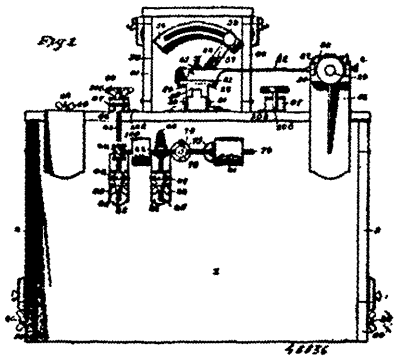
No. 48,836. Feeder for Mills.

(Alimentateur pour moulins.)



John Peter Wehrer, La Crosse, Wisconsin, U.S.A., 3rd May, 1895; 6 years.

Claim.—1st. In an automatic feeder of the class described, the combination of the casing, a vibrating feed pan suspended within the casing, and provided with inclined imperforate bottom boards declining from both sides of the centre thereof, separating sieves forming front extensions of said bottom boards and horizontal distributing boards disposed below said front sieves in front of the inclined bottom boards and the hopper, substantially as set forth. 2nd. In a machine of the class described, the casing, a longitudinally vibrating feed pan arranged within said casing, swinging spring metal hanger straps secured at their lower ends to the corners of said pan, adjustable supporting blocks attached to the upper ends of said straps, angle clamp plates secured to the inner sides of the casing and provided with inner grooved sides embracing said supporting blocks, clamp bolts connecting the inner ends of said clamp plates beyond said blocks, screw rods attached to said adjustable supporting blocks and working through the top of the casing, thumb nuts engaging said screw rods above and below the top of the casing and the feed devices for said pan, substantially as set forth. 3rd. In a machine of the class described, the combination of the casing, the swinging feed pan suspended within the casing, upright shaker-bars attached to said feed pan and working in slots in the top of the casing, the drive shaft supported for rotation above the casing, operating connections between said drive shaft and the upper ends of said shaker bars, and the feed devices for said pan, substantially as set forth. 4th In a machine of the class described, the combination of the casing, the swinging feed pan adjustably suspended within the casing, upright shaker bars attached centrally to opposite sides of the pan and projecting through slots in the top of the casing, a transverse drive shaft journalled on top of the casing and provided with opposite eccentrics, spring pitmen provided at one end with adjustable boxes clamped on the eccentrics of said shaft, vertically adjustable cap plates provided with opposite flanged and longitudinally slotted strap arms embracing the upper ends of said shaker bars and with horizontal flanged top seats adapted to have clamped therein the other ends of said spring pitmen, clamp bolts passed through the upper ends of the shaker bars and engaging the slots of said strap arms, adjusting set screws working through threaded openings in one end of the pitmen and the top of said cap plates to impinge against the upper ends of said shaker bars, and the feed devices for the pan, substantially as set forth 5th. In a machine of the class described, the combination of the casing open at its bottom and provided at opposite ends thereof with mote boxes, a longitudinally vibrating feed pan supported to swing in said casing and provided with inclined bottom boards and separating sieves in front of said boards, and the feed boxes or chutes arranged to discharge onto the inclined bottom boards of said feed pan, substantially as set forth. 6th. In a machine of the class described, the combination of the open bottom casing provided at opposite ends with removable mote boxes having sieve bottoms, the swinging feed pan suspended within the casing and provided with inclined imperforate bottom boards declining from both sides of the center thereof, separating sieves forming front continuations of said bottom boards, and horizontal distributing boards disposed below said front seives in front of the inclined bottom boards, and the feed boxes or chutes arranged to discharge onto the inclined bottom boards of said feed pan, substantially as set forth. 7th. In a machine of the class described, the combination of the open bottom casing, mote boxes removably clamped to opposite lower ends of the casing and provided with sieve bottoms comprising a parallel series of sieve wires, the swinging feed pan suspended within the casing and provided with opposite inclined imperforate bottom boards, inclined separating sieves extended in front of said bottom boards and comprising a parallel series of sieve wires supported with their inner ends fitted in the outer edges of said bottom boards and arranged wider apart than the wires in the bottom of the mote boxes, and the horizontal distributing boards arranged directly under said sieves in front of the inclined bottom boards, and the feed boxes or chutes arranged to discharge onto the inclined bottom boards of said feed pan, substantially as set forth. 8th. In a machine of the class described, the combination of the open bottom casing, the swinging or longitudinally vibrating feed pan suspended within the casing and having at both sides of its center inclined bottom boards and separating sieves beyond such boards, downwardly flared feed boxes or chutes secured within the casing directly over the inclined bottom boards of the pan, and pointed dividing plates supported for longitudinal adjustment within said feed boxes or chutes, substantially as set forth. 9th. In a machine of the class described, the combination of the open bottom casing, the swinging feed pan suspended within the casing and having opposite inclined bottom boards and separating sieves beyond said boards, downwardly flared feed boxes or chutes secured within the casing directly over said bottom boards of the pan and provided at their lower ends with opposite inner parallel slide grooves, slide blocks mounted to slide in said grooves, upright adjustable dividing plates working within said feed boxes or chutes and attached to said slide blocks, clamp strips attached to the front sides of said feed boxes or chutes, a clamp device attached to said dividing plates and adapted to be adjustably clamped to said clamp strips, and the hopper arranged on top of the casing, substantially as set forth. 10th. In a machine of the class described, the combination of the casing, the swinging feed pan having opposite inclined bottom boards and separating sieves, feed boxes or chutes attached to the top of the casing and depending therein directly above said bottom boards, adjustable dividing plates mounted within said feed boxes or chutes, a hopper box mounted on top of said casing and provided with separated bottom openings communicating with the upper ends of the said feed boxes or chutes, a dividing board or valve pivotally mounted within said hopper box, an adjusting arm connected to the pivotal support of said board or valve, and a clamp device for said adjusting arm, substantially as set forth. 11th. In an automatic feeder of the class described, the casing, a vibrating feed pan suspended within the casing and provided with an inclined bottom board and a separating sieve, a feed box or chute arranged over said inclined bottom board, and a self adjusting feed regulating gate supported over said inclined bottom board in close proximity thereto in front of said box or chute, said gate being provided with a separate back board disposed at an angle thereto, and having its lower edge terminating short of the lower edge of the gate, substantially as set forth. 12th. In an automatic feeder of the class described, the combination of the casing, a vibrating feed pan suspended within the casing, a feed box or chute arranged over the pan, a transverse gate shaft loosely journalled in the casing, swinging gate arms attached at one end to said shaft, and a self adjusting feed regulating gate adjustably attached to the other free ends of said arms and arranged to work in front of the feed box or chute over the feed pan, substantially as set forth. 13th. In an automatic feeder of the class described, the combination of the casing, a vibrating feed pan suspended within the casing, the hopper feeding onto said pan, a transverse gate shaft loosely journalled in the casing, swinging gate arms attached at one end to said shaft and provided at their opposite ends with an open boxing having aligned guide openings and depending parallel guide straps or arms, a self-adjusting feed regulating gate arranged to work within the pan directly over its bottom, U-shaped clamps attached to the upper edge of said gate and provided with opposite slide grooves loosely receiving said guide straps or arms of the swinging gate arms, screw rods attached to said U-shaped clamps and arranged to project through the aligned guide openings of said open boxing, adjusting nuts mounted on said screw rods within said boxing, and thumb clamp nuts mounted on the upper ends of said screw rods on top of said boxing, substantially as set forth. 14th. In an automatic feeder of the class described, the combination of the casing, a vibrating feed pan suspended to work within the casing, a hopper feeding onto said pan, a transverse gate shaft loosely journalled in the casing and having off-standing swinging gate arms, a self-adjusting feed regulating gate adjustably attached to said gate arms and working within the pan, said gate shaft projecting at one end outside of the casing, and automatic gate adjusting devices attached to the projecting extremity of said gate shaft, substantially as set forth. 15th. In an automatic feeder of the class described, the combination of the casing, the vibrating feed pan within the casing, the hopper, a transverse gate shaft having swinging gate arms carrying a feed regulating gate, a sleeve clamped onto one end of said gate shaft, a screw rod clamped to said sleeve, adjustable balancing and regulating weights having threaded openings engaging said screw rods at both sides of the sleeve, an adjustable retractile spring connected to said screw rod adjacent to said sleeve, and upper and lower gages for one end of said screw rod, substantially as set forth. 16th. In an automatic feeder of the class described, the combination of the casing, the vibrating feed pan within the casing, the hopper, a transverse gate shaft having swinging gate arms carrying a feed regulating gate, a sleeve clamped onto one end of said gate shaft, a rod mounted in said sleeve and extending to both sides thereof, balancing and regulating weights adjustably mounted on opposite ends of said rod, a hook arm attached to said rod near to the sleeve,