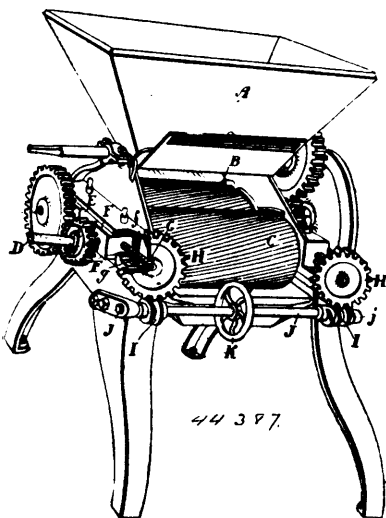


on the welt of the shoe, and suitable gearing to rotate the said wheels in unison at substantially the same surface speed to feed the sole and shoe through the machine while the cutter acts. 3rd. A feeding and a supporting wheel adapted to act upon and sustain the edge of the sole outside the line of the channel, combined with an opposed presser wheel or roll to bear on the welt portion of the shoe at the opposite side of the sole, a bearing yoke or carrier for the said presser wheel or roll, and an upper gage located near the said presser wheel or roll and carried by the said yoke and adapted to bear against the upper on the last and rise and fall with the presser roll, substantially as described. 4th. In a channelling machine, the following instrumentalities, viz., a channel knife, a wheel like support for the outer face of the sole to be channelled, and a bevelled face presser wheel to bear on the welt portion of the shoe at the opposite side of the sole, combined with devices to move the presser wheel substantially at right angles to the channel knife during the cutting of the channel, to thereby vary the distance of the channel from the median line of the sole, substantially as described. 5th. In a channelling machine, the following instrumentalities, viz., a channel knife, a wheel like support for the outer face of the sole outside the channel, a bevel faced presser roll to bear against the welt portion of the sole, an upper gage to bear against the upper next the edge of the last, and devices to move the presser roll and upper gage in unison toward and from the vertical plane occupied by the edge of the channel knife, substantially as described. 6th. In a channelling machine, the following instrumentalities, viz., a channel knife, a wheel like support for the outer face of the sole outside the channel, a bevel faced press or roll to bear against the welt portion of the sole, an upper gage to bear against the upper next the edge of the last, devices to move the presser roll and upper gage in unison toward and from the vertical plane occupied by the edge of the channel knife, and devices to determine the extent of the lateral movement of the said presser roll and upper gage, substantially as described. 7th. In a channelling machine, the following instrumentalities, viz., a channel knife, a bevelled face feed wheel adapted to engage near its edge the outer sole to be channelled and provided with teeth, a presser wheel mounted just above it and having a bevelled face to bear on the welt, said presser wheel being provided with gear teeth, gears engaging the teeth of said feed wheel and presser wheel, suitable gears engaging the teeth of said wheels, parallel shafts carrying said gears, gearing to rotate the said shafts in unison at substantially the same surface speed to feed the sole and shoe through the machine, and an independent support for the central part of the sole, substantially as described. 8th. The stand, and the bevel wheel C⁹, having a bevelled face to support the edge of the sole, combined with the frame E, having the roller support E¹, to support the central part of the sole, and an adjusting device for said frame, substantially as described. 9th. The bevel faced wheel C⁹, the presser wheel c, co-operating therewith, means to rotate the said wheel, and a wheel E¹, to support the sole near its median or centre line, combined with a cutter located between said wheels C⁹ and E¹, to operate, substantially as described.

No. 44,387. Grain Crusher. (*Machine à broyer le grain.*)



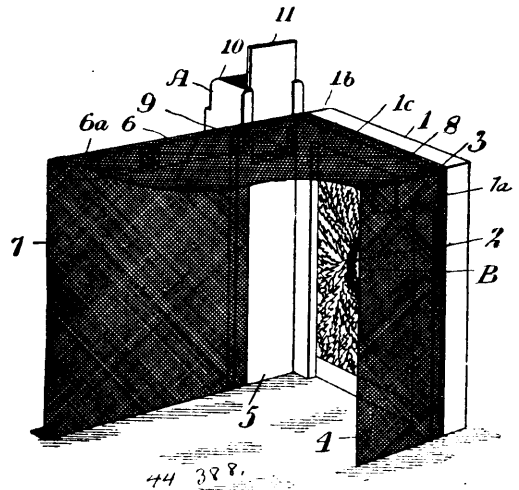
James Irving, Seaforth, Ontario, Canada, 4th October, 1893; 6 years.

Claim.—1st. In a grain crusher, the combination, with the stationary roll held in stationary bearing blocks, the adjustable roll C, journaled in bearing blocks E, held in guideways F, F, of the partially threaded spindle G, connected to or in contact with the bearing blocks and passing through the end f, of the guideways and gearing connecting the spindles G, whereby both bearing blocks may be adjusted simultaneously, as and for the purpose specified. 2nd.

In a grain crusher, the combination, with the stationary roll held in stationary bearing blocks, the adjustable roll C, journaled in bearing blocks E, held in guideways F, F, of the partially threaded spindle G, connected to or in contact with the bearing blocks and passing through the end f, of the guideways, the worm wheels G, secured in the ends of the spindles G, the worms i, secured in the shaft J, and the hand wheel K, arranged as and for the purpose specified.

No. 44,388. Trap for Horn Flies.

(*Piège pour mouches à cornes.*)

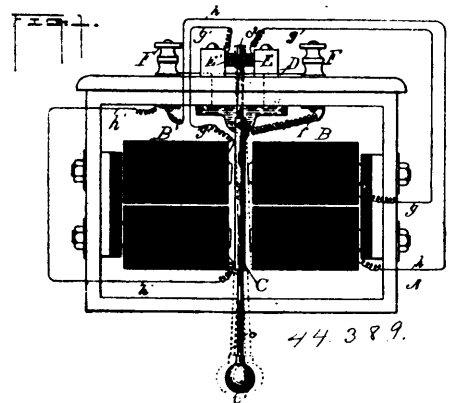


Robert Henry, Guthrie, South Dumfries, Ontario, Canada, 4th October, 1893; 6 years.

Claim.—1st. In a trap for horn flies, the combination of a frame, a brush in said frame, means for permitting the passage of cattle through said brush, and means for securing the flies after being removed by said brush, substantially as described. 2nd. In a trap for horn flies, the combination of a frame, a brush mounted in said frame, said brush having an opening to permit the passage of the cattle therethrough, hinged arms connected to the top of said frame, fabric netting secured to the top and sides of said arms to form a trap for flies after being removed by said brush, a cage, and an opening from said trap into said cage, substantially as described.

No. 44,389. Electro-Magnetic Bell.

(*Cloche électro-magnétique.*)



James Jasper Ross and George R. Holden, both of Detroit, Michigan, U.S.A., 4th October, 1893; 6 years.

Claim.—1st. In an electric bell ringing apparatus, the combination, with two or more electro-magnets, of the armature lever pivoted intermediate the ends thereof between said magnets and carrying a hammer at one end, the bell or bells arranged in proximity to said hammer, the contact springs resting against opposite sides of the other arm or end of said armature lever and circuit connections, substantially as described, normally closed through said armature lever and both of said magnets and contact springs, whereby a continuous bell ringing action is produced by the reciprocal action of the magnets, substantially as set forth. 2nd. A continuous bell ringing apparatus, comprising two or more electro-magnets, an armature lever pivoted intermediate the ends thereof between said magnets, a hammer on the long arm of said lever, a suitable bell or