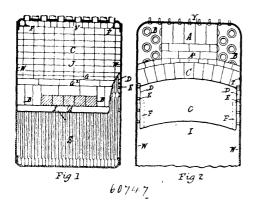
No. 60,747. Steam Boiler Furnace Arch.

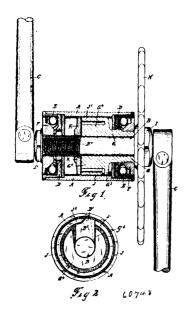
(Arche pour fournaises de chaudieres à vapeur.)



Alfred Frank Hack, Melbourne, Victoria, Australia, 2nd August, 1898; 6 years. (Filed 28th May, 1898.)

Claim.--1st. A fire-box arch having an inclined arched bridge extending the full width of the fire-box, and supporting upon its rear end a central vertical wall of lesser width, whereby two combustion chambers I.J. are formed connected by passages or flues B, substantially as set forth. 2nd. A fire-box arch having an inclined arched bridge extending the full width of the fire-box, a part only of the bridge front touching the tube plate, and a space H being left between the tube plate and the lower part of said bridge front, substantially as set forth. 3rd. In a fire-box, an upper combustion chamber, having at its base a bridge the full width of a fire-box and having as its rear a central wall of less width, extending from the fire-box top to the rear of the said bridge, so as to leave side passage between the said combustion chamber and the chamber containing the firebars, substantially as set forth. 4th. The combination of the several parts C, D, E, F and G with a wall A reaching to the fire-box roof, substantially as set forth.

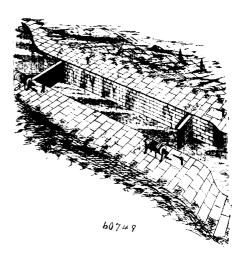
No. 60,748. Bicycle Brake. (Frein de bicycle.)



George E. Clark, Ingersoll, Ontario, Canada, 2nd August, 1898; 6 years. (Filed 15th November, 1897.)

stud B¹, engaging with the free end of said spring J, substantially as and for the purpose set forth. 2nd. A brake for bicycles, consisting of a sleeve G, and a spring J, one end of which is fixed to said ing of a sierve α , and a spring δ , one end of which is fixed to said sleeve, in combination with an axle B, provided with a stud B¹, the cylinder A, and a nut K, screwed on said axle B, to prevent the movement laterally of said spring J, substantially as and for the purpose set forth. 3rd. A brake for bicycle, concealed within the partial branking adhigher λ and consisting in combination with the latter bearing cylinder A, and consisting, in combination with the latter, of the sleeve G, the spring J, one end of which is fixed to said sleeve, and the axle B, provided with a stud B1, said stud B1, being adapted to engage with either the free or fixed end of said spring J, substantially as and for the purpose set forth. 4th. A brake for bicycles, concealed within the pedal bearing cylinder A, and consisting, in combination with the latter, of the sleeve G, provided with a bearaxing G⁴, the spring, J, one end of which is fixed to said sleeve the axle B, provided with a stud B¹, and the nut K, substantially as and for the purpose set forth. 5th. The crank axle B, provided with the lug or stud B¹, and the latter formed with a beyelled should B², in combination with the sleeve G, the sprocket-wheel H, secured thereto, a spring J, one end of which is fixed to said sleeve G, a shoulder or stop G, formed on said sleeve, and the pedal–bearing cylinder A, substantially as and for the purpose set forth.

No. 60,749. ('anal and Lock. (Canal et écluse.)



Delia Rochette, assignee of Emilien Alfred Manny, all of Beauharnois, Quebec, Canada, 2nd August, 1898; 6 years. (Filed 25th September, 1897.)

Claim.-1st. The combination with a canal, of auxiliary channels connected to said canal, and controllable ports, operated independently of each other for regulating the passage of the water through said channels whereby said channels may be used independently or collectively, substantially as described. 2nd. The combination with a canal, of auxiliary channels connected to said canal, valves for controlling the entrance of water to said channels, and valves for controlling the discharge of water from said channels, each valve being independent of the movement of the remaining valves valve being independent of the movement of the remaining valves whereby said channels may be used independently or collectively, substantially as described. 3rd. In a canal, the combination with gates adapted to enclose a portion of said canal, of channels connected with said canal but independent of said inclosed portion, means for connecting said channels and said enclosed portions, valves for controlling the entrance of water to said channels, and valves for controlling the discharge of water from said channels, each valve being independent of the movement of the remaining valves, substantially as described. 4th. In a canal, the combination with gates adapted to enclose a portion of said canal, of a channel connected with said canal but independent of said enclosed portion, and transverse channels connecting said independent channel and said enclosed portion, the openings of said transverse channels within said enclosed portion being arranged at opposite sides thereof, in such manner that water will be admitted to said enclosed portion at both sides simultaneously, substantially as described. 5th. The combination with a canal having a lock portion, of an auxiliary channel having connection with said canal and said lock portion, and independently operated valves located in said channel on a plane above the bottom of said bock portion, whereby said lock por-tion cannot be entirely emptied through the medium of said channel, substantially as described. 6th. In a canal, the combination with gates adapted to enclose a portion of said canal, of channels con-Claim.—1st. A brake for bicycles, consisting of a sleeve G, and a spring, J, one end of which is fixed to said sleeve, in combination with an axle B, provided with a stud B³, and the cylinder A, said means for admitting water into said enclosed portion from each of