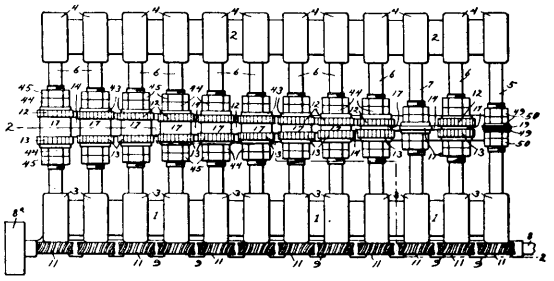
No. 63,756. Machine for making Expanded Metal.
(*Machine pour la fabrication de métal expansible.*)

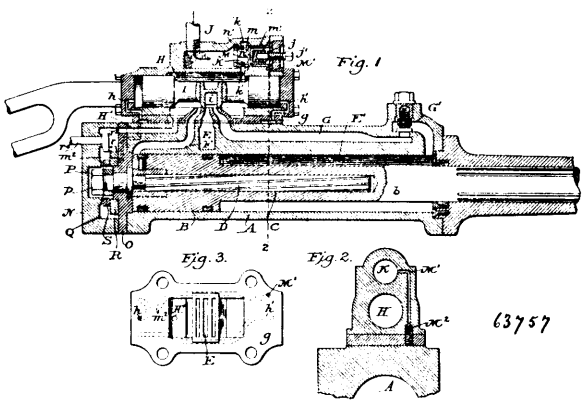


63756

Frank H. Pitkin and Josiah Thompson, both of Chicago, Illinois, U.S.A., 1st September, 1899; 6 years. (Filed 12th May, 1899.)

Claim.—1st. A machine for making expanded metal, having in combination a plurality of cutters arranged in converging series and a table arranged between said cutters and having knives at its edges co-operating with the cutting faces of said cutters, substantially as set forth. 2nd. A machine for making expanded metal, having in combination a sheet support, a plurality of rotary cutters arranged in pairs axially and projecting past the edges of said support on diametrically opposite sides thereof, and each cutter on each side of the support having its cutting edge in a different vertical plane from the others on the same side, substantially as set forth. 3rd. A machine for making expanded metal, having in combination a rotary cutter, a frame having vertical guideways, knives located therein on opposite sides of said frame and vertically adjustable stocks on opposite sides of said frame and upon which stocks said knives rest, and a vertically adjustable pressure roll held between said stocks under said rotary cutter, substantially as set forth. 4th. A machine for making expanded metal, having in combination a number of transverse shafts having end bearings, a support for the sheet to be expanded arranged transversely of and under said shafts, two cutters located on each of said shafts, at an intermediate point thereof, one on each side of said support and the cutting edges of the cutters on one shaft being located in different vertical planes from the cutting edges of the cutters on the other shafts, substantially as set forth. 5th. A machine for making expanded metal, having in combination a plurality of rotary cutters star shaped in axial section and arranged in converging series and having their inner cutting faces arranged in different vertical planes, and knives located adjacent to the inner face of each of said cutters and co-operating therewith, substantially as set forth. 5th. A machine for making expanded metal, having in combination a plurality of rotating members having peripheral projections and a support for holding the sheet to be expanded against said projections, located adjacent to the plane of rotation of said members, and past the edge of which support said projections extend, said rotating members and support being so relatively arranged that the body portions of the rotating members do not cut into the plane in which the supporting face of the support lies and said rotating members being arranged in a line extending at an angle to the line of movement of the sheet and one in advance of the other, substantially as set forth. 7th. A machine for making expanded metal, having in combination a plurality of rotating members provided with peripheral projections having their engaging faces axially elongated and provided on their inner sides with cutting edges, and a support for holding the sheet to be expanded against said projections, located adjacent to the plane of rotation of said members and past the edge of which support said projections extend, said rotating members and support being so relatively arranged that the body portions of the rotating members do not cut into the plane in which the supporting face of the support lies and said rotating members being arranged in a line at an angle to the line of movement of the sheet and one in advance of the other, substantially as set forth. 8th. A machine for making expanded metal, having in combination a plurality of rotating members provided with peripheral projections having their engaging faces axially elongated and parallel with the plane of the sheet to be expanded and provided on their inner sides with cutting edges, and a support for holding the sheet to be expanded against said projections, located adjacent to the plane of rotation of said members and past the edge of which support said projections extend, said rotating members and support being so relatively arranged that the body portions of the rotating members do not cut into the plane in which the supporting face of the support lies, and said rotating members being arranged in different parallel planes and one in advance of the other, substantially as set forth. 9th. A machine for making expanded metal, having in combination a plurality of rotating members provided with peripheral projections, and a support for holding the sheet to be expanded against said projections, located adjacent to the plane of rotation of said members and past the edge of which support said projections extend, said rotating members and support being so relatively arranged that the body portions of the rotating members do not cut into the plane in which the supporting face of the support lies and said rotating members being arranged one in advance of the other in a line at an angle to the line of movement of the sheet and on each side of said support, substantially as set forth. 10th. A machine for making expanded metal having in combination a plurality of rotating members provided with peripheral projections, knives for holding the sheet to be expanded against said projections, located adjacent to the plane of rotation of said members and past the edges of which knives said projections extend, said knives and rotating members being so arranged that the body portions of the rotating members do not extend beyond the edges of the knives and aids rotating members and knives being located in a line at an angle to the line of movement of the sheet and at different points with reference to the length of the sheet, substantially as set forth.

No. 63,757. Coal Cutting Machine.
(*Machine à couper le charbon.*)



63757

The Ingersoll-Sergeant Drill Company, No. 26 Cortland Street, New York City, New York, assignee of Henry Clark Sergeant, Westfield, New Jersey, 1st September, 1899; 6 years. (Filed 4th April, 1899.)

Claim.—1st. In a reciprocating engine, the combination with a cylinder having an inlet and exhaust ports, a main valve controlling the same, and a piston working in said cylinder, of a normally inactive governing valve for reducing the speed of the piston, and means for actuating the governing valve when the piston moves beyond the normal working point and for rendering it inactive when the piston resumes its normal stroke. 2nd. In a reciprocating engine, the combination with a cylinder having inlet and exhaust ports, a main valve controlling the same and a piston working in said cylinder, of a normally inactive governing valve for diminishing the main air supply, and means operated by the stroke of the piston for partially closing the governing valve when the piston moves beyond the normal working point and for opening said governing valve when the piston resumes its normal stroke. 3rd. In a reciprocating engine, the combination with a cylinder having inlet and exhaust ports, a main valve controlling the same, and a piston working in said cylinder, of a normally inactive governing valve for diminishing the main air supply to the main valve, and means operated by the stroke of the piston for operating the governing valve to diminish the main air supply when the piston moves beyond the normal working point, and for restoring the same when the piston resumes its normal stroke. 4th. In a reciprocating engine, the combination with a cylinder having inlet and exhaust ports and passages, a main valve controlling the same, and a piston reciprocated in said cylinder, of a movable, normally inactive governing valve controlling the main air supply, an adjustable stop for determining the active position of said governing valve and means for moving said governing valve into position to diminish said main air supply when the piston moves beyond the normal working point. 5th. In a reciprocating engine, the combination with a cylinder having inlet and exhaust ports and passages, a main valve controlling the same and a piston reciprocated in said cylinder, of a movable, normally inactive governing valve for dimishing the main air supply interposed between said main air supply and the main valve, an adjustable stop for determining the active position of said governing valve, and means operated by the stroke of the piston for moving said governing valve into and holding the same in operative position to diminish said main air supply when the piston moves beyond the normal working point.

No. 63,758. Window Shade and Curtain Hanger.
(*Abat-jour de fenêtre et porte-rideau.*)

William H. McFadden and John Love, assignees of Josiah P. Lucas, all of Cadiz, Ohio, U.S.A., 1st September, 1899; 6 years. (Filed 1st March, 1899.)

Claim—1st. In a window shade and curtain hanger, the combination with a swinging frame, of a shade roller carried thereby, and a curtain pole pivotally mounted on said frame, whereby said pole may be swung outwardly with the frame or independently