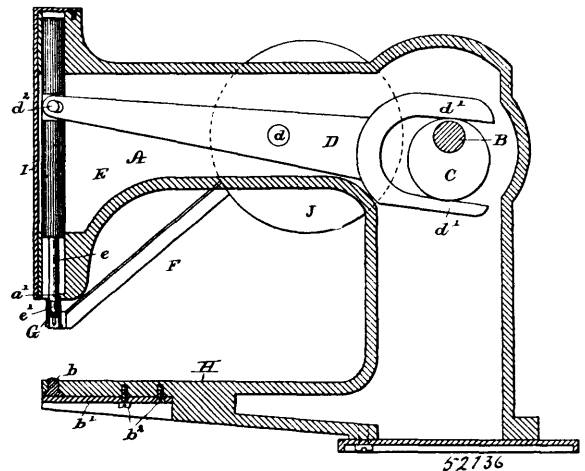


clutch shipping-mechanism to stop the machine, substantially as and for the purpose set forth. 10th. In a machine for forming blanks by fastening sheets and strengthening wires to reinforcing-cleats, the combination of guides for the cleats, intermittent feed-mechanism for advancing the cleats longitudinally in their guides and with a sheet through the machine, an intermittingly actuated staple driver adjacent to the path of each cleat, alternating in its section with said feed-mechanism, to fasten the sheet and strengthening wires, by successive operations, to the cleats, means for guiding the strengthening wires with the sheet across the staple drivers, and skipper-mechanism operating, at predetermined intervals, in the passage of the sheet and cleats through the machine, to produce an increase of the distance between the points at which the staples are driven, substantially as described. 11th. In a machine for forming blanks by fastening sheets and strengthening wires to reinforcing-cleats, the combination of guides for the cleats, intermittent feed-mechanism for advancing the cleats longitudinally in their guides and with a sheet through the machine, an intermittingly actuated staple driver adjacent to the path of each cleat, alternating in its action with said feed-mechanism, to fasten the sheet and strengthening wires, by successive operations, to the cleats, means for guiding the strengthening wires with the sheet across the staple drivers, skipper-mechanism operating, at predetermined intervals, in the passage of the sheet and cleats through the machine, to produce an increase of the distance between the points at which the staples are driven, and strengthening wire severing mechanism actuated from the said feed mechanism, to sever the strengthening wires when the sheet and cleats have passed the staple drivers, substantially as described. 12th. In a machine for forming blanks by fastening sheets and strengthening wires to reinforcing cleats, the combination of a drive shaft and a driver therefor, clutch mechanism between the said driver and shaft, clutch shipping mechanism, guides for the cleats, intermittent feed-mechanism actuated from the said drive shaft for advancing the cleats longitudinally in their guides and with a sheet through the machine, an intermittingly actuated staple driver adjacent to the path of each cleat, operated from the said drive shaft and alternating in its action with said feed-mechanism to fasten the sheet and strengthening wires by successive operations, to the cleats at intervals in the direction longitudinally of the cleat, means for guiding strengthening wires with the sheet across the staple drivers, skipper mechanism operating at predetermined intervals in the passage of the sheet and cleats through the machine, to produce an increase of the distance between points at which staples are driven, and means, actuated from the said feed-mechanism, for moving the said clutch-shipping mechanism to stop the machine when the cleats and sheet have passed the staple drivers, substantially as described. 13th. In a machine for forming blanks by fastening a sheet to cleats, the combination of guides for the cleats, intermittent feed-mechanism for advancing the cleats longitudinally in their guides and with the sheet through the machine, comprising primary and secondary feed-rollers rotating normally at the same rate of speed, an intermittingly actuated tacking device adjacent to the path of each cleat, alternating in its action with said feed-mechanism to fasten the sheet, by successive operations, to the cleats, and means for increasing the movement of the primary feed-rollers to hasten the movement of the sheet and cleats toward the tacking devices, substantially as described. 14th. In a machine for forming blanks by fastening a sheet to cleats, the combination of laterally adjustable guides for the cleats, intermittent feed-mechanism for advancing the cleats longitudinally in their guides and with the sheet through the machine, the said feed-mechanism being formed with feed-rollers extending cross-wise of the machine in the plane above the said guides and feed-wheels journaled in the said guides, an intermittingly-actuated tacking device supported adjacent to the path of each cleat and laterally adjustable on its support and alternating in its action with the said feed-mechanism to fasten the sheet, by successive operations, to the cleats, substantially as described. 15th. In a machine for forming blanks by fastening a sheet to cleats, the combination of a main drive-shaft, guides for the cleats, intermittent feed-mechanism, for advancing the cleats longitudinally in their guides, and with the sheet through the machine, comprising primary and secondary feed-rollers rotating normally at the same rate of speed, an intermittingly actuated tacking device adjacent to the path of each cleat, alternating in its action with said feed-mechanism, to fasten the sheet, by successive operations, to the cleats, a secondary drive-shaft actuated from the main drive-shaft and to which the primary feed-rollers are geared, and means for increasing the movement of the primary feed-rollers, to hasten the movement of the sheet and cleats toward the tacking-devices, comprising speed-gear mechanism actuated from the main drive-shaft and with which the said secondary drive-shaft may be thrown into and out of engagement at will, substantially as described. 16th. In a machine for forming blanks by fastening a sheet to cleats, the combination of a main drive-shaft, guides for the cleats, intermittent feed-mechanism, for advancing the cleats longitudinally in their guides, and with the sheet through the machine, comprising primary and secondary feed-rollers rotating normally at the same rate of speed, an intermittingly actuated tacking device adjacent to the path of each cleat, alternating in its action with said feed-mechanism, to fasten the sheet, by successive operations, to the cleats, a secondary drive-shaft actuated from the main drive-shaft and to which the primary feed-rollers are geared, and means for rotating the

said secondary drive-shaft independently of the main drive-shaft, comprising pawl and ratchet mechanism at the secondary drive-shaft, and an operating handle therefor, substantially as and for the purpose set forth. 17th. In a machine for forming blanks by fastening a sheet to cleats, the combination with the guides for the cleats and intermittent tacking device of intermittent feed-mechanism for advancing the cleats longitudinally in their guides and with the sheet through the machine, comprising a series of upper and lower feed-rollers, movable stops at the said guides adjacent to the first upper feed-roller, and means for raising the said first feed-roller, and lowering the said stops into the paths of the cleats and sheet, substantially as and for the purpose set forth. 18th. In a machine for forming blanks by fastening a sheet to cleats, the combination with the guides for the cleats and intermittent tacking devices at said guides, of intermittent feed-mechanism for advancing the cleats longitudinally in their guides and with the sheet through the machine, comprising a series of upper and lower feed-rollers, between the forward end of the guides and tacking devices and lever mechanism operative at will to raise the first upper feed-roller and the upper feed-roller adjacent to said tacking devices, substantially as and for the purpose set forth. 19th. In a machine for forming blanks by tacking a sheet to cleats, the combination with the intermittingly actuated tacking devices, of guides for the cleats, yielding guides for the edges of the sheet and intermittingly actuated feed-mechanism for advancing the cleats and sheet in their guides longitudinally across the said tacking devices, the said feed-mechanism alternating in its action with the said tacking devices, substantially as described. 20th. In a machine for forming blanks by fastening a sheet to cleats, the combination with intermittingly actuated tacking devices, of outer and intermediate guides for the cleats, yielding guides for the edges of the sheet on the said outer cleat guides, and intermittingly actuated feed-mechanism for advancing the sheet and cleats in their guides longitudinally across the said tacking devices, the said feed-mechanism alternating in its action with the said tacking devices, substantially as described. 21st. In a machine for forming blanks by fastening a sheet to cleats, the combination with intermittingly actuated tacking devices, of guides for the cleats, yielding guides for the edges of the sheet, overlapping guides for the edge portions of the sheet and feed-mechanism for advancing the sheet and cleats in their guides longitudinally across the said tacking devices, the said feed-mechanism alternating in its action with the said tacking devices, substantially as described.

No. 51,136. Rivet-Setting Machine.

(Machine à poser les rivets.)



Herbert Summer Crombie, Waltham, Massachusetts, U. S. A., 1st May, 1896; 6 years. (Filed 16th March, 1896.)

Claim.—1st. In a rivet-setting machine, a thimble or friction device for the riveting bar, constructed with vertical slots to produce the friction, and a horizontal slot and vertical slot adapted to the entering of the rivet, and a shoulder to support the entering rivet, substantially as described and shown. 2nd. In a rivet-setting machine in combination with a riveting bar having one end constructed to operate as a die, a thimble or friction device constructed with slots to produce the friction, and another slot to admit the rivet, and a shoulder to support the entering rivet, substantially as described and shown. 3rd. In a rivet-setting machine, the combination of a riveting bar provided with a riveting die of less diameter and a shoulder so formed above said die, with a thimble or friction device carried by the riveting bar, and slotted to receive the rivet from the raceway and having an inner shoulder to permit the descent of the riveting bar through said thimble sufficiently to compress said rivet in the material, substantially as described and shown. 4th. In a rivet-setting machine, the combination of the riveting bar E, having the cam c, the shank e, and the die e', with the thimble G, having the vertical friction slots g, and the horizontal slot g', and the