

tions of the said grate, substantially as described. 18th. In a furnace, the combination with an inclined grate having rocking grate bars, of a rocking frame adapted to actuate the same, the said frame carrying movable journal blocks, means for adjusting the movable journal blocks, rods connecting the journals with portions of the grate, and means for rocking the frame, the construction being such that the movable journal blocks may communicate a uniform or graduated movement to the grate bars according to their position in the frame, substantially as described. 19th. In a furnace, the combination with an inclined grate having rocking grate bars, of a frame pivotally mounted in the furnace, said frame having guide bars, movable journal blocks adapted to move upon the said guide bars, means for adjusting the said blocks, connecting rods interposed between the journals upon said movable journal blocks, and the grate bars, and means for rocking the frame whereby the rocking bars may be rocked simultaneously to a uniform extent or have a graduated motion with respect to each other, substantially as described. 20th. In a furnace, the combination with an inclined grate having rocking grate bars, of a rocking frame having guide bars formed therein, movable journal blocks mounted upon the guide bars, means for connecting the movable journal blocks to a single member or arm, and means for operating the said arm or member, whereby the position of the movable journal blocks may be regulated with respect to each other, the construction being such that the different portions of the grate bars will be adapted to move uniformly or with a graduated action, substantially as described. 21st. In a furnace, the combination with an inclined grate having rocking grate bars, of means for rocking the said bars comprising a rocking frame pivotally mounted in the furnace, movable journal blocks mounted in the said frame, means for connecting the journal blocks, and means for operating the said journal blocks, and connecting means, whereby all the journal blocks will be moved to regulate the throw of the grate bars, substantially as described. 22nd. In a furnace, the combination with an inclined grate having rocking grate bars, of means for rocking the same, comprising a rocking frame, movable journal blocks mounted therein, a rack for raising or lowering the said journal blocks, a pinion for engaging the said rack, and means for operating the said pinion, whereby the journal blocks are adjusted to impart different movements to the grate bars, substantially as described. 23rd. In a furnace, the combination with an inclined grate having rocking grate bars, of a frame for operating the same, said frame having supporting journals, guides formed in the said frame, movable journal blocks moving upon the said guides, a pivoted arm mounted upon the said frame, link connecting said arms with the said journal blocks, and means for raising and lowering said links and journal blocks, whereby each one has a graduated movement relative to the other, and means for connecting said movable journal blocks with different grate bars, the construction being such that the grate bars will be moved according to the position of said movable journal blocks, substantially as described. 24th. In a furnace, the combination with an inclined grate and rocking grate bars, of a pivoted frame for moving the same, movable journal blocks mounted in the said frame, racks for raising or lowering the said journal blocks, pinions engaging the said racks, an actuating pinion for operating the said pinions, a shaft for rotating the said actuating pinion, said shaft being adapted to extend through the front of the furnace, and operating means secured to the outer ends of said shaft, the construction being such that the movable journals may be adjusted in the frame from the outside of the furnace to regulate the throw of the grate bars, substantially as described. 25th. In a furnace, the combination with an inclined grate and rocking grate bars, of a rocking frame for actuating the same, movable journal blocks mounted in the said frame, racks connected with said journal block, a shaft having an actuating pinion adapted to engage said racks to raise or lower the said movable journal blocks, said shaft extending through the front of the furnace, hand operated means secured to the outer end of the shaft, and means for actuating the hand operating mechanism to its different adjusted positions, substantially as described. 26th. In a furnace, the combination with an inclined grate and rocking grate bars, of a rocking frame for operating the same, means for connecting the grate bars with the said frame, a shaft for adjusting the said connections to impart different movements to the parts of the grate, hand operating means upon the outer end of the said shaft, and an indicator mounted on the front of the furnace and actuated by the operating means, whereby the position of the grate bars may be determined and adjusted without inspecting the interior of the furnace, substantially as described. 27th. In a furnace, the combination with an inclined grate and rocking grate bars, of a frame for actuating the same, guides formed in the said frames, movable journal blocks mounted on the said guides, each of said journal blocks comprising a hollow casing adapted to enclose the said guides, and journal studs mounted thereon, means for connecting said journal studs with the rocking grate bars, and means for adjusting said journal blocks, substantially as described. 28th. In a furnace, the combination with an inclined grate and rocking grate bars, of a rocking frame for operating the same, movable journal blocks mounted in the said frame and connected with the said grate bars, said journal blocks comprising hollow casings adapted to receive guides formed in the frame, studs formed upon the faces of the said casings, and means for connecting all the studs with a pivoted arm, the construction being such that when one casing is moved all the other casings will be moved relatively, substantially as described. 29th. In a furnace, the combin-

ation with an inclined grate and rocking grate bars, of a rocking frame for actuating the same, movable journal blocks mounted in the said frame connected with said grate bars, racks connected with the said journal blocks, pinions for operating the said racks, and a stationary pinion adapted to actuate the said pinions on the rocking frame, said stationary pinion and the one with which it meshes being provided with teeth having curved edges, whereby the frame may rock with respect to the actuating pinion without throwing the parts out of engagement, substantially as described. 30th. In a furnace, the combination with an inclined grate and rocking grate bars, of a rocking frame for actuating the same, rods connecting said frame with separate grate bars, movable journal blocks mounted upon the said frame, means for adjusting said journal blocks, said rods being provided with engaging end portions having bifurcated hook for engaging the movable journal blocks, and means for connecting the other ends of the said rods to the grate bars, substantially as described. 31st. In an inclined feeding grate, the combination with rocking grate bars, of a rocking frame pivotally mounted with respect to the said grate, movable journal blocks mounted in said frame, means for connecting said journal blocks with single bars, and means for adjusting the journal blocks so as to give the bars a uniform or graduated movement, substantially as described. 32nd. In a furnace, the combination with an inclined grate and rocking grate bars, of a rocking frame co-operating with the same, movable journal blocks mounted in the said frame and connected with separate grate bars, racks connected with said movable journal blocks adapted to raise or lower the same, said racks being guided in slots in the said rocking frame, the upper end of the said rack being provided with an elongated slot adapted to receive a journal formed upon one of the movable journal blocks, and pinions for actuating the said racks, the construction being such that the racks may adjust themselves with relation to the said journal blocks, substantially as described. 33rd. In a furnace, the combination with an inclined grate and rocking grate bars, of a rocking frame connected therewith for operating the same, curved guides mounted in the said frame, movable journal blocks mounted upon the said guides, and means for raising or lowering the said movable journal blocks for regulating the throw of the grate bars, substantially as described. 35th. In a furnace, the combination with an inclined grate and rocking grate bars, of a rocking frame connected with different grate bars for imparting the same or different movements to the same, means for rocking the said frame, said means comprising a rod having a bifurcated inner end, said rod passing through the front of the furnace, a journal upon the frame for engaging the said rod, and means outside the furnace for reciprocating the said actuating rod, substantially as described. 35th. In a furnace, the combination with an inclined grate, and rocking grate bars, of a rocking frame for actuating the same, movable journal blocks mounted in the said frame, means for bringing the said journal blocks upon the same line to impart a uniform movement to the grate bars, and means for lowering the said journal blocks to graduate the movement of the said grate bars more or less with respect to each other, substantially as described. 36th. In a furnace, the combination with an inclined grate and rocking grate bars, of a rocking frame for actuating the same, movable journal blocks mounted in the said frame, means for moving the said journal blocks upon a level and above and below the same, the construction being such that when the journal blocks are brought upon a level they will communicate a uniform movement to the said grate bars and when they are moved above and below the level, they will impart a graduated feed to the grate, substantially as described. 37th. In a furnace, the combination with an inclined grate and rocking grate bars, of a rocking frame for actuating the same, movable journal blocks mounted in the said frame, pinions for raising or lowering the said journal blocks, and an actuating pinion engaging one of said pinions for moving it, the said pinion which engages the said actuating pinion having teeth with curved edges to permit of the rocking of the frame without interfering with the engagement of the said pinions with the actuating pinion, substantially as described. 38th. In a furnace, the combination with an inclined grate, and rocking grate bars, of a rocking frame for actuating the same, movable journal blocks mounted in the said frame, means for moving the said journal blocks, the construction being such that when the journal blocks are brought upon a level, they will communicate a uniform movement to the said grate bars, when they are moved below the level, they will impart a graduated feed to the said bars with the maximum movement at the bottom, and when they are moved above the level, they will impart a graduated feed to the said bars with the maximum movement at the top, substantially as described. 39th. In a furnace, the combination with an inclined grate principally made up of rocking grate bars, of means for rocking the said grate bars for producing a feeding movement and a cut out movement, means for adjusting the said rocking means, whereby the grate bars may be given a uniform movement throughout or may have a graduated action, and means connecting the said rocking means with an actuating shaft outside the front of the furnace. 40th. In a furnace, the combination with an inclined grate and rocking grate bars, of a rocking frame for operating the same, means connecting the said bars and frame, a shaft for adjusting the said connecting means to impart the same or different movements to the parts of the grate, an indicator mounted on the front of the furnace, and gearing connecting said indicator with said shaft whereby it is adapted to indicate the position of the