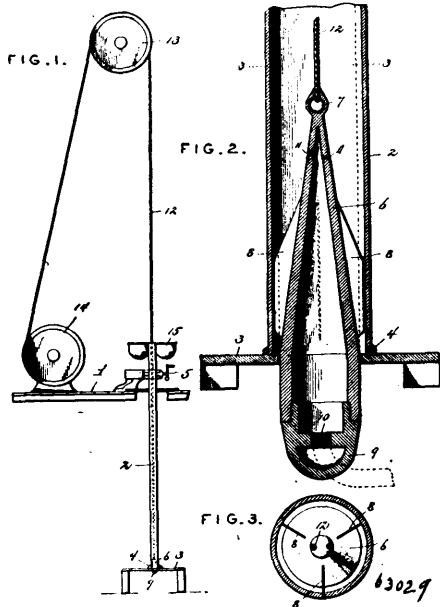
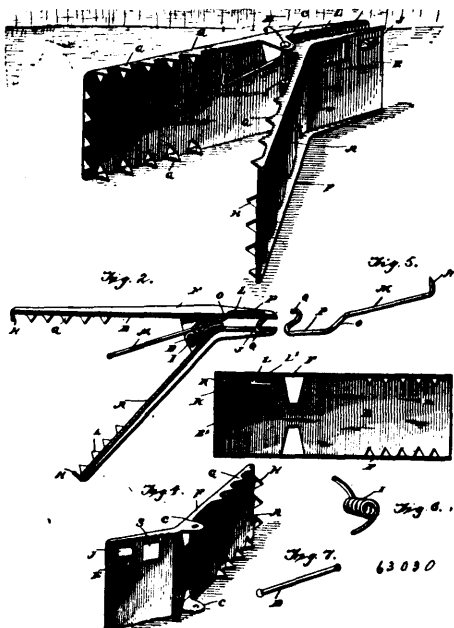


smaller end of the spreader, substantially as set forth. 2nd. A spreader for distributing material in forming a lining within a pipe,



comprising a hollow body tapered from its larger portion upward, wings projecting from the tapered portion of the body, a loop or yoke at the butt end of said body, and a pipe communicating with the said larger end, the upper or smaller end of the spreader having a series of apertures inclined downward, substantially as shown and for the purpose set forth. 3rd. A device for distributing material in forming a lining for pipes or other conduits, consisting of a hollow spreader tapered substantially as shown and provided with an inlet opening at its larger end and outlet passages at its smaller end, a yoke or cap at the larger end of the spreader, and wings or guides projecting laterally from the tapered portion of the spreader, for the purpose set forth.

**No. 63,030. Animal Trap. (Piège.)**

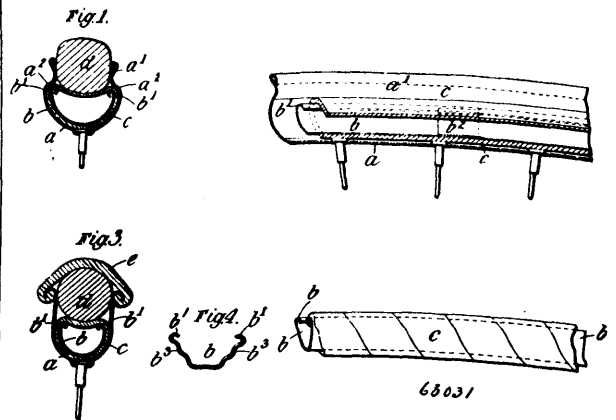


James H. Mackintosh, Asbury Park, New Jersey, U.S.A., 8th May, 1899; 6 years. (Filed 6th June, 1898.)

*Claim.*—1st. An animal trap consisting of two vertical pivoted toothed jaws provided with spring closing mechanism and a trigger and setting bar with bait holder between the jaws, the jaws being constructed and arranged to be placed on edge when set to permit the approach of the animal to the bait without the necessity of passing over any other object than the floor or carpet upon which the trap is set, substantially as described. 2nd. The animal trap herein

described, consisting of a jaw A, having a rear extension at an obtuse angle thereto and the jaw B having a rear extension in line with the body of the jaw, each of said jaws being stamped from sheet metal and provided with teeth and pivot lugs stamped out of the material of the jaw, the jaw A being provided with openings J and S and the jaw B with openings K and L, the pivot pin passing through the pivot lugs, the spring coiled about the pivot pin and bearing outwardly between the extensions D and E<sup>1</sup> and the trigger and set rod M provided with a point N to receive the bait, a bent portion O to pass through the opening L and engage shoulder L<sup>1</sup> when set, and a toe Q to pass through and engage with the edge of the opening J in setting the trap, substantially as described. 3rd. The combination of two jaws pivotally attached to each other and having extensions beyond the pivots, a wire S pivotally secured to the end of one jaw adapted to be passing around the other jaw and through an opening therein, a stop or catch to engage the end of the wire, and a trigger pivotally secured to the jaw and adapted to release the wire, the trigger having pointed ends to receive the bait, substantially as described. 4th. The combination in an animal trap of two vertical jaws pivotally attached to each other and having extensions beyond the pivots, a wire S pivotally secured to the end of one jaw and adapted to be passed around the end of the other jaw and through an opening therein, a trigger and set bar V provided with tangs W W, adapted to be engaged through slots or openings in the last named jaw, with space to permit of vertical movement to trip the wire S, substantially as described. 5th. The combination in an animal trap of two vertical jaws pivotally attached to each other and having extensions beyond the pivots, a wire S<sup>1</sup> pivotally secured to the end of one jaw adapted to be passed around the end of the other jaw and through an opening therein, a stop or catch to engage the end of the wire, and a trigger and set V<sup>1</sup> pivotally secured to the latter jaw at W<sup>1</sup> and adapted to be oscillated on its pivot to trip the wire at S<sup>1</sup>, substantially as described.

**No. 63,031. Tire and Rim. (Bandage et jante.)**



Henry Constable, 267 Ladbroke Grove, London, England, 8th May, 1899; 6 years. (Filed 25th October, 1898.)

*Claim.*—1st. In a resilient tire for wheels, the combination with the wheel rim, of a detachable inner rim on which is mounted a resilient bed or support for the body of the tire proper, substantially as described. 2nd. In a resilient tire for wheels, the combination of a wheel-rim having flat parallel outer sides or edges, a detachable inner rim having laterally expansible edges, a tube of resilient material inclosing said inner rim and being gripped between the same and the wheel rim, and an endless band or tire resting on said resilient material, substantially as and for the purposes specified. 3rd. In a resilient tire for wheels, the combination of a wheel rim having inwardly pressed flat parallel outer sides or edges forming guide surfaces and internal shoulders, a detachable inner rim having laterally expansible edges tending to house themselves under said shoulders, an adjustable tube of resilient material inclosing said inner rim, and an endless band or tire resting on said resilient material and between said guide surfaces, substantially as and for the purposes specified. 4th. In a resilient tire for wheels, the combination with the wheel rim of a detachable inner rim, a resilient bed or support carried by said inner rim, and an endless band or tire resting on said bed between the edges of the wheel rim and being of approximately square shape so as to be capable of being turned to present any one of its faces as the wearing surfaces, substantially as described.

**No. 63,032. Rotary Engine. (Machine rotatoire.)**

Edward Probst, Terre Haute, Indiana, U.S.A., 8th May, 1899; 6 years. (Filed 5th November, 1898.)

*Claim.*—1st. In a rotary engine, the combination, with a cylinder, of a piston journalled in the cylinder and provided with a series of circumferential grooves, a series of slidable abutment plates arranged in line with each other and carried by the cylinder, said abutment