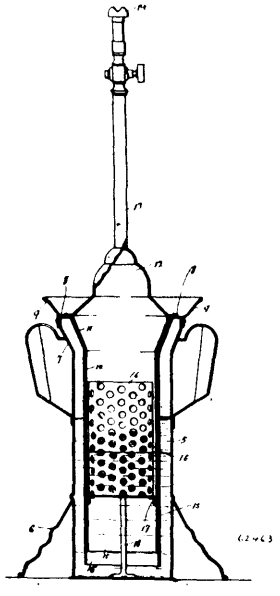
ted on the casing and extending through the slot in the wall thereof, one arm of the armature being within the casing and the other arm of the armature being without the casing, a switch mounted on the outer side of the casing and controlling the circuit of the magnet and arranged in the path of the outer arm of the armature to be thrown into open position by the movement of the inner arm of the armature toward the magnet, and a pivotally mounted arm carried on the exterior of the casing and engaged with the outer arm of the armature and normally held immovable thereby.

No. 62,463. Acetylene Gas Lamp.
(*Lampe à gaz acétylène.*)



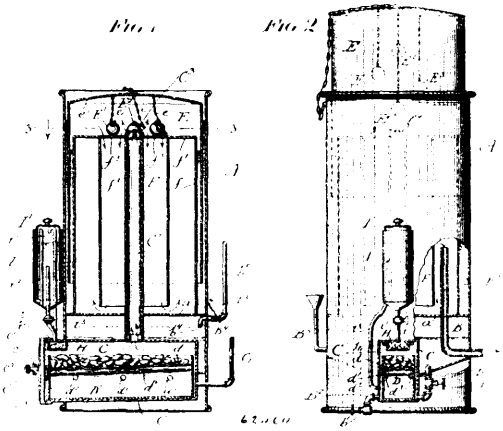
George Dacarie Pearson, and Ernest Cooper Mount, both of Montreal, Quebec, Canada, 26th January, 1899; 6 years. (Filed 6th September, 1898.)

Claim.—1st. An acetylene gas lamp comprising a cylinder having its upper end open and flared and lower end closed, a second cylinder having its upper end closed and communicating with the burner and its lower end open, said second cylinder being suspended with said first mentioned cylinder and extending within a short distance of the lower end thereof, and a perforated calcium carbide holder supported within said inner cylinder a short distance above the lower end thereof, for the purpose as set forth. 2nd. An acetylene gas lamp having a cylindrical water chamber 5, with expanded or flared upper end, as shown and described. 3rd. An acetylene gas generator comprising an outer cylinder 5 having its lower end closed and upper end partially closed by a perforated diaphragm 8, an inner cylinder 10 having its upper end extended in circumference as at 11 and provided with a dome 12, communicating with the burner 14 and a calcium carbide holder 16 made of wire mesh and supported upon a leg 18 within said inner cylinder, and provided with radial projections 17, substantially as described and for the purpose set forth.

No. 62,464. Acetylene Generator. (*Générateur à acétylène.*)

F. Cortez Wilson, assignee of Augustine Davis, both of Chicago, Illinois, U. S. A., 26th January, 1899; 6 years. (Filed 31st August, 1898.)

Claim.—1st. In an acetylene gas generator, provided with a generating chamber, a carbid support in said chamber, means for supplying a head of water to said chamber from below the charge of carbid, and an expansible gas receiver affording with increase of capacity an increase of gas pressure acting in opposition to said head of water to control or depress its level relatively to the carbid support. 2nd. An acetylene generator provided with a generating chamber, a gas outlet leading from the generating chamber to an expansible gas receiver, means for supplying a head of water to the generating chamber at a point below the gas outlet, means for adjustably limiting the head of water supplied, and means for automatically increasing the pressure of the receiver as it increases in capacity so as to thereby control the hydration of the carbid by varying the water level in the generating chamber. 3rd. In a gas generating apparatus, the combination of a water chamber and a generating chamber located in fixed relation to the water chamber and having a continuous water connection with the water in the water chamber when the generator is in operation, and means for determinably varying the inital water level in said chamber to regulate the head of water supplied. 4th. In an acetylene gas generator, the combination with a generating chamber having a carbid support set to be immersed by a head of water admitted to said chamber, of a water chamber supplying said head of water to



the generating chamber at a point below said support, an adjustable outlet pipe in the water chamber for determining the maximum water level therein, and an indicator whereby the position of the outlet pipe can be adjusted at will to determine the head of water supplied. 5th. In an acetylene generator, the combination with a generating chamber having a carbid support set to be immersed by a head of water admitted to said chamber, of a water chamber supplying said head of water to the generating chamber at a point below said support, and means for limiting the maximum level of water in said chamber, comprising a pipe passing out through a stuffing box and revoluble therein and having its inner end deflected out of its axis of rotation, and an indicator on the outer end of the pipe whereby the position of its inner end can be determined. 6th. An acetylene generator provided with a generating chamber, means for supplying a head of water to said chamber from below the charge of carbid, means for adjustably varying the said head of water supplied, a floating gas receiver, and one or more heavy bodies arranged to be lifted in succession by the receiver as it rises to produce an increasing gas pressure acting in opposition to the head of water to regulate the hydration of the carbide. 7th. An acetylene generator provided with a generating chamber, a water supply chamber communicating with generating chamber below the charge of carbide, an expansible gas receiver affording with increase of capacity an increase of gas pressure acting in opposition to the head of water afforded by said supply chamber, and means for adjustably limiting the maximum water level in the supply chamber. 8th. An acetylene generator provided with a generating chamber, a water supply chamber communicating with the generating chamber below the charge of carbid therein, an expansible gas receiver affording an increase of gas pressure with increase of capacity, and means for adjustably limiting the maximum water level in the supply chamber comprising an outlet pipe passing out of the chamber through a stuffing-box in which it is revolubly mounted, the inner end of the pipe being deflected out of its axis of rotation, and an indicator enabling the position of the pipe to be accurately adjusted. 9th. An acetylene generator provided with a a generating chamber and a water chamber opening into the lower portion of the generating chamber, a carbid support within the generating chamber above the water inlet, an auxiliary carbid support within the generating chamber above the first support, a water receptacle discharging independently into the generating chamber at a point adjacent to the auxiliary support, and a valve controlling the discharge of said receptacle, whereby the auxiliary charge of carbid can be independently hydrated at will. 10th. In an acetylene gas generator, the combination with a closed generating chamber having a carbid support, and means for supplying a head of water to said closed chamber at a point beneath the carbid support, of an open relief pipe leading directly out of said closed chamber at a point beneath the normal level of the water therein. 11th. The combination with a closed generating chamber having a support for calcic carbid, of means for supplying a head of water to the chamber at a point below the carbid support, an expansible gas receiver affording increased pressure with increased capacity, and a relief pipe leading directly out of said closed chamber at a point below the normal level of water therein but adapted to be uncovered when the maximum pressure afforded by the expansible receiver is approached. 12th. The combination with a generating chamber and receiver, of means for forcing air into the generating chamber, and a blow-off pipe normally closed by the water in the generating chamber for conducting away the gas expelled by the air. 13th. The combination with a generating chamber having a support for calcic carbid, of means for supplying a head of water to the chamber at a point below the carbid support, a gas receiver connected with the generating chamber by a valved passage, means for forcing air into the generating chamber, and an open relief pipe leading out of the generating chamber at a point below the normal water level