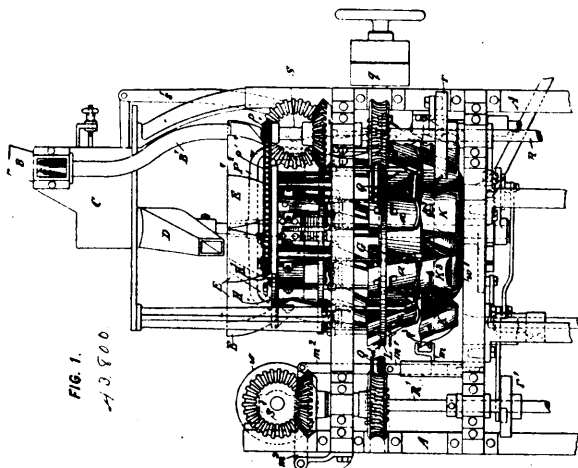


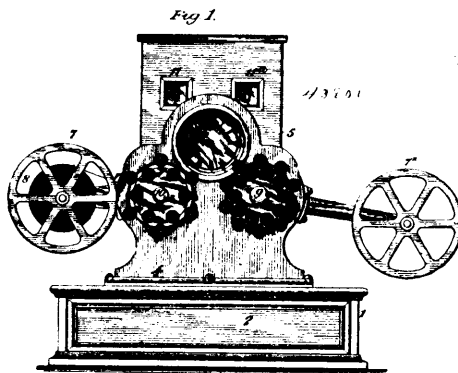
discharge the receptacles, and a revolving cam for reciprocating said slide at intervals. 4th. The combination with a series of



scales and a corresponding series of receptacles arranged to receive successive charges of the material to be weighed, and deliver them simultaneously into the scale pans, and a measuring device delivering the charges into said receptacles successively, of a movable slide, having openings registering with the respective receptacles and movable to bring said openings out of register therewith and to bring close the receptacles and to bring them into register therewith to discharge the receptacles, and driving mechanism for operating said measuring device and slide, constructed to operate the former as many times in succession as there are scales, and upon the termination of the series of operations, by which all said receptacles are charged, to operate said slide to simultaneously dump said receptacles, and immediately thereafter to restore said slide. 5th. The combination, with a circular series of scales and a corresponding series of circularly-arranged receptacles adapted to receive charges of the material to be weighed and a series of chutes leading downward from the respective receptacles, and adapted to discharge the material therefrom into the scale pans, of a movable slide, consisting of an annular plate, having openings registering when in one position, of the plate with the respective receptacles, arranged between said receptacles and their chutes, and movable to bring said openings out of register with the receptacles to close the latter, or to bring them into register therewith to simultaneously discharge the receptacles. 6th. The combination, with the series of scales, of a circularly-arranged series of receptacles E, E, an annular bottom plate H<sup>1</sup>, therefor, having holes under the respective receptacles, and a movable slide H, consisting of an annular plate mounted to oscillate beneath said bottom plate, and having openings registering with the bottom openings of the respective receptacles, whereby its movement simultaneously opens or closes the bottom openings thereof. 7th. In an automatic weighing machine, the combination with a scale and mechanism for dumping a charge into its pan, of a fixed stop for limiting the descent of the pan, and a movable stop moving to engage the scale beam and hold it against said fixed stop, and remaining stationary to hold it there until the dumping of the charge into the pan, and subsequently retracting to release the beam and permit the scale to weigh the charge. 8th. In an automatic weighing machine, the combination with a scale, mechanism for dumping the weighed charge from its pan, and mechanism acting subsequently thereto for dumping a charge into its pan, of a fixed stop for limiting the descent of the pan, and a movable stop moving down before the dumping of the charge from the pan to hold the scale beam against said fixed stop, remaining stationary to hold it there during the dumping of the pan and until the dumping of the new charge into the pan commences, and moving subsequently slowly upward to gradually release the scale. 9th. In an automatic weighing machine, the combination of a series of scales, mechanism for dumping the weighed charges from the scale pans, and mechanism acting subsequently thereto for dumping charges of the material to be weighed simultaneously into the scale pans, of a series of fixed stops for limiting the descent of the pans, and a vertically-movable stop ring P, and driving mechanism for raising and lowering it, adapted to move it down before the dumping of the charge from the pan to force the scale beams down until held against said fixed stops, to hold it stationary there during the dumping of the pans, and during the dumping of the new charges into the pans, and to subsequently move it slowly upward to gradually release the several scales. 10th. In an automatic weighing machine, the combination with a series of scales, mechanism for dumping the scale pans, and mechanism for subsequently dumping the charges into the pans, of fixed stops for limiting the descent of the pans, and a vertically-movable stop ring P connected to a vertically-sliding hub P<sup>1</sup>, and driving mechanism for said ring, consisting of a cam r, and the lever r<sup>1</sup> for transmitting motion from said cam to said hub. 11th. In an automatic weighing

machine, comprising the combination of a series of scales, mechanism for dumping the scale pans simultaneously, a revolving series of carrier receptacles beneath the scales, arranged to receive the charges dumped from the scale pans, a delivery chute, and mechanism for dumping the carriers in succession as they reach said chute, the construction of the one of said carrier receptacles which stands over said chute at the instant of dumping the scales, with a permanent discharge opening w<sup>1</sup>, whereby said carrier receptacle constitutes essentially a hopper or chute through which the charge dumped from the scale pan descends directly into the delivery chute independently of the operation of the dumping mechanism.

#### No. 43,801. Cash Register. (Registre de monnaie.)



George Boemermann, Brooklyn, New York, U.S.A., 1st August, 1893; 6 years.

*Claim.*—1st. In a cash register, the combination with a pull and its spindle, capable of rotation and endwise movement, type wheels on the spindle of the pull for printing the amount received and the time of its receipt, on strip or piece of paper, means, operated by the pull, for feeding said paper under the type wheels, an inking ribbon, a clock mechanism between the clock and the type wheel or wheels which print the time, whereby the former rotates and sets the latter intermittently, an impression roller, and means intermediate between said impression roller and the pull whereby the drawing out of the latter effects the printing, substantially as set forth. 2nd. In a cash register, the combination with a pull and its spindle, the type wheels 50, 51 and 52, mounted on said spindle, the ratchet wheels fixed to said type wheels, as described, the triple pawl 53, having hooks of different lengths engaging the teeth of the respective ratchet wheels, the pawl arm 62, and its spring, the clock, and the cam wheel 55, mounted on an arbour of the clock and arranged to act on the arm 62, substantially as set forth. 3rd. In a cash register, the combination with a pull and its spindle, type wheels mounted on said spindle, an inking ribbon for printing from said wheels, a plate 69, arranged under the ribbon and type, a flanged pivotally-mounted track 34, to support and guide the impression roller the said impression roller, mechanism between the said roller and the pull whereby the roller is operated by the drawing out of the pull, and means for feeding paper into position to be printed upon, substantially as set forth. 4th. In a cash register, the combination with the pull and its spindle, of the carrier 17, the push pins 18, mounted therein and provided with heads having numerals marked thereon, the ratchet wheel 20, rotating with the carrier 17, and the pawl 21, pivotally mounted on the frame with its head adapted to engage the ratchet wheel, said pawl having a cam stud 22, on its tail arranged in the path of the push pins when the latter are pushed in, whereby the said pins serve to put the nose of the pawl into engagement with the ratchet teeth, substantially as set forth. 5th. In a cash register, the combination with the pull and its spindle, of the carrier 17, the push pins mounted therein and adapted to be pushed in and drawn out to a limited extent, and the latch 23, pivotally mounted on the frame with its bevelled head in the path of the protruding ends of the pins whereby they will wipe under and raise the latch when the pull is rotated forward, said latch head having a lateral bevel or incline 23a, in the path of the pins, whereby the pins are pushed outward when the pull is rotated backward, substantially as set forth. 6th. In a cash register, the combination with the pull and its spindle, of the carrier 17 splined thereon, the push pins 18 mounted in the carrier, and each having in it two recesses, the spring detent 19 mounted in the carrier and adapted to engage one of said recesses when the pin is pushed in and the other when it is pulled out, and means operated by the push pins for arresting the forward rotation of the pull, substantially as set forth. 7th. In a cash register, the combination with a pull and its spindle, feed rollers for feeding a strip of paper to a cutter, and mechanism intermediate between the pull and said rollers, whereby they are operated when the pull is pushed in, of a cutter to sever a piece from the strip, comprising a frame, a stationary blade and a movable blade 39 mounted in guides on the frame, and mechanism between the pull