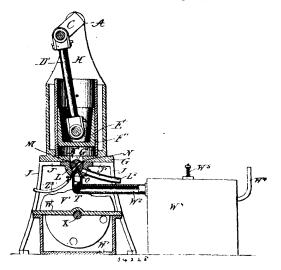
No. 54,228. Gas Engine. (Machine à gaz.)



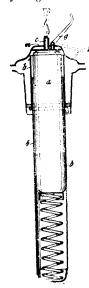
Charles Franklin Goddard, Chicago, Illinois, U.S.A., 1st December, 1896; 6 years. (Filed 28th October, 1896.)

Claim. -1st. In a gas engine, the combination of a cylinder with a conduit leading thereto and a rotary valve interrupting the connection between the conduit and cylinder and provided with an opening to periodically connect the cylinder and conduit, and drivone of connections to the valve from the part driven by the engine, so that the speed of rotation and hence the duration of connection between the conduit and cylinder is responsive to the speed of the engine, and a second valve located in the conduit leading to the engine, and a second varve located in the containing to the cylinder and provided with storing pockets containing the charging material, said pockets adapted to be brought periodically in connection with said conduit, substantially as described. 2nd. In a gas engine, the combination of a cylinder and a conduit with a rotary valve interrupting their connections, said valve provided with a hole which periodically connects them, a reciprocating slide to vary the size of said hole, said slide rotating with said valve and connected with a governor responsive to variations in the speed of the engine. 3rd. In a gas engine, the combination of a cylinder and a conduit with a rotary valve interrupting their connection and provided with a hole which periodically connects them, and a governor to vary the size of said hole responsive to variation in the speed of the engine, said governor connected with a rod rotating with said valve but free to move longitudinally with relation thereto, said rod connected to a slide adapted to vary the size of the hole in the relay valve to a since anapted to vary the size of the hole in the relay valve when moved. 4th. In a gas engine, the combination of a cylinder and conduit with a rotary valve interrupting their connection and provided with a hole which periodically connects them, and a governor to vary the size of said hole responsive to variations in the speed of the engine, said governor consisting of a slide moving in such hole, said slide connected with a pair of centrifugal balls which are connected with the engine shaft so as to be rotated thereby. 5th. In a gas engine, the combination of a series of cylinders and pistons with a single rotary controlling valve which successively admits the gas to the respective cylinders, and a shaft to which the pistons of said cylinders are attached, each at a different angular position so that one is always effectively operating, said rotary valve consisting of a continuous shaft having transverse holes so as to admit gas into or a continuous suart having trainerers, included a continuous suart having trainerers, a rod extending through said rotary valve and provided with slides associated with each of said holes and a pair of centrifugal balls connected with said rod so as to vary its position as the speed of the engine varies, thereby simultaneously varying the size of the admission ports of each cylinder, said rotary valve being operatively connected to the engine shaft, substantially as described. 6th. The combination of a gas engine with a conduit leading thereto, and a mixing device consisting of a rotating part, which in its rotations passes through the conduit and through a gasoincrease on the control of the contr provided with pockets which are adapted to carry a quantity of gasoline, said pockets so situated that they periodically register with said conduit, substantially as described.

## No. 54,229. Wick Adjusting Device for Oil Carriage Lamps. (Appareil à ajuster les mèches de lampes de voitures.)

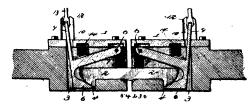
Canterbury, New Zealand, 1st December, 1896; Alfred Billens. 6 years. (Filed 28th October, 1896.)

stantially as and for the purposes herein specified. 2nd. The hinged handle upon the wick adjusting stem which can be turned up to



allow the lamp to be placed within a carriage lamp socket and then turned down to be away from the wick and for adjusting purposes, substantially as specified.

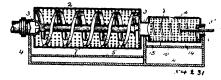
No. 54,230. Car Coupler. (Attelage de chars.)



George Edward Smith and Henry Clay Johnson, both of Shiloh, Lousiania, U.S.A., 2nd December, 1896; 6 years. (Filed 9th 41th October 1896.)

Claim.-In a car coupler, a draw-head having a longitudinal cavity and provided with an opening in its bottom, in combination with a trifurcated link-lifter comprising a lip working in said opening in the draw-head, an intermediate arm inclining upward and forward and fulcrumed adjacent to the mouth of the draw-head, and an arm extending upward through an opening in the top of the draw-head, a spring for holding the link-lifter normally depressed, and levers fulcrumed at each side of the draw-head and having pivotal connection with the upwardly extending arm of the lifter, all arranged for joint operation, substantially as described.

No. 54.231. Wood Pulp Separator. (Separateur de pulpe.)



Edward Ferris Millard, Jackson, Michigan, U.S.A., 2nd December, 1896; 6 years. (Filed 29th October, 1896.)

Claim.—1st. In wood pulp separators, the combination with a revoluble screen, having central supply and discharge orifices, and a vat in which the screen is in part submerged, of a shelf or partition extending horizontally beneath the screen and affixed to three sides of the vat, and a dam which extends from the tail of the vat in part along the unattached edge of the shelf, substantially as stated. 2nd. In combination with a rotary and partially submerged screen, axially located inlet and outlet openings, a plurality of peripheral ribs interiorly of the screen, and a lifting device to co-operate with the outlet openings, a vat in which the screen is mounted, a shelf horizontally beneath the screen and affixed to three sides of the vat to form an opening 10<sup>1</sup>, and a dam by which the liquid level in the screen is controlled, said dam to extend from the tail of the vat in part along the unattached side of the shelf and above the bottom of Claims.—1st. The wick adjusting device for oil carriage lamps part along the unattached side of the shelf and above the bottom of consisting of the combination with the lamp a, of the wick tube c, the carrier c, the adjusting stem f, having a hinged handle g, sub
3rd. In wood pulp refining apparatus, the combination with a rotary