing receiving the upper end of the coupling pin, an inverted cup suspended within the casing, and a rock shaft mounted on the car and having an arm connected with the top of the casing, substantially as described. 13th. In a car coupling, the combination, with a car having a draw-head, of a coupling pin, a casing having tapering sides receiving the upper end of the coupling pin, an inverted cup suspended within the casing and engaging the upper end of the coupling pin, a rock shaft having an arm, and a link connected to the upper end of the casing and to the arm of the rock shaft, substantially as described.

material of one electric polarity is not in contact with material of opposite electric polarity, and arranged so that fluids can be forced through the series of passages formed in the massing of the elements of the generator, substantially as described. 2nd. A pyro-electric generator, constructed of elements of opposite electric polarities separated from each other by porous insulating material arranged so that heated gaseous material can be forced through the series of passages formed by the interstices obtaining in the pyro-electric pile constituting such generator, substantially as described. 3rd. A pyro-electric generator, consisting of an insulating casing, a series of elements arranged therein to form a series of passage-ways therethrough, such elements consisting of materials of opposite electric polarity separated from each other by porous insulating material, and inlet and outlet pipes through such casing, substantially as described. 4th. An element of a pyro-electric generator consisting of a porous cup, and a second and smaller porous insulating cup contained in the first named cup in combination with material contained in one of said cups and material of opposite electric polarity contained in the other of said cups, substantially as described. 5th. A filling for the regenerating chamber of a gas machine, composed of material of opposite electric polarities, arranged so that material of opposite electric polarities will not come in contact with each other, substantially as described. 6th. In a gas machine, a regenerator consisting of a chamber having an inlet and an outlet, and a filling contained therein composed of materials of opposite electric polarities, the materials of opposite polarities not coming in electrical contact with each other, and so arranged as to form series of gas passages through the chamber, substantially as described. 7th. The combination in a gas apparatus of a converter having a combustion chamber and a regenerating chamber communicating therewith, such regenerating chamber having a filling therein of materials having opposite electric polarities arranged so that materials of opposite polarities will not come in contact with each other and such filling forming a series of gas passages, substantially as described. 8th. In a gas machine, a mixing chamber having an inlet and an outlet and series of gas passages therethrough, formed by a filling of refractory material, in combination with a regenerator consisting of a chamber having an inlet and an outlet, and a filling contained therein composed of materials of opposite electric polarities not coming in electrical contact with each other and so arranged as to form series of gas passages through the chamber, substantially as described. 9th. A gas generating apparatus consisting of a combustion chamber, a mixing chamber into which the heated products from the combustion chamber may be delivered, a regenerating chamber having a passage way extending there into from the mixing chamber, a filling of material of opposite electric polarities arranged in the regenerating chamber, so that material of one polarity will not come in contact with material of opposite polarity, and to form series of gas passage ways therethrough, an air supply extending into the combustion chamber at the base thereof, and steam supply extending through the walls of the apparatus, and adapted to discharge steam into the heated products obtained from the combustion of carbonaceous fuel, substantially as described. 10th. A gas generating apparatus consisting of a combustion chamber, an air supply extending into the combustion chamber at the base thereof, and a steam supply extending through the walls of the apparatus, and adapted to discharge steam into the heated products obtained from the combustion of carbonaceous fuel in the combustion chamber, a mixing chamber into which the products of the combustion with the steam delivered, a regenerating chamber connected with the mixing chamber, a carburetting chamber adapted to contain carbonaceous material into which regenerating chamber extends, and a second regenerating chamber having a passage way extending there into from the carburetting chamber, both of such regenerating chambers containing a filling composed of materials of opposite electric polarities, arranged so that materials of opposite electric polarities will not come in contact with each other, and so that series of gas passages will extend therethrough, substantially as described. 11th. A gas generating apparatus consisting of more than one combustion chamber, an air supply extending into each of the combustion chambers at the base thereof, and a steam supply extending through the walls of the apparatus and adapted to discharge steam into the heated products obtained from the combustion of carbonaceous fuel in the respective combustion chambers, mixing chambers into which the products of the combustion chambers with the steam are respectively delivered, regenerating chambers connected respectively with the mixing chambers, a carburetting chamber adapted to contain carbonaceous material into which the regenerating chamber extend, and an additional regenerating chamber having a passage way extending there into from the carburetting chamber, all of such regenerating chambers containing a filling composed of materials of opposite electric polarities, arranged so that materials of opposite polarities will not come in contact with each other, and so that series of gas passages will extend therethrough, substantially as described. 12th. In a gas apparatus, the combination of a closed combustion chamber with a stoker consisting of a rod extending through the top of the combustion chamber, a circular head on the lower end of the rod, and within the combustion chamber, the top of the head extending downward and outward from the rod to the periphery of the head, and means for hoisting and letting fall such rod and head, substantially as described. 13th. In a steam generating boiler and furnace, a steam supply pipe extending into the furnace, a number of elements consisting of materials of opposite electric polarities separated from each other,

No. 44,164. Pyro-Electric Generator and Gas.

(Générateur pyro-électrique.)



The International Chemical and Gas Company, assignee of Thurston Gordon Hall, all of Chicago, Illinois, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. A pyro-electric generator, constructed of elements of opposite electric polarities, separated from each other so that