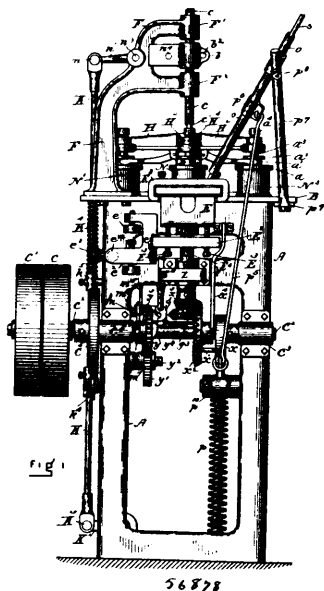


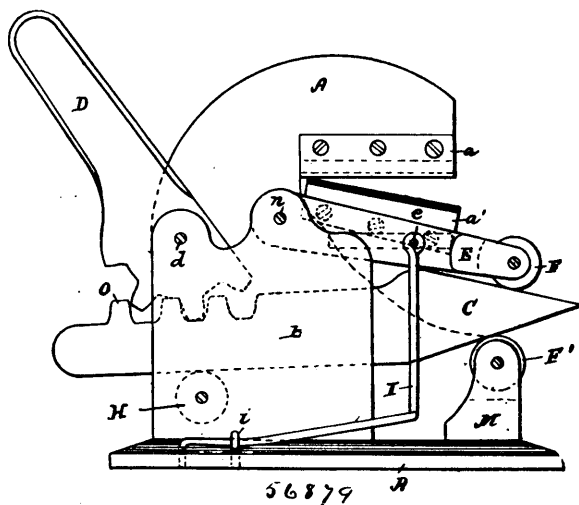
wheel g^4 , provided with the recessed hub x^8 , and gear wheel g^8 , secured to the standard G, and adapted to actuate it, substantially



as and for the purpose set forth. 3rd. In an automatic machine for soldering end pieces to cans, the gear wheel y , provided with the cam y^4 , the lever y^5 , and gear wheel y^3 , in combination with suitable devices for placing and removing cans in the process of soldering, substantially as set forth. 4th. In an automatic machine for soldering end pieces to cans, the main shaft C^2 , gear wheel x^2 , secured to said main shaft, the spindle shaft c^2 , the gear wheel x^3 , secured to said spindle shaft and adapted to actuate the live spindle by the rotation of the main shaft, in combination with suitable can soldering mechanism, substantially as and for the purpose set forth. 5th. In an automatic machine for soldering end pieces to cans, the cam wheel C^5 , secured to the main shaft C^2 , the lever k^2 , provided with the wheel k^4 , and adapted to actuate the vertical rod K, in combination with suitable can holding and can soldering devices, substantially as and for the purposes set forth. 6th. In an automatic machine for soldering end pieces to cans, the rod K, the piece K^5 , secured to said rod and having the arm c^5 , the spring K^4 , the lever c^7 , having the bent arm c^8 , the set-screw e^{10} , the independent movable rod e^{11} , in combination with the hinge e , provided with the shelf E^2 , and the extension end e^{12} , and the spring c^4 , substantially as and for the purposes described. 7th. In an automatic machine, for soldering end pieces to cans, the cam wheel C^5 , the lever k^2 , provided with the wheel k^4 , the rod K, movably secured at its lower end and provided with the adjustable piece k , secured thereto, the arm n^1 , pivotally secured to the upper end of said rod, and also to the clamp b , the said arm being journaled to part F, in combination with the spindle c , and adapted to actuate said spindle, substantially as and for the purposes described. 8th. In an automatic machine for soldering end pieces to cans, the rod x^4 , adapted to be operated by a suitable cam movement, the rod x^5 , the spring x^6 , provided with the projection x^7 , in combination with the wheel g^1 , having the notch, g^7 , the said wheel secured to the standard G, and adapted to hold the same, substantially as and for the purposes set forth. 9th. In an automatic machine for soldering end pieces to cans, the heating plate E^5 , having a concave circular bevelled edge, a slot upon its upper side and a recessed part underneath, and adapted to be removably secured to a movable heater box, substantially as and for the purposes set forth. 10th. In an automatic machine for soldering end pieces to cans, the solder holder and conveyor, consisting of the barrel o , the spring o^2 secured at one end to said barrel, the other end being free and resting in the slot x^1 , of barrel o , the movable slide p^5 , provided with the spring piece o^2 , secured at one end to said slide and the other end being free and resting in the slot x^1 , of barrel o , and adapted to hold the wire solder within said barrel and to move the same forward, substantially as and for the purposes set forth. 11th. In an automatic machine for soldering end pieces to cans, the cam wheel, x , secured to the main shaft C^2 , the lever p^3 , the spring p , the rod p^5 , slide p^6 , and the barrel o , arranged and adapted to hold and convey the solder intermittently to the soldering point, and in combination with suitable soldering mechanism, substantially as set forth. 12th. In an automatic machine for soldering end pieces to cans, the lever a^5 , pivotally secured at one end to hub H^4 , and contacting its other end with holder a^1 the rod d , provided with the bevelled end piece d^1 , adapted to raise the holder a^1 , in combination with suitable conveying and soldering mechanism, substantially as and for the

purposes herein set forth. 13th. In an automatic machine for soldering end pieces to cans, the acid tank m^1 , the pipe m^2 , the pipe m , adapted to deliver the acid at the soldering point, the said tank provided with a suitable valve for regulating the flow of the acid in the tank under pressure to the discharge pipe, and arranged to be actuated by suitable cam devices, and all combined with suitable can soldering mechanism and adapted to operate in connection therewith, substantially as and for the purposes set forth. 14th. In an automatic machine for soldering end pieces to cans, the independent socketed rotatable, removable and vertically movable can holder a^1 , provided with the rim a^2 , stem a^3 , the rotating arm H^4 , lever a^5 , adjustable rod d , provided with the bevelled end d^1 , and table B, combined with suitable can conveying and can soldering mechanism, all substantially as and for the purposes set forth. 15th. In an automatic machine for soldering end pieces to cans, the plate l , provided with the bevelled edge l^2 , and adapted to be suitably secured to table B, in combination with the live spindle c^2 , and suitable can revolving mechanism, all substantially as herein set forth and for the purposes described. 16th. In an automatic machine for soldering end pieces to can bodies, the guide ways L, L^1 , secured to the table, in combination with automatic rotating mechanism adapted to deliver the cans within the guide ways, substantially as described. 17th. In a machine for soldering end pieces to cans, the adjustable hub H^4 , provided with radiating arms, combined with adjustable can holders and adapted to be carried by said arms, arranged and adapted to operate substantially as set forth. 18th. In a machine for soldering end pieces to cans, the heating plate E^5 , provided with a curved recess and adapted to be suitably heated, in combination with the live spindle, substantially as and for the purposes described. 19th. In a machine for soldering end pieces to cans, the standard G, the hub H^4 , the radial arms provided with socketed can holders, in combination with the live and the dead spindles, substantially as described. 20th. In a machine for soldering end pieces to cans, a live spindle adapted to rotate the can in combination with the rotatable and vertically movable can holder, substantially as and for the purposes described.

No. 56,879. Shears for Cutting Cold Iron. (*Cisailles*.)



George McCool, Laingsburg, Michigan, U.S.A., 4th August, 1897; 6 years. (Filed 17th May, 1897.)

Claim.—1st. In shears for cutting cold iron consisting of a frame provided with a base, said frame having a stationary blade rigidly secured thereto, an arm pivoted to said frame at one end and the opposite end provided with a friction roller, a cutting blade secured to said arm, friction rollers journaled on said frame, a slidable wedge provided with a rack, lever pivoted to said frame and having teeth meshing in said wedge to advance said wedge when said lever is pulled downward thereby raising the arm of the cutting knife to close said knives, a spring connected to the frame and the cutting arm to pull said arm downward, substantially as shown and described. 2nd. The herein described shears for cutting cold iron consisting of a main frame provided with two friction rollers near its base and a stationary cutting blade near the top, an arm pivoted to said frame near its centre, a cutting blade secured to said arm, a friction roller attached to said arm at its outer end, a wedge provided with a rack on rear end and travelling on said friction rollers, said wedge travels between the recess of said frame, a lever pivoted between said recess provided with teeth on its lower end and meshing in the rack on the wedge, said lever when pulled downward to advance said wedge thereby causing said arm provided with cutting blade to move upward causing the blades to close, a tension spring attached to said arm and frame to pull said arm downward, substantially as shown and described.