

therefor, means for actuating said plunger consisting of the arms A^1 , A^1 pivotally connected to each other and to an end of the forked lever P^1 , a depending horse-shoe L^1 suitably supported and having its arms pivotally secured to the prongs of said lever, a roller Y^3 , and the elongated pin V^3 , the inside and outside cams Q^3 and K^1 , and means for actuating the same, the outer extremities of said arms A^1 being secured to the aforesaid plunger and to an adjusting device, the above parts being combined substantially as described.

13th. In a press, a table carrying a die, an inking device and a wiper, means for actuating the above parts, a plunger, mechanism for actuating the same, consisting of outside and inside cams, the pin V^3 , the forked lever P^1 and the depending horse-shoe L^1 , the arms A^1 having their inner ends pivoted to each other and to the lever P^1 , while their outer ends are attached to the plunger and bolt F^1 , respectively, the latter passing through the top of the press, and being adjustably held in position by the nuts G^1 and H^1 , the above parts being combined as described.

14th. In a press, a frame, a table having a die thereon, an inking device therefor, a wiper, a plunger, mechanism for actuating the same consisting of a system of toggle levers, and inside and outside cams which engage suitable portions of said system of toggle levers, a threaded bolt P^1 to which one of the levers of said system is pivotally attached, said bolts passing through the top of the frame Z , and having the nuts G^1 and H^1 engaging its threaded portion on either side of the frame, whereby the stroke of the plunger may be readily adjusted, substantially as described.

15th. In a press, a table carrying a colour box, a die and a cam, means for actuating said table, an inking roll or rolls mounted in suitable journals, a belt for driving the same normally loose, and adapted to be tightened when the rolls are passing over said colour box, a tightener for said belt, moved at proper intervals by said cam, whereby said rolls are driven only when taking colour, and are allowed to run free over said die, a wiper and impression devices, substantially as described.

16th. In a press, a table carrying thereon a colour box and a die, an impression device, an inking device, a wiper, means for actuating the same comprising a rack on said table, a shaft suitably journaled and having a cog wheel, ratchet and pawl attachment and a cone pulley thereon, a belt encircling said pulley, and a second cone pulley whose shaft carries a spool upon which the wiping material is wound after use, a belt shifter engaging said belt, a wiper plate under which said wiping material passes, said plate resting on springs above and below, which are held in position by studs mounted on bars suitably guided, and means for moving said bars, the above parts being combined substantially as described.

17th. In a press, a table carrying thereon a die, means for actuating said table, an inking device, an impression device, a wiper, means for actuating the same comprising a rack on said table, a shaft provided with a suitable bearing, and having a cog wheel, a ratchet and pawl attachment, and a cone pulley thereon, and a band connecting said pulley with another cone pulley whose shaft carries a spool upon which the wiper is wound after use, a movable plate cushioned on springs above and below, under which plate said wiper is passed, a tension device for keeping the wiper taut, consisting of a split sleeve encircling the shaft from which the wiper is unwound, said sleeve having a portion thereof contacting with said fixed point, substantially as described.

18th. In a press, a table-carrying thereon a die, an inking device for the latter, a wiping-out brush for removing all but a thin film from the deep parts of the die, a surface wiper, means for actuating the same consisting of a rack on said table, a shaft suitably journaled and having a cog wheel, a ratchet and pawl attachment and a cone pulley thereon, a band connecting said pulley with another cone pulley whose shaft carries a spool upon which the wiper is wound after use, the above parts being combined substantially as described.

19th. An organized press for die printing, embossing, etc., having a wiping-out device whose sole function is to remove all but a thin film of ink from the deep parts of the die, substantially as described.

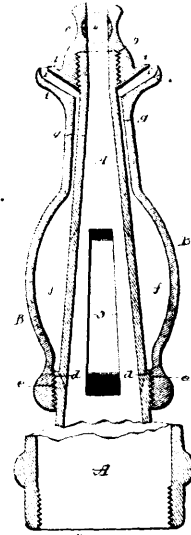
20th. An organized press having a table carrying a die thereon, means for actuating said table, an inking device, an impression device, a surface wiper, a separate wiping-out device, whereby all but a thin film of colour is removed from the deepest parts of the die, said parts being combined substantially as described.

No. 54,794. Nozzle. (Lance de bonaux.)

William A. Swift and William W. Stewart, both of Columbus, Georgia, U.S.A., 1st February, 1897; 6 years. (Filed 8th November, 1895.)

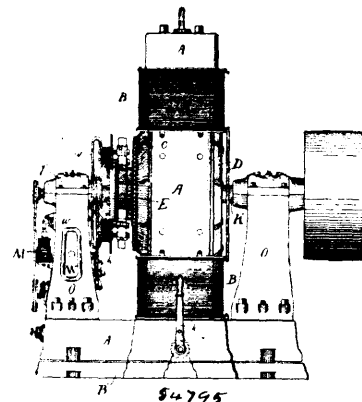
Claim.—1st. In a nozzle, the combination with a pipe or nozzle having a deflecting annular flange which extends outwardly at an angle thereto whereby to deflect water coming into contact therewith outwardly, of an adjustable ring or collar back of said flange between which and the flange a passage for water is formed, said ring or collar being of greater diameter at its outer end than the flange and extending forwardly at its extreme outer end whereby to turn the flow of water its outward direction to a straight forward course or any intermediate angle between a straight forward course and the outward lateral direction induced by the annular flange, and means for maintaining a continuous flow of water from the supply to both apertures of the nozzle, substantially as set forth. 2nd. In a nozzle, the combination with a pipe or nozzle having a screw-thread formed thereon at or near its outer end, and an outwardly deflecting annular flange screwed on this thread, of an adjustable annular ring or collar having a greater diameter at its outer end

than the flange and projecting forwardly at its outer end whereby to change the direction of the spray passing between the flange and



ring or collar from a lateral direction to a straight forward course or to an intermediate angle between the outward and forward direction, and means for maintaining a continuous flow of water from the supply to both apertures of the nozzle, substantially as set forth. 3rd. In a nozzle, the combination with a pipe or nozzle having a screw-threaded exterior, a shell surrounding the pipe or nozzle and screwed thereon whereby an annular space is formed between them, said pipe or nozzle having communicating openings for the passage of water therefrom into the space between the shell and pipe or nozzle, of an outwardly projecting flange on the outer end of the pipe or nozzle, and a ring or collar screwed on the end of the outer shell, said ring or collar being of greater diameter at its outer end than the flange and extending forwardly to deflect the water turned laterally by the flange to different angles to a straight forward direction, and means for maintaining a continuous flow of water from the supply to both apertures of the nozzle, substantially as set forth.

No. 54,795. Dynamo. (Dynamo.)



The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of James John Wood, Fort Wayne, Indiana, U.S.A., 1st February, 1897; 6 years. (Filed 26th December, 1895.)

Claim.—1st. The combination in a dynamo having movable commutator brushes, of a current regulator consisting of a clutch-driven shaft f , a brush-shifting mechanism connecting said shaft to the brushes to move the latter, the driven members $N N^2$ of two clutches fixed on said shaft, driving clutch-wheels g , a continuously revolving shaft p having a pinion a^1 driving the clutch-wheel g , a secondary shaft r^1 having a pinion r driven from the shaft p and a pinion r^2 driving the other clutch-wheel i , said pinions being relatively proportioned to drive the clutch-wheel i more rapidly than the clutch-wheel g . 2nd. The combination in a dynamo having commutator brushes carried by a movable yoke, of a current regulator consisting of an electro-motive device responding to current changes, and a brush-shifting mechanism controlled by the electro-motive device and comprising a driven shaft, a lever geared to said shaft to be oscillated thereby, and a mechanical connector between said lever and brush yoke, by which the movement is communicated to the latter, said connector constructed to be longitudinally adjust-