

type making machine such as described, the combination of the following elements, to wit: a mould provided with an adjustable wall or section for varying the width of the mould cavity, a series of dies or matrices each adapted to be brought into co-operative relation with the mould to form individual types, actuating mechanism for centering individual dies or matrices and affecting the normal adjustment of the mould, said actuating device being provided with a series of controllable stops or devices for determining the positions of the matrices or dies and of the adjustable section of the mould, abnormal adjusting or justifying mechanism acting through the adjustable section of the mould to vary the normal adjustments thereof and provided with a controllable member through which latter the matrix actuating mechanism may be utilized to effect the adjustment of the justifying mechanism, and further provided with a driver or operating device and a controllable member for rendering the justifying mechanism operative upon the movable section of the mould, a perforated controlling strip, and a pneumatic system governed by the controlling strip and in turn governing the controllable devices of the matrix actuating mechanism, and of the justifying mechanism. 5th. In a machine for forming justified lines of type, the combination of the following elements, to wit: a mould provided with an adjustable wall or section for varying the width of the mould cavity, a movable die case provided with actuating mechanism, including controllable stop devices for separately locating each die in conjunction with the mould, normal mould adjusting mechanism for affecting variations in the width of the mould cavity, justifying mechanism provided with controllable adjusting devices and controllable actuating or connecting devices, a metal injecting mechanism provided with controllable connections, a galley mechanism provided with a type carrier receiving the types from the mould and transferring them to a line holder, and a line transferring mechanism for moving the completed line into the galley, a perforated controlling strip, and a pneumatic system governed by the controlling strip and having separate connections with the controllable members of the die case actuating mechanism, the justifying mechanism, the injecting mechanism and the line transferring devices of the galley mechanism. 6th. In a machine for making justified lines of types, the combination with the mould and its movable section, the die case and its actuating mechanism, the normal adjusting and the justifying mechanism, the metal injecting mechanism, the resetting mechanism for the justifying mechanism, and the galley mechanism, of a perforated controlling strip and a pneumatic system governed thereby, the latter controlling the movements of the die case, the adjustments of the justifying mechanism, the application of the justifying mechanism to the movable section of the mould, the metal injecting mechanism, the galley mechanism and the resetting devices of the justifying mechanism. 7th. In a machine for making justified lines of types, the combination with an adjustable mould, a movable die case, a normal adjusting mechanism for the mould, an abnormal adjusting or justifying mechanism, and metal injecting mechanism, of a controlling strip and a controlling system governed thereby, the latter including connections operating upon the die case to centre each die opposite the mould upon the justifying mechanism to determine the amount of variations required to justify the line, and to apply said variation, and upon the injecting mechanism to suspend its action when desired. 8th. In a machine for making justified lines of types, the combination with the adjustable mould, the movable die case, the justifying mechanism, the metal injecting mechanism and the resetting devices for the justifying mechanism, of a perforated controlling strip and a controlling system governed by said strip, said system, including connections, operating upon the die case, actuating mechanism to control the position of the dies with reference to the mould, upon the justifying mechanism, to set the latter for the line and establish operative connection with the adjustable section of the mould when certain designated dies are centred upon the injecting mechanism to suspend its action, and the resetting device of the justifying mechanism to return the latter to the starting position. 9th. In a type making machine, the combination of the following elements, to wit: a movable series of dies or matrices with actuating devices therefor deriving motion from a main driving shaft and provided with a series of stopping or limiting devices for arresting the motion of the series of dies with any one in the centred or casting position, a mould for forming the bodies of the types provided with an adjustable section for varying the width of the mould to form types of different widths, normal adjusting mechanism controlling the position of the adjustable mould section, a perforated controlling strip, and a pneumatic system governed by the controlling strip and operating the limiting or stopping devices of the dies or matrices. 10th. In a machine for making justified lines of type, the combination of the following elements, to wit: a main driving shaft, a fixed mould with an adjustable section for varying the width of the mould cavity therein, a die case, supported to move in transverse directions, two actuating mechanisms, each controlling the movements of the die case in one direction, driven from the main shaft through flexible connections and provided with a series of controllable stops for arresting the die case during different portions of its traverse, to centre any one of the dies or matrices opposite the mould, a justifying mechanism for controlling the position of the adjustable section of the mould, said justifying mechanism being provided with an adjustable member operated from the die case actuating mechanism through a controllable mem-

ber or pawl, and a driver operated from the main shaft and connected through a controllable pin or member with the adjustable section of the mould, a pump and nozzle for injecting molten metal into the mould, with actuating mechanism driven from the main shaft to connect the muzzle with the mould and operate the pump, a strip containing perforations for controlling the action of the machine, and a pneumatic system governed by the controlling strip and containing ports, passages and pistons, the latter operating the controllable stops of the die case actuating mechanism, the controllable pawl and pin of the justifying mechanism, and a disengaging device intermediate the pump and driving shaft for controlling the action of the pump. 11th. In a machine for making justified lines of types containing as its principal elements a movable die or matrix case, an adjustable mould, normal adjusting and justifying mechanisms for the mould, and a perforated controlling strip, the combination therewith of a pneumatic controlling system governed by the perforated strip and operating the controlling stops for determining the position of the die case and the adjustment and connection of the justifying mechanism. 12th. In a machine for making justified lines of types containing in its organization a movable die case containing a series of matrices, a mould adjustable as to width of the cavity, normal and abnormal or justifying mechanisms for adjusting the mould, a metal injecting mechanism, and a perforated controlling strip, the combination therewith of a pneumatic controlling system governed by the perforated strip and controlling the position of the movable die case, the adjustment and application of the justifying mechanism, and the action of the injecting apparatus. 13th. In a machine for making justified lines of type, the same being provided with a movable series of matrices, a mould having an adjustable member and metal injecting apparatus co-operating with the mould to deliver molten metal therein after the mould has been adjusted and the selected matrix brought into conjunction therewith, the combination of a normal adjusting mechanism controlled by or from the actuating devices for the matrices and acting upon the adjustable section of the mould to vary the width of the latter, an abnormal adjusting or justifying mechanism operating through or upon the normal adjusting mechanism, to vary the extent of adjustment produced thereby, a controlling strip containing perforations representing the selected matrices and justification index for the line, and a pneumatic system governed by the controlling strip and including the controllable members of the matrix actuating mechanism and of the justifying mechanism. 14th. In a machine for making justified lines of type provided with a movable series of matrices, a mould having an adjustable member, and metal injecting mechanism, the combination of normal adjusting mechanisms connected to the adjustable member of the mould and controlled by the actuating mechanism of the matrices, an abnormal adjusting or justifying mechanism acting through the adjustable member of the mould to vary the normal adjustments thereof and provided with controllable actuating devices for determining the degree of variation, controllable connecting devices for determining the time or occasion of its application to the mould and controllable resetting devices, a controlling strip provided with perforations representing the selected matrices, the degree of variation for justification and the time or occasion for the application of the justifying mechanism to the mould and the re-setting of the justifying mechanism, and a pneumatic system governed by the perforated strip and controlling the location of the matrices, the degree of adjustment of the justifying mechanism, the time or occasion of the application of the justifying mechanism and the re-setting of the justifying mechanism. 15th. In a machine for producing justified lines of types provided with a movable series of matrices, a mould having an adjustable section for varying the width of the cavity and a movable section, normal justifying mechanism acting through the adjustable section of the mould to vary its position to correspond with the selected matrix, abnormal adjusting or justifying mechanism operating to vary the position of the adjustable section of the mould, metal injecting mechanism, and a galley mechanism receiving successive types from the mould, arranging them in lines and transferring the lines to a galley, the combination therewith of the perforated controlling strip, and the pneumatic system governed by said strip and operating the controllable members of the mechanisms for locating the matrices, for setting the justifying devices, for applying the justifying devices, for controlling the injection of molten metal into the mould, for effecting the transfer of the completed line to the galley and for re-setting the justifying mechanism. 16th. In a machine for making justified lines of types adapted to be controlled by a single strip perforated to represent the individual types which are to compose the line, the types to be varied in width as compared with the normal, to effect justification, the degree or amount of variation for each of the selected types to produce justification, and the re-setting of the justification mechanism preliminary to the formation of the next line, the combination with such a controlling strip of a mould in which the body portions of the types are formed, a series of movable matrices or discs co-operating with the mould to form and determine the face of the type, with controllable devices for locating the several matrices or dies, justifying mechanism for varying the width of the mould cavity, said mechanism including controllable devices for adjusting the same to produce the desired degree of variation for resetting the adjustable member, and for rendering the adjustable member operative to effect the width of the mould, and a pneumatic system intermediate the perforated