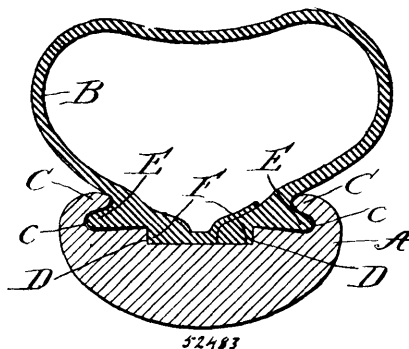


5th. In an autoharp, the combination with the body of a casing secured thereto above the sound board, a board or false bottom covering said casing provided with perforations or guides for a series of vertical pins, an organ key board arranged upon said false bottom, a series of pins having a vertical motion in said false bottom and adapted to be depressed by said keys, a series of presser bars under said bottom corresponding to said keys and pins held up by springs and adapted to be depressed by said keys and pins, a rocking bar pivoted to said bottom adapted to have one edge depressed by the keys and having at one end an arm or lever, a spring holding up the rear end of said arm or lever, a vertical pin under the forward end of said arm or lever held vertically sliding in said false bottom, a muffler bar under said pin guided and supported at each end by pins and springs and a series of damper bars disposed transversely to said muffler bar and parallel to the strings of the instrument and upon which said muffler bar bears bodily so that the spring supporting the arm or lever depresses said muffler bar and with it all the damper bars, substantially as set forth. 6th. In an autoharp, the combination of a casing secured above the sound board, an organ key board disposed upon a false bottom in said casing, a rocking bar pivoted upon said bottom transversely under said keys and adapted to have its rear edge depressed by any one or more of said keys, an arm or lever at the end of said rocking bar bearing with its forward end upon the pin and depressing a presser bar which depresses the free end of a series of dampers, a spring under the rear end of said arm or lever holding the same up and a clamp pin by which the spring actuated end of said arm or lever may be held depressed, substantially as set forth.

No. 52,483. Wheel Rim and Tire.

(*Jante et bandage de roues.*)



Thomas B. Jeffery, Chicago, Illinois, U.S.A., 2nd June, 1896; 6 years. (Filed 29th April, 1896.)

Claim.—The combination with the rim provided on each edge with two abutting flanges or ridges of the tire, also provided on each edge with two corresponding abutting ribs or flanges, the distance between the two tire ribs when the tire is deflated being less than the distance between the two corresponding rim flanges whereby when the tire is inflated a bearing is first established between the inner ribs and later between the outer ribs, substantially as described.

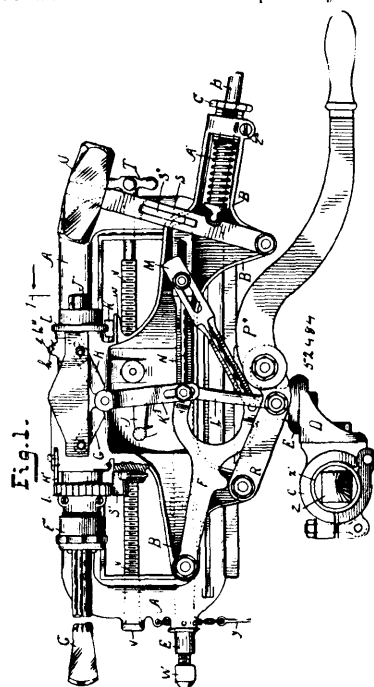
No. 52,484. Hand Power Rock Drilling Machine.

(*Forêt de mine.*)

Riverious Palmer Elmore, Chicago, Illinois, U.S.A., 2nd June, 1896; 6 years. (Filed 29th April, 1896.)

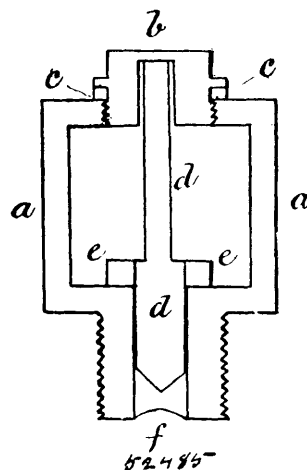
Claim.—1st. In a hand power rock drilling machine the combination of frame A, frame B adapted to slide upon frame A and carrying a reciprocating drill holder S² and its spring, screw rod V journaled in frame A, and having the hand-wheel T on its outer end, ratchet-wheel *l* splined on said screw shaft, and seated in a recess in frame B, bell crank paul K pivotally connected at its angle to gib *n* by means of pin P having the coil spring *m* for yieldingly holding said paul at its point of pivot, said paul being adapted to engage and turn said ratchet wheel by means of one of its arms, and the other arm having the lugs O for carrying between them the flange of nut P on the drill holder for actuating said paul, nut P, half nut Y, and detent latch K² all arranged to operate substantially as and for the purpose set forth. 2nd. In a hand power rock drilling machine the combination of frame A and frame B arranged to slide thereon, a drill holder carried by frame B and arranged to reciprocate therein, a screw rod carried by frame A, and a bell crank ratchet paul K pivotally connected to sliding frame B and adapted to engage said ratchet-wheel, and adapted to be actuated by the drill holder all arranged to operate substantially as and for the purpose set forth. 3rd. In a hand power rock drilling machine the combination of the frame B the reciprocating drill holder S² having the longitudinal groove S² spring bolt or latch *i* having the radial arms *j* near its upper end, and the hollow nut *h*¹ adapted to screw into barrel *h*² and having the radial recess P¹ across its upper end for receiving arms *j* and the coil spring introduced in said barrel around said latch and between a shoulder thereon and the lower end of said nut all arranged to operate substantially as and for the pur-

pose set forth. 4th. In a hand power rock drilling machine the combination of frame B hammer handle S pivotally connected at its



outer end to said frame, rod B having its inner end connected with said hammer handle by a ball and socket joint, and having its outer end pass free through hollow nut C¹, nut C¹ screwed into the screw threaded extension end of said frame B and the coil spring A¹, sleeved on said rod between the head thereof and the inner end of said nut, all arranged to operate substantially as and for the purpose set forth. 5th. In a hand power rock drilling machine the combination of the sliding frame B, drill holder S¹ adapted to reciprocate therein, ratchet-wheel *l* on said drill holder, paul H¹ pivotally attached to the top of said frame adjacent to said drill holder and ratchet-wheel for engaging and partially rotating said drill holder as it reciprocates, and the detent spring or bolt S for preventing backward rotation of said drill holder, all arranged to operate substantially as and for the purpose set forth. 6th. In a hand power rock drilling machine the combination of the frame A, frame B adapted to slide on frame A, drill holder S² adapted to reciprocate in said frame B and having the flange nut or hand L, hammer head J¹ and ratchet-wheel *l*, coil spring J² sleeved on said drill holder, pauls H¹ and K, spring bolt or latch *i* for fitting the groove in said drill holder, screw shaft V, ratchet-wheel *l* splined thereon, hammer U, and the means for actuating said drill holder and drill and hammer are arranged to operate substantially as and for the purpose set forth.

No. 52,485. Device for Oiling Carriages and other Vehicles. (*Graisneur pour voitures, etc.*)



Albert Shepherd Geiger and Samuel Irwin, both of Waterloo, Ontario, Canada, 2nd June, 1896; 6 years. (Filed 29th April, 1896.)