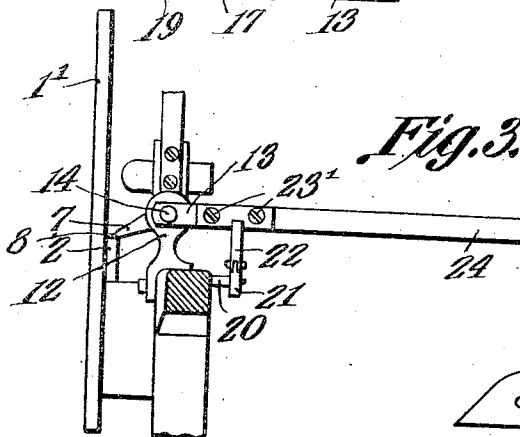
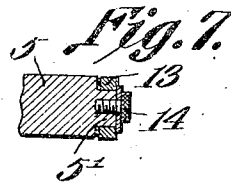
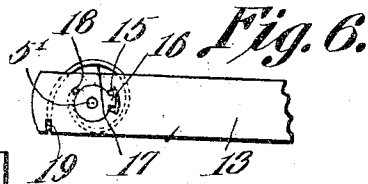
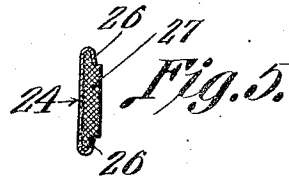
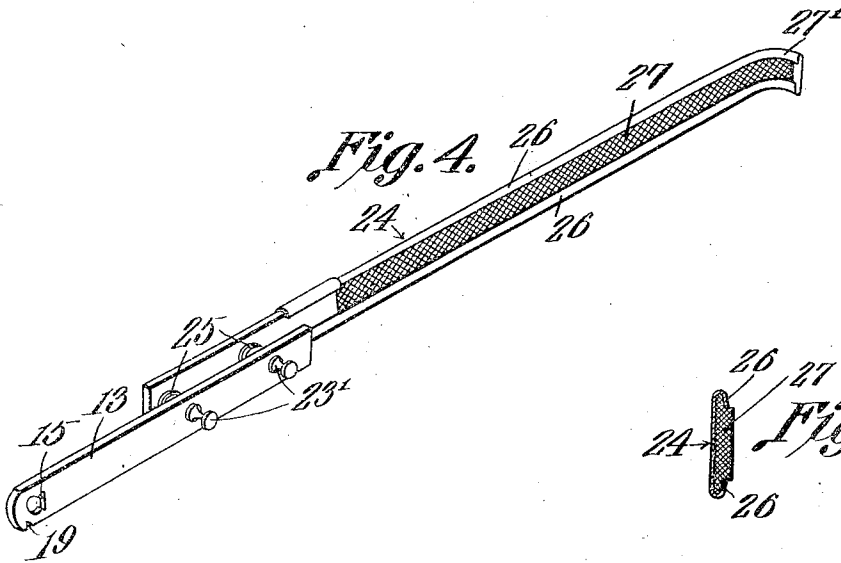


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MOUTHPIECE WIPER FOR LINOTYPE MACHINES.
APPLICATION FILED MAY 21, 1912.

1,064,319.

Patented June 10, 1913.

2 SHEETS—SHEET 2.



Witnesses

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MOUTHPIECE-WIPER FOR LINOTYPE-MACHINES.

1,064,319.

Specification of Letters Patent. Patented June 10, 1913.

Application filed May 21, 1912. Serial No. 698,778.

To all whom it may concern:

Be it known that I, GROVER C. GLENN, a citizen of the United States, residing at Raleigh, in the county of Wake and State of North Carolina, have invented a new and useful Mouthpiece-Wiper for Linotype-Machines, of which the following is a specification.

The present invention relates to improvements in mouth piece wipers for linotype machines, the primary object of the invention being the provision of a reciprocatory wiper actuated from the main cam shaft of the linotype machine and disposed to wipe the mouth piece from the top downward upon the initial stroke to clear the horizontally disposed vents of said mouth piece, the wiper being returned from lower position upward to insure the polishing of the mouth piece after the first downward wipe, the positioning of the wiper with relation to the cam shaft being such that any jar occasioned thereby will in no way affect the delicate mechanism of the casting machine.

A further object of the present invention is the provision of a mouth piece wiper which when lines are duplicated, that is when the same line is cast more than once, the wiper will be operated once to each casting operation, thus cleaning the vents of the mouth piece thoroughly between each casting operation.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings—Figure 1 is a plan view showing a portion of the cam shaft, mouth piece and mold disk and the adjacent portion of a linotype machine with the present mouth piece wiper in operable relation thereto. Fig. 2 is an elevation taken from the main cam side thereof. Fig. 3 is a section taken on line 3—3 of Fig. 2. Fig. 4 is a perspective view of the wiper *per se*. Fig. 5 is a cross section through the wiper showing the manner of securing the wiping material in position. Figs. 6 and 7 are detail views showing the connection of the

wiper to the actuating shaft therefor. Fig. 8 is a detail view of the cam employed for actuating the wiper shaft and wiper.

Referring to the drawings, the numeral 1 designates the main cam shaft, which carries the elevator cam 1' of usual construction, while in order to properly operate the present invention, the cam 2 is secured to the spider of the elevator cam 1' so that once every revolution of the main cam shaft 1 and elevator cam 1', the cam 2 will actuate the wiper as will presently appear.

The shifter lever hub 3 is disposed in the usual manner between the respective bearings 4 and 4', while journaled in the bearings 4 and 12, carried by the frame of the machine, is the shifter actuating rod or shaft 5.

Keyed upon the shaft 5 adjacent to the bearing 4, is a collar 6 which is provided with the arm 7 having the outwardly projecting lug 8 which is disposed in the path to be engaged by the cam 2 once every revolution of the shaft 1, the spring 9 being disposed upon the shaft 5 and having one end connected, as at 10, to the shaft while the other end is connected, as at 11, to the bearing support 4. The spring 9 is so tensioned as to hold the lug 8 of the arm 7 downwardly upon the face of the cam 2 at all times, so that the rotation of the shaft 1 and the action of the cam 2 upon the lug 8 of the arm 7 will impart a movement in opposition to the spring 9 so as to properly oscillate or reciprocate the shaft 5 within its bearings 4 and 12.

The extreme outer end of the shaft 5 is reduced as at 5' for the reception of the wiper carrying arm 13, the milled screw 14 being employed to retain the arm 13 upon the reduced end of the shaft 5, but permit the arm 13 to have a certain play, such play being limited by means of the dove-tail socket 15 and the dove-tail projection 16 carried by the reduced end 5' of the shaft 5. In order to impart a spring tension to the arm 13, the spiral spring 17 is provided and has one end connected to the shaft 5 as at 18, while the other end is seated within the notch 19 of the arm 13.

Connected to the mold gear arm of the machine and fulcrumed at 20 is the lever 21, which has connected to its free end a link 22, the upper end of which is in the path to engage the arm 13 and thus provides a precautionary device to prevent the wiper 2

from dropping in between the mouthpiece and the mold disk, or remaining there should the spring 9 give way. The mold disk in moving toward the mouth piece will press against the lower end of lever 21, which has a tendency to carry the wiper 24 up to its normal position.

The wiper 24 is connected to the arm 13 by means of two screws 23, which are provided with the adjusting nuts 23', the springs 25 being mounted upon the screws and interposed between the adjacent faces of the arm 13 and the inner end of the wiper 24 to resiliently hold the wiper relatively to the arm 13. Thus the springs 25 add resiliency to the wiper when moved across and against the nipple or mouth piece 28 and between the nipple and mold disk 29, both of usual construction.

The wiper 24 is preferably made from sheet metal and is provided with the in-turned flanges 26 for the reception of the flexible strip 27, which is the wiping material disposed in operable relation or adjacent to the nipple or mouth piece 28 and is normally held in elevated position above the mouth piece, with its front end 27' so disposed as to readily pass the mold disk 29 during the reciprocation of the wiper 24 downwardly across the path of the mouth piece and upwardly out of the way of the mold disk 29 between each casting operation.

The mechanism for operating the wiper is so constructed and timed as to move the wiper 24 downwardly from the top of the mouth piece or nipple 28 throughout the full length of the mouth piece and upwardly across the same during the movement of the mold disk 29 away from and toward the mouth piece between each casting operation.

From the foregoing description, it will be seen that a mouth piece wiper which is constructed and arranged according to the present invention may be operated to wipe the mouth piece of the metal mold box twice between the casting of every slug, that is on a downward movement and an upward movement thereof, thus permitting a close locking up of the mold disk with the mouth piece and preventing any "back squirts", and as the wiping pad 27 carries oil and graphite, the outer surface of the mouth piece or nipple is cleansed each reciprocation of the wiper and cleared of any metal that has a tendency to adhere to the outer surface of the mouth piece.

By this construction of device, a better and more solid slug is secured, and one which will enable the pressman when locking up the forms to keep the slugs upon their feet and thus insure a more perfect print.

By removing the wiper actuating shaft 5 away from the delicate mechanism of the casting machine, it is evident that the movement of the wiper across the mouth piece does not in any way affect the casting or the shifter band, as is the usual practice in attaching mouth piece wipers and that therefore the tendency to jar the machine or the delicate parts thereof is prevented in a device constructed and arranged according to the present invention.

What is claimed is:

1. In a line casting machine, the combination with the main frame, a main shaft, and a mouth-piece, of an oscillatory shaft journaled upon the frame, a spring for imparting one movement to the oscillatory shaft, an arm carried by said oscillatory shaft and operably connected to the main shaft, and a wiper blade having a tension toward the mouth-piece and carried by said oscillatory shaft for reciprocation thereby.

2. In a line casting machine, the combination with the main frame, a main shaft, and a mouth-piece, of an oscillatory shaft journaled upon the frame, a spring for returning the oscillatory shaft, an arm carried by said oscillatory shaft and operably connected to the main shaft, a tensioned arm loosely connected to the outer end of said oscillatory shaft, and capable of a slight movement independently of the oscillatory shaft, a spring connected to the oscillatory shaft and arm to cushion the movement transmitted from the shaft to the arm, a wiper blade, and a resilient connection between the arm and blade and exerting a tension upon the wiper blade toward the mouth-piece.

3. In a line casting machine, the combination with the main frame, a main shaft, and a mouth-piece, of a wiper mechanism for the mouth-piece, comprising an oscillatory shaft journaled upon the frame, a cam mounted upon the main shaft, a finger carried by the oscillatory shaft and disposed within the path to be engaged by the cam, a spring upon the oscillatory shaft for moving the shaft in opposition to the cam, an arm loosely mounted upon the outer end of the oscillatory shaft, a spring connected to said arm and the oscillatory shaft to limit the movement of the arm relative to the oscillatory shaft, a wiper blade, and a resilient connection between the arm and blade for retaining the blade under tension toward the mouth piece.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GROVER C. GLENN.

Witnesses:

JENNIE WARREN,
CLARENCE E. MITCHELL.