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INVENTIONS PATENTED.

NOTE.—Patents are granted for 18 years. The term of years for which the fee has been paid, is given after the date of the patent.

No. 44,132. Fire-proofing Composition.

(Composition à l'épreuve du feu.)

Frank S. Culver, Williamsport, Pennsylvania, and Thomas J. King, Washington, Columbia, U.S.A., 1st September, 1893; 6 years.

Claim.—A fireproof composition consisting of asbestus and plaster of Paris, or their equivalents, combined in approximately the proportion, by weight, of 15 parts of asbestus to 84 parts of plaster of Paris, whereby a flexible body is produced with or without the binding fibres, as described.

No. 44.133. Electrode for Arc Lamps.

(Electrode pour lampes à arc.)

Charles W. Hazeltine, St. Louis, Missouri, U.S.A., 1st September, 1893; 6 years.

Claim.—1st. An electrode or carbon for arc lamps, provided with a covering materially increasing its life beyond the life of coated carbons of the prior art, substantially as set forth, which covering remains upon and protects the carbon to a point substantially even with the arc, thereby making the carbons burn with a blunt point, and preventing substantial penciling or coning of the same at the end, and saving the carbon comprised between the ordinarily coned end and the cylindrical end of the carbon, and which covering does not flake or fuse off in pieces of material size, and does not project be-Youd the electrode or envelope the arc so as to interfere with the light, but is dissipated by the heat of the arc so as not to affect the lamp and the light thereof. 2nd. An arc lamp electrode provided with a composite metallic coating increasing its conductivity and protecting it, substantially as and for the purpose described. 3rd. An electrode for arc lamps provided with a protective coating composed of a plurality of metal. 4th. An arc lamp electrode or carbon protected by a suitable outer cover of different character, carried by the electrode. 5th. An arc lamp electrode or carbon having an inner metallic coating protected by an outer coating of different material, which outer coating is capable of being oxidized by the heat of the arc, the oxide formed being dissipated by the heat of the arc. 6th. A protective covering for the electrodes of an arc lamp made up of coating of copper and zinc. 7th. A protective covering for the electrodes of an arc lamp, consisting of a coating of copper electro deposited upon the electrodes, and a second coating of zinc electrode deposited upon such copper coating.

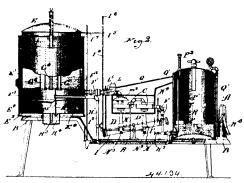
No. 44,134. Portable Gas Generating Works.

(Générateur portatif à gaz.)

Jacob Mortimer Goldsmith, Chicago, Illinois, U.S.A., 1st September, 1893; 6 years.

Claim.—1st. In portable gas works, the combination of an oil tank, a gas generating retort, a receptacle filled with fluid, a gas

holder arranged therein and constructed to rise as it is filled with gas, and to sink as the gas is exhausted therefrom, a safety shut off



valve in the oil supply pipe, and means for automatically operating the same, comprising a lever J^{\pm} , a link J^{\pm} , directly connecting one end of such lever to the stem of the shut off valve, a rod J^{δ} , extending from the other end of the lever to a point where it may be acted upon by the gas holder when it sinks beyond the desired point, and pipes conveying the oil from the tank to the gas generator, and gas from the generator to the gas holder, substantially as described. 2nd. In portable gas works, the combination of a receptacle filled with fluid, a gas holder arranged therein and constructed to rise as it is filled with gas, and to sink as the gas is exhausted therefrom, a pipe G for conveying gas into the gas holder, a pipe G2 for conveying gas out of the gas holder, a pipe G² opening into the gas holder on a lower plane than that of the openings of the gas inlet and outlet pipes to carry off particles of condensation, means for carrying particles of condensation to such pipe, a chamber F³, into which the pipes G^2 and G^4 which carry the gas and the particle of condensation from the gas holder open, a pipe or pipes leading from such chamber to convey the gas to the place of use, and pipes conveying oil from the tank to the gas generator and gas from the generator to the gas holder, substantially as described. 3rd. In portable gas works, the combination of an oil supply tank, a gas generating retort, a gas holder, a chamber F², intermediate the retort, and the holder into which the gas is introduced from the retort and from which it passes to the holder, a pipe leading from the retort to such chamber, and a pipe leading from such chamber to the holder, a chamber F³, intermediate the holder and the place of use, partitions E⁴, in said chambers F² and F³, cutting off portions thereof for the reception of particles of condensation, and pipes conveying oil from the tank to the gas generator and gas from the generator to the gas holder, substantially as described. 4th. In portable gas works, the combination of a pipe leading from a source of supply of fluid to be vaporized, a cast integral retort into which the pipe leads, provided with a primary set of connected channels in which the fluid is subjected to partial vaporization, and with a secondary set of connected channels communicating with the primary set, and in which the partially vaporized fluid is subjected to further vaporization, such retort having a chamber located at the point of greatest heat and at the exhaust passage of the retort, and a delivery pipe for the gas, sub-stantially as described. 5th. In portable gas works, the combination stantially as described. 5th. In portaone gas works, one communion of a retort of cast metal containing a multiple series of connected tortuous or winding ducts for detaining a combustible fluid in proximity to a source of heat, and having vertical heat tubes or passages extending through the same, and a superheater located above the retort and containing a baffle plate or other device for