

Claim.—1st. The combination with the rotating drum of a marking device, and a clutch mounted on the marking device and engaging the drum, said clutch consisting of pawls pivoted to the marking device, a bar connecting the pawls, springs tending to hold the pawls in engagement with the drum, and a lug secured to one of the pawls, whereby they may be released, substantially as described. 2nd. In a letter marking device, the combination of a letter-feed, an intermittently-operating letter-marker, a pivoted pawl which stops, said letter-marker, a pivoted trip having an arm projecting into the path of the letter and connected with said pawl, said trip and pawl being movable on their respective pivots to permit the stopping of the letter-marker before the letter has completely passed the arm of the trip, substantially as described. 3rd. In a letter-marking device, the combination of a letter-feed, an intermittently-operated letter-marker, a pivoted pawl which stops said letter-marker, and a pivoted trip connected with said pawl to withdraw it from engagement with the marker, and having a sliding arm permitting the pawl to come into position for stopping the marking device before the letter has passed the arm, substantially as described. 4th. In a letter-marking device, the combination of a letter-feed and intermittently-operated letter-marker, a pivoted pawl which stops the letter-marker, a spring which tends to force said pawl into position to stop the marker, and a pivoted trip connected with said pawl to withdraw it from engagement with the marker, having a sliding arm projecting into the path of the letter, said sliding arm permitting the pawl to be moved by the spring into position for stopping the marking device before the letter has passed the arm, substantially as described. 5th. In a letter-marking device, the combination of a letter-feed, an intermittently-operating letter-marker, a pawl which stops said letter-marker, a spring which tends to force the pawl into position to stop the marker, a trip consisting of a pivoted portion, and a sliding arm secured thereto extending into the path of the letter, said trip being connected with the pawl, substantially as described. 6th. In a letter-marking device, the combination of a letter-feed, an intermittently-operating letter-marker, a pivoted pawl which stops the letter-marker, a spring which tends to hold said pawl in position to stop the marker, a trip consisting of a pivoted portion connected to the pawl, and a sliding portion extending into the path of the letter, and a spring bearing against said sliding portion of the trip to force it into the path of the letter, substantially as described. 7th. In a letter-marking device, the combination of a letter-feed, an intermittently-operating letter-marker, a pivoted pawl which stops the letter-marker, a trip having a pivoted portion connected to said pawl, and a sliding arm projecting into the path of the letter, a spring connected to the sliding portion of the trip and tending to force the pawl into position to stop the marker, and another spring bearing against the end of the sliding arm and tending to force it into the path of the letter, substantially as set forth. 8th. In a letter-marking device, the combination of a letter-feed, a continuously-rotating shaft, a letter-marking cylinder loosely mounted thereon, a clutch interposed between said shaft and cylinder having friction-faces, a spring which tends to force said friction-faces into engagement with the opposing bearing-faces, a stopping pawl adapted to engage with a projection carried by the clutch to compress said spring and release the frictional faces, and a trip operated by the letters for withdrawing the pawl, substantially as described. 9th. The tripping device consisting of a pivoted pawl, a lever connected to the pawl, a sliding arm mounted on the lever, a spring bearing upon the end of the lever, and a spring connected to the sliding arm, substantially as described. 10th. In a letter-marking device, the combination of a letter-feed, a continuously-rotating shaft and intermittently-rotated printing-cylinder mounted thereon, a stop projecting from said cylinder, and a catch pawl with which said stop engages after being released from said shaft, substantially as described. 11th. In a letter-marking device, the combination of a letter-feed, a continuously rotating shaft, a marking-cylinder mounted thereon, a clutch device interposed between the shaft and cylinder, a pin carried by the cylinder, a catch-pawl with which said pin engages after the cylinder is released from the clutch, and a spring which forces said pawl into the path of the pin, substantially as described. 12th. In a letter-feeding device for a letter-marker, a movable frame provided with a feed-roller, a guide-plate carried by said frame and a trip having an arm resting adjacent to said guide-plate, substantially as and for the purpose set forth. 13th. In a feed for a letter-marking device, a movable frame provided with a feed-roller, and a guide-plate carried by said frame and having formed therein a groove, in combination with a letter-trip having an arm resting in said groove, substantially as and for the purpose set forth. 14th. The combination, with separable feed-rollers, of separable impression and printing cylinders, and a controller between the feed rollers and the impression and printing cylinders, whereby the position of the feed-rollers controls the position of the impression and printing cylinders, substantially as described. 15th. The combination, with a marking-roller, an impression-roller having spring-actuated journals, and a feed-roller journaled in a swinging spring-actuated frame, of a lever actuated by the swinging feed-roller, and another lever connected thereto and arranged between said lever, and the impression roller for pressing the latter back from the marking-roller as the feed-rollers swing aside substantially as and for the purpose set forth. 16th. In a letter-marking device, the combination of a printing-roller, and impression-roller held toward the printing-roller by a spring feeding ng-rollers, a lever adapted to be operated when the feeding-rollers are unusually separated as by a letter of usual thickness, another lever bearing against the support of the impression-roller, and a link connecting said levers, whereby the printing and impression rollers are separated by the separation of the feeding-rollers. 17th. In a letter-marking device, the combination of the stationary portion of the printing surface, the removable portion seated in the stationary part, a catch for confining said removable portion in its seat, and a spring under compression when the removable portion is in place, and tending to force it out of its seat when released, substantially as described. 18th. A removable type-holder having a type-cell, the inner wall of the type-cell being grooved, and the side-wall being perforated, and a key seated in said groove and in corresponding grooves in the types, and having an end projecting through said aperture by which it may be easily withdrawn, substantially as described.

No. 32,248. Machine for Separating and Feeding Letters. (*Machine à séparer et alimenter les lettres.*)

The International Postal Supply Company, New York (assignee of Matthew J. Dolphin), Brooklyn, N. Y., U.S., 11th September, 1889; 5 years.

Claim.—1st. An automatic letter-feeding receptacle, consisting of a straight wall, a wall partially curved and obliquely-moving bottom feed-belt, whereby letters placed in the receptacle are guided, one slightly in advance of the other, and deflected toward feeding rollers, substantially as specified. 2nd. The combination, with a letter separator and feed rollers, of an automatic letter-feeding receptacle, consisting of a straight wall, a wall partially curved and a moving bottom belt, whereby the moving letters are automatically arranged, one slightly in advance of the other, and are guided and deflected toward and into contact with the feed rollers, substantially as specified. 3rd. The combination, with a letter separator, of an automatic letter-feeding receptacle, having a wall partially curved for guiding the letters, one a little in advance of the other, an obliquely-moving bottom feed belt for deflecting the letters toward the feeding rollers, and a supporting feed roller, substantially as specified. 4th. In an intermittent letter-feeding and separating machine, the combination of the feed-roller J₁ and rollers J₂, J₃ arranged to interlap between the rollers J₂, and J₃, all of said rollers rotating in the same direction, substantially as and for the purpose set forth. 5th. In a letter-separating machine, the combination, with the feed rollers J₂, J₃ mounted on a shaft journaled in stationary bearings, of the separating rollers mounted on a shaft journaled in yielding bearings, said shaft connected by a universal joint to a shaft journaled in stationary bearings, substantially as specified. 6th. The combination of the stationary journaled feed-rollers, the separating rollers journaled in yielding bearings, and connected by a universal joint to the driving shaft L, the pulleys O, and the spring belt P, substantially as specified. 7th. The combination, with an automatic letter-feeding receptacle, of a yielding journaled hinderance or check and pressure roller, and interlapping feed rollers, substantially as specified. 8th. The combination, with an automatic letter-feeding receptacle, a check and pressure roller, and an interlapping feed-roller, of a letter separator and feed-rollers, substantially as specified.

No. 32,249. Adjustable Self Locking Gate.

(*Barrière mobile automatique.*)

William H. Ardiell, London, Thp., Ont., 13th September, 1889; 5 years.

Claim.—1st. An adjustable self-locking gate, supported on rollers E, E₁ and wheel F, said rollers and wheel being adjustably attached to the gate-posts and bars, substantially as shown and specified. 2nd. The automatic locking device, consisting of latch K, having screw or projection c in its larger end, catch K pivoted to gate posts B, at any point, lug pivoted pin e, and engaging with notch on end of bar A, all arranged and operating substantially as shown and specified. 3rd. In combination, with rollers E, E₁, the spring H adjustably attached to end of gate frame, as and for the purpose specified.

No. 32,250. Gas or Oil Stove.

(*Poêle à gaz ou à huile.*)

Benjamin G. Davoe (co-inventor with Thompson A. Dull), Chicago, Ill., U.S., 14th September, 1889; 5 years.

Claim.—1st. The combination, with the open-ended cylinder C, having a base R, of the cylinder B, having a hood to fit over the top of cylinder C, and the cylinder A fitting on base R, as and for the purpose set forth. 2nd. The combination of air cylinder C, drip-pan K and the pipe D, and means whereby the same may be raised or lowered to regulate the amount of air admitted to the fire, as and for the purpose set forth. 3rd. In an oil stove, the combination, with the oil pipe Y, of the air-valve L and mixer M, as and for the purpose set forth. 4th. The combination, with cylinders A, B, C, and burner or mixer M, of the adjustable top or dome P and pipe Y, as and for the purpose set forth. 5th. The stove, having the dome P, provided with the air passage, in combination with the drip-pipe Y and mixer M located within the stove and beneath the pipe, as and for the purpose set forth.

No. 32,251. Type Writer. (*Graphotype.*)

Elliott G. Thorp, Boston (assignee of Harry E. Tileston, Randolph), Mass., U.S., 14th September, 1889; 5 years.

Claim.—In a type-writer, in which the imprint of the type is secured by the direct impact of a device, such as a printing lever D thereon, the combination of a stud or toe a free to move on said lever, and a spring f backing said toe, substantially as described for the purpose specified.

No. 32,252. Adjustable Water Wheel.

(*Roue hydraulique variable.*)

The Universal Water Power Company, London, (assignee of Hortensius C. Simpson, Shrewsbury), Eng., 14th September, 1889; 5 years.

Claim.—1st. The hereinbefore described improved means of rendering the height of water-wheels adjustable to suit different water levels, consisting in carrying the water-wheel axle by a lever frame which may or may not be counterbalanced, and which can be moved about the fixed driving shaft as a centre, the said water-wheel shaft and the fixed driving shaft being geared to revolve together, substantially as hereinbefore set forth. 2nd. The combination, with a water-wheel, of a counterbalanced lever frame supporting the water-