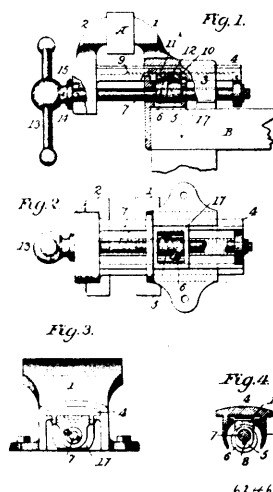


therein. 14th. The combination with a generating chamber, of a relief pipe normally sealed by the water in said chamber, means for drawing down the water to open the relief pipe, and means for forcing air into the chamber to displace the gas therein and expel it through the relief pipe. 15th. The combination with a water chamber and a generating chamber having a carbid support and communicating with the water chamber below said support, of a gas holder connected with the generating chamber by a valved passage, a relief pipe leading out of the generating chamber at a point below the water level therein, and valved a passage for draining the chamber, and an air pump for forcing air into the chamber. 16th. An acetylene generator provided with a generating chamber, a gas holder connected with the chamber, means for supplying water to a principal charge of carbid within the chamber, an auxiliary charge of carbid normally free from water, a tank opening into the generating chamber at a point adjacent to the auxiliary charge of carbid, a valve controlling the discharge of said tank, an inverted bell within said tank, a valved air inlet opening into the bell, a valved air outlet leading from the bell into the generating chamber, and a relief pipe leading out of the chamber. 17th. The combination, with a generating chamber, of an inverted gas holding bell having its lower edges submerged in an annular sealing chamber, a transverse partition extending between the inner walls of said sealing chamber to form a mixing chamber beneath, depending partition reaching from said transverse partition to within a short distance of the bottom wall, a gas inlet leading into the bell, apertures in the upper partition wall on one side of the depending partition, and an outlet pipe leading from the mixing chamber at a point on the opposite side of the depending partition from said apertures. 18th. An acetylene gas apparatus, comprising a water chamber, a generating chamber within said water chamber having removable door or cover, a removable carbid receptacle within the generating chamber, a carbide support in said receptacle, a valved passage opening from the water chamber into the generating chamber at a point below the carbid support, a relief pipe extending out of the generating chamber at a point below the carbid support, discharge passage opening out of the lower portion of the generating chamber and controlled by a valve, and a valved outlet pipe leading to a gas receiver. 19th. An acetylene generator provided with a generating chamber, a removable receptacle provided in its upper part with a carbid supporting grating, closed in its lower portion so as to retain the waste, apertures in the receptacle above the bottom thereof below the carbid support, and means for supplying water to said chamber at a point below the carbid support. 20th. An acetylene generator provided with a generating chamber, an expandible gas receiver affording increased pressure with increased capacity, a removable receptacle within the generating chamber provided in its upper part with an inclined grating serving as a carbid support and closed in its lower portion to retain the waste, means for supplying a head of water to the chamber from below the carbid support, and apertures in the removable receptacle above its bottom and below the inclined screen. 21st. A gas generator provided with a generating chamber, having a removable receptacle with a primary carbid support consisting of an upper grating and a subjacent parallel lower grating of finer mesh, the receptacle being closed in its lower portion to retain the waste and being provided with apertures in its side walls above said closed bottom portion but below the lower grating, and means for supplying water to the generating chamber at a point below the carbid support. 22nd. In a gas generator, a closeable generating chamber extending into a close ventilated water supply chamber provided with means for determining the head of water contained therein, and connected therewith by a valved opening for hydrating the charge of carbid by means of said head of water, and having a relief pipe normally closed by the water in said generating chamber. 23rd. In a gas generator, a generating chamber extending within a water chamber and connected therewith by a valved passage, means for adjustably varying the head of water in said water chamber, a carbid support within the generating chamber above said opening, and a connected expandible gas receiver affording increased pressure with increased capacity. 24th. The combination, with a generating chamber and an expandible gas receiver affording an increased pressure with increased capacity, of a substantially plane primary carbid support of open work, inclined from the horizontal, and means for supplying a head of water to the chamber at a point below the carbid support. 25th. The combination, with a generating chamber, of a primary carbid support, consisting of an upper grating to receive the charge and a lower grating of finer mesh immediately beneath parallel with and in close proximity to the upper grating, means for supplying a head of water to the chamber at a point below the carbid support, and a gas receiver connected with the chamber. 26th. The combination, with a generating chamber, of an inclined primary support for calcic carbid, consisting of an upper grating for the reception of the original and regular charge of carbid, and a lower grating of finer mesh immediately beneath and parallel with the upper grating. 27th. In an acetylene gas generator, the combination with a generating chamber having an inclined primary carbid support consisting of an upper grating which receives the charge and a lower parallel grating of smaller mesh in proximity thereto, means for supplying a head of water to said chamber from beneath the carbid support, and an expandible gas receiver affording with increase of capacity an increase of gas pressure acting in opposition to said head of water to regulate its height relatively to the carbid support. 28th. An acetylene gas generator, provided

with a generating chamber containing an inclined primary carbid support consisting of an upper grating to receive the original and regular charge of carbid and a parallel lower grating of finer mesh immediately beneath and in proximity thereto, means for supplying a head of water to said chamber from below the charge of carbid, an expandible gas receiver, and an increasing resistance automatically applied to the receiver as its capacity increases to afford a variable pressure acting in opposition to the head of water to control or depress its level relatively to the carbid support. 29th. In a gas generator of the class described, a closeable generating chamber, a removable drawer having a carbid support and closed in its lower portion to retain the residuum, said generating chamber being constructed to contain said drawer and also having a valved connection with a water supply at a point below the level of the carbid support, and an independent valved discharge opening arranged to drain said closed generating chamber. 30th. In a gas generator of the class described, a closeable generating chamber, a removable drawer having a carbid support and also constructed to retain the residuum, said generating chamber being constructed to contain said drawer and also having a valved connection with a water supply at a point below the level of the carbid support, an independent valved discharge opening arranged to drain the generating chamber, and means for forcing air into the chamber to displace the air therein.

#### No. 62,465. Clamping Device. (*Appareil d'assemblage.*)



Willard Reed Green, Denver, Colorado, assignee of Augustus Howard, San Francisco, all in the U.S.A., 26th January, 1899; 6 years. (Filed 9th January, 1899.)

*Claim.*—In a clamping device, two parts, each provided with an extension the one adapted to fit the other, and means for adjustably securing them with relation to each other, substantially as described. 2nd. In a clamping device, two parts, one provided with a hollow extension and the other with an extension sliding loosely in the first extension and means for adjustably securing the extensions with relation to each other, substantially as described. 3rd. In a clamping device, two parts, one provided with a hollow extension and the other with an extension sliding loosely in the first extension, a rod mounted in one extension, a cam operated by the rod, and means whereby the extensions are positively moved with relation to each other on the operation of the rod, substantially as described. 4th. In a clamping device, two parts, one provided with a hollow extension and the other with an extension sliding loosely in the first extension, a rod mounted in one extension, a cam operated by the rod, a block operated by the cam and having projections engaging projections on one of the extensions, substantially as described. 5th. In a clamping device, two parts, one provided with a hollow extension and the other with an extension sliding loosely in the first extension, a rod mounted in one extension, a cam operated by the rod and having a thread, a block having a groove engaging the thread and provided with projections engaging projections on one of the extensions, substantially as described. 6th. In a clamping device, two parts, one provided with a hollow extension and the other with an extension sliding loosely in the first extension, a rod mounted in one extension, a cam adapted to turn with the rod and slide freely thereon, a spiral thread on the cam, a block provided with a collar surrounding the cam and having a groove engaging the thread thereon and projections on the block engaging projections on one of the extensions, substantially as described. 7th. In a clamping device, two parts, one provided with a hollow extension and the other with an extension sliding loosely in the first extension, a rod mounted in one extension, a cam rotating with and sliding on the rod, a spiral thread on the cam, a block having a collar surrounding the cam and provided with a flattened portion, a housing for the cam and projections on the block adapted to engage projections on