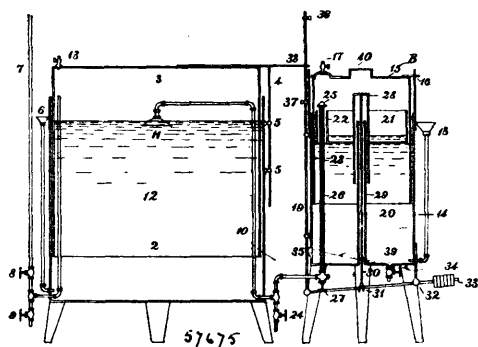


segments to facilitate removal, laggings *b*, struts *c*, flanges *f*, wedges *h*, segments *d*, and a strengthening sett *e*, *e*<sup>1</sup>, *e*<sup>2</sup>, all secured together and arranged substantially as described.

# No. 57,675. Acetylene Gas Generator.

(Générateur à gaz acétylène.)



Herbert A. Zettel, Shakopee, Minnesota, U.S.A. 5th October, 1897; 6 years. (Filed 5th June, 1897.)

**Claim.**—1st. The combination with the water sealed gas holder and gas generator of the class described, of the pipe connecting the generator with the gas holder, and having its outlet beneath the level of the water therein, the carbide basket arranged in the generator and the means for raising and lowering the same controlled by the bell of the gas holder. 2nd. In an apparatus of the class described, the combination with the gas holder of the generator comprising in combination the water receptacle adjustable therein and sealed by said water, the basket enclosed within said bell and adapted to be vertically adjusted therein, and the means operated by the bell of the gas holder for raising and lowering said basket. 3rd. In an apparatus of the class described, the gas generator comprising in combination the water receptacle, the bell adjustable therein and sealed by its contained water, the means for securing the bell in normal position, the carbide basket arranged within said bell, the standpipe arranged in said holder to permit the outflow of gas and projecting into and through vertical opening in said basket, the valve for closing the top of said standpipe, the centrally arranged standpipe in said generator opening through the bottom of the water receptacle, and telescoping into the closed pipe in said basket, the rod extending through said standpipe and to the top of said closed pipe, the lever for reciprocating said rod and the operating connections between said lever 31 and the bell of the gas holder, whereby the carbide basket is carried into or out of the water automatically by the rise and fall of the bell of the gas holder. 4th. In an apparatus of the class described, the combinations with the gas holder "A" having a bell 3 and the generator "B" having the bell 15, of the spring catches for supporting the bell 15 in normal position, the carbide basket arranged therein, the standpipe 23 arranged in said generator and provided with a valve 25, the standpipe 29 working in an opening in the basket, the rod extending through said pipe 29 and to the basket the lever 31 connected to said rod and serving to actuate the same to raise and lower the basket, and the operating connection between said lever 31 and bell 3, whereby the rise and fall of the bell 3 serves to automatically raise and lower the basket.

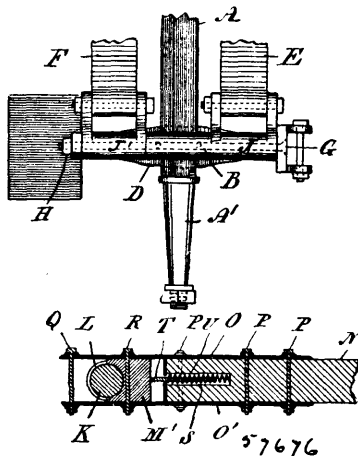
# No. 57,676. Carriage Running-Gear.

(Engrenage de voitures.)

Mathew Stanley, Perth, Ontario, Canada, 4th October, 1897; 6 years. (Filed 2nd July, 1897.)

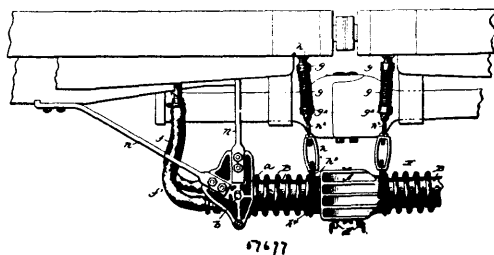
**Claim.**—1st. The combination with the axle and two bolster springs provided with shackles J, J<sup>1</sup>, of a T-shaped stud or bearing B, and a D-shaped spring hanger or yoke D, clipped to the axle, and a bolt G, passing through the stud and yoke and the tubular end of the shackles intervening the same, as set forth. 2nd. The combination of the spring hanger D, bolt G, bearing B, and clip C, substantially as and for the purpose set forth. 3rd. The combination with the reach N, and axle K, of the plates or straps O, O<sup>1</sup>, bolted to the reach, and a plate M, having a bracket or swell projection M<sup>1</sup>, and a connecting bolt R, passing through said reach-plates and bracket-projection, as set forth. 4th. The combination with the reach and axle of the plates or straps O, O<sup>1</sup>, bolted to the reach, plate M, clipped to the axle and provided with a bracket projection M<sup>1</sup>, a connecting bolt R, passing through said

plates or straps, and a spring T, at the end of the reach to impinge said bracket-projection, to prevent the connecting bolt rattling.



5th. The reach N, having a spring at the end to keep the coupling connection from rattling.

# No. 57,677. Pipe Coupler. (Joint de tuyau.)



Edward G. Cox, assignee of James E. Marble, all of Albany, New York, U.S.A., 5th October, 1897; 6 years. (Filed 17th September, 1897.)

**Claim.**—1st. The combination with a coupler, of a hanger provided with a gimbal supporting said coupler, said gimbal being loosely journaled in elongated vertical bearings, substantially as described. 2nd. A coupler provided with a head having fluid passages, pipes connecting with said passages, and encasing tube for the pipes, and a hanger containing a gimbal supporting the tube, said gimbal being loosely journaled in elongated vertical bearings, substantially as described. 3rd. A coupler provided with a head having fluid passages, pipes connecting with said passages, an encasing tube for the pipes, a hanger containing a gimbal supporting the tube, said gimbal being loosely journaled in elongated vertical bearings, and spring hangers connected with opposite sides of the head, substantially as described. 4th. A coupler provided with a head having a series of fluid passages whose outlets are arranged in the same central vertical plane and whose inlets are arranged in different vertical planes, pipes connecting with the inlets and parallel to each other, an encasing tube for the pipes, a hanger containing a gimbal through which the tube passes, and a closing plate at the end of the tube, through which the pipes pass, substantially as described. 5th. A coupler head having central fluid passages, and outlying tongues, one of which is straight and the other inclined, and both of which are separated from the walls of the central fluid passages by intervening recesses, and a third inclined tongue projecting from and forming a continuation of one of said walls, the said inclined tongues verging towards each other from without inwardly to practically a single plane of nearest approach and being separated thereat a distance equal to the thickness of the straight tongue, substantially as described. 6th. A coupler head having central fluid passages and outlying tongues, one of which is straight and the other inclined and both of which are separated from the walls of the central fluid passages by intervening recesses, and a third inclined tongue projecting from and forming a continuation of one of said walls, the said inclined tongues verging toward each other from without inwardly to practically a single plane of nearest approach and being separated thereat a distance equal to the thickness of the straight tongue and cross webs connecting the tongues with the walls of the central fluid passages, said cross webs being likewise inclined and verging toward each other from without inwardly to the plane of nearest approach, substantially as described. 7th. A coupler head fluid outlet port, having there in a shouldered bushing, a corres-