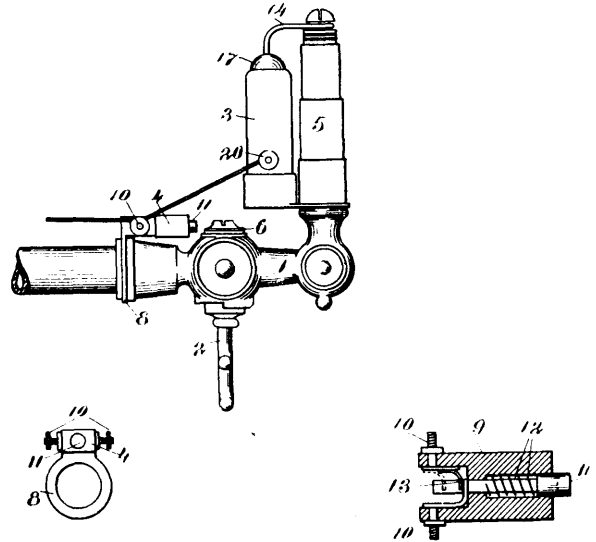


ring thereon, with a matrix ring adapted to fit in said recess and notched for the engagement of said catch, for the purpose and substantially as described. 12th. The combination of the reciprocating frame, a series of matrix carriers thereon and reciprocated therewith, the catches adapted to hold the carriers in normal position on the frame, and means for displacing any carrier whose catch is disengaged, with means for reciprocating said carriers, and means for disengaging the catches from the carriers, substantially as and for the purpose described. 13th. In a type casting machine, the combination of the mould, having an adjustable slide forming one side thereof and a rotatable annulus provided with stops of different lengths adapted to engage a stop on the slide and prevent backward movement thereof during the casting of a type, for the purpose and substantially as described. 14th. The combination in a type casting machine, of a mould and matrix holder adapted to receive a matrix and present it to the mould, and a pair of adjustable stops, with means for projecting either one of said stops into the path of said holder, whereby it may be rocked as it is moved toward the mould. 15th. The combination in a type casting machine, of a mould, a matrix holder adapted to receive a matrix and present the same to the mould, a pair of movable stops, and means for projecting either one of said stops into the path of said holder, whereby it may be rocked as it is moved toward the mould, with the fixed stop whereby the holder is rocked to normal position when moved back from the mould, substantially as and for the purpose described. 16th. In a type casting machine, the combination of a mould, one side of which is formed by the periphery of a rotatable disc, and means for oscillating said disc, after each casting of a type. 17th. In a type casting machine, the combination of a disc adapted to form one side of the mould, and provided with a peripheral slot adapted to receive the finished type, and having a scraper adapted to trim one side of the type as the disc is rotated, substantially as and for the purpose described. 18th. In a type casting machine, the combination of the disc having a plate forming one side of the mould, a peripheral slot opposite said plate adapted to receive the finished type, and a scraper intermediate the slot and plate and adapted to trim one side of the type as the disc is rotated, with a fixed scraper adapted to trim the other side of the type when the same is being moved by the slot from the mould. 19th. In a character selecting device, the combination of a rotary disc having notches in its periphery with a series of feelers and a releasing lever controlled by said feelers adapted to be operated once whenever all of said feelers simultaneously find notches in the periphery of the disc, substantially as described. 20th. In a character selecting device, the combination of a rotary disc having a plurality of series of notches in its periphery, with a series of feelers and a releasing lever controlled by said feelers adapted to be operated once whenever all of said feelers simultaneously find notches in the periphery of the disc, with means whereby one or more of said feelers may be shifted laterally so that it will engage the notches in another series on the disc, and means whereby all of said feelers are returned to normal position once for each revolution of the disc. 21st. In a character selecting device for type casting machines, the combination of a peripherally notched disc, a series of laterally movable feelers and a release lever controlled by said feelers, adapted to be operated whenever all of said feelers simultaneously find notches in the disc, substantially as described. 22nd. In a character selecting device for type casting machines, the combination of a peripherally notched disc, a series of laterally movable feelers and a release lever controlled by said feelers, adapted to be operated whenever all of said feelers simultaneously find notches in the disc, the pivoted levers for shifting said feelers laterally, with a series of electro-magnets controlling said cam levers, and means for controlling the circuits through said electro-magnets, substantially as and for the purposes described. 23rd. In an electro-mechanical selecting device, the combination of a rotary cylinder, a series of spring contacts thereunder and a perforated strip adapted to be moved between the cylinder and said contacts, and means for automatically moving said contacts from the cylinder when it and the strip are moving, substantially as described. 24th. In a type casting machine, the combination of a series of reciprocating carriers, a relatively stationary matrix holder, moulding mechanism beside the holder and matrix rings removably mounted on the carriers and adapted to be caught separately by the holder and presented to the mould, each matrix ring having a plurality of matrices for different characters and a recess beside each matrix, substantially as described, with mechanism adapted to engage a recess of each matrix ring to control the adjustment of the mould, so that each type character will have a body of the proper size, and mechanism whereby after the casting operation, the matrix ring is returned to its own carrier and the cast type automatically removed from the mould, for the purpose and substantially as described. 25th. In a type casting and setting machine, the arrangement for the adjustment of the working matrix arms, characterized by the moving to and fro during the operation of the machine of the matrix frame, and with it the matrix arms E, which motion is effected by the conversion of rotary motion into horizontal motion, effected by means of the revolving shaft with application to the inner toothed ring G and of the pinion G² revolving within it, and having a diameter half that of the ring, whereby a given point upon the wheel G² describes a horizontal line, and directs the sliding motion of the matrix frame, so that the single matrix arms can pass at any given moment beneath a hammer whose motion can according to the arrangements hereinbefore described

release the hooks E^h of the one or the other matrix arms, and bring the corresponding matrix piece into the working position, constructed and arranged substantially as hereinbefore described.

No. 61,538. Electrical Gas Detector.

(*Alarmer électrique pour le gaz.*)



5/535

Charles Edward Ormsby, Toronto, Ontario, Canada, 2nd November, 1898; 6 years. (Filed 22nd April, 1898.)

Claim.—1st. In an electrical gas detector, a thermostat and cut-out switch secured to the burner, said thermostat operated by the metal conductor which encircles the nipple of the gas burner, and said cut-out switch operated by the cam shaped washer, which rotates with the gas cock, substantially as shown and described. 2nd. In an electrical gas detector, a thermostat contained within a case, and operated by the heat conducted by the metal conductor which encircles the nipple of the gas burner, substantially as shown and for the purpose hereinbefore set forth. 3rd. In an electrical gas detector, a thermostat containing within the case, two metal legs composed of two or more metals, having different expansive powers, said legs having attached to their free extremities the contact points and flexible connection, substantially as shown and described. 4th. In an electrical gas detector, a cut out switch operated by a cam shaped washer secured to the gas cock, said switch contained within a case, and secured to a burner substantially as shown and described. 5th. In an electrical gas detector, a thermostat and cut-out switch, secured to the burner and electrically connected in parallel, substantially as shown and for the purpose hereinbefore set forth. 6th. In an electrical gas detector, a thermostat and a cut-out switch secured to each burner, said burners connected in series with a relay and closed circuit battery, substantially as shown and described. 7th. In an electrical gas detector, a thermostat and cut-out switch, electrically connected in parallel, while the burners containing the said thermostat and cut-out switch are electrically connected in series, with the relay and closed circuit battery, in combination with an intermitting alarm controlling mechanism, operated by a separate battery, and controlled by the said relay, substantially as shown and for the purpose hereinbefore set forth. 8th. In an electrical gas detector, a thermostat and cut-out switch, electrically connected in parallel, while the burners containing the said thermostat and cut-out switch are electrically connected in series with the relay and closed circuit battery, in combination with an annunciator, said annunciator containing a three point switch for cutting said relay out, and a movable arm forming contact with contact points electrically connected to the room containing said burners, and an alarm operated by said closed circuit battery, substantially as shown and for the purpose hereinbefore set forth. 9th. In an electrical gas detector, a thermostat and cut-out switch, electrically connected in parallel, while the burners containing the said thermostat and cut-out switch are electrically connected in series with the relay and closed circuit battery, in combination with an annunciator, said annunciator containing a three point switch for cutting said relay out, and a movable arm forming contact with contact points electrically connected to the room containing said burners, and an alarm operated by said closed circuit battery, substantially as shown and for the purpose hereinbefore set forth. 10th. In an electrical gas detector, an intermitting alarm controlling mechanism consisting of a time-piece in combination with electro-magnets for operating the mechanism which carries a pinion for engaging with