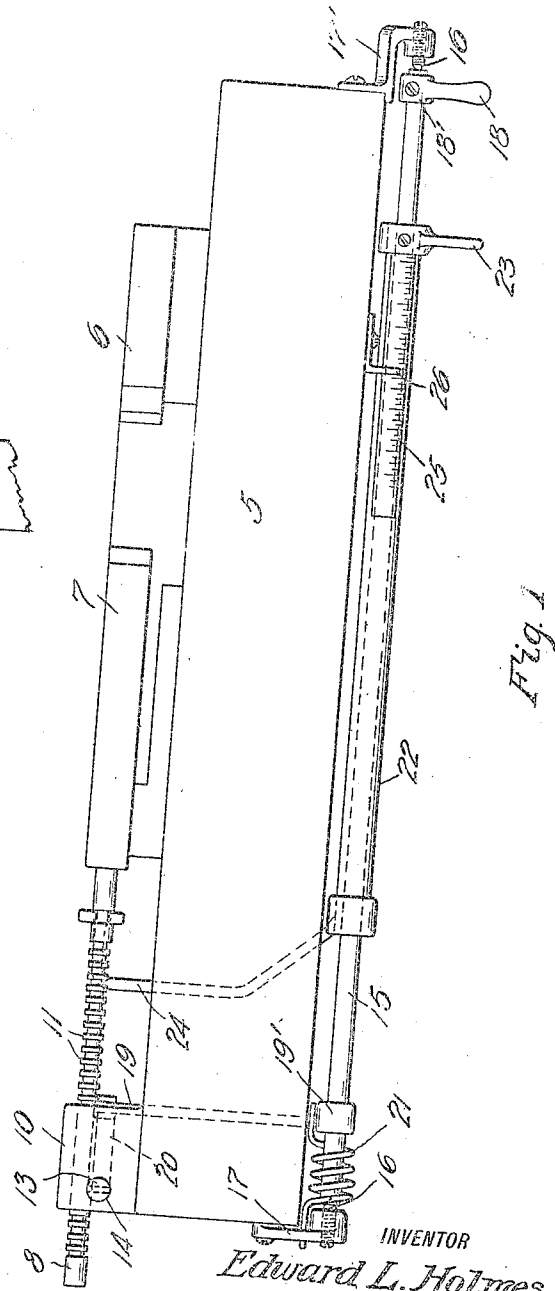
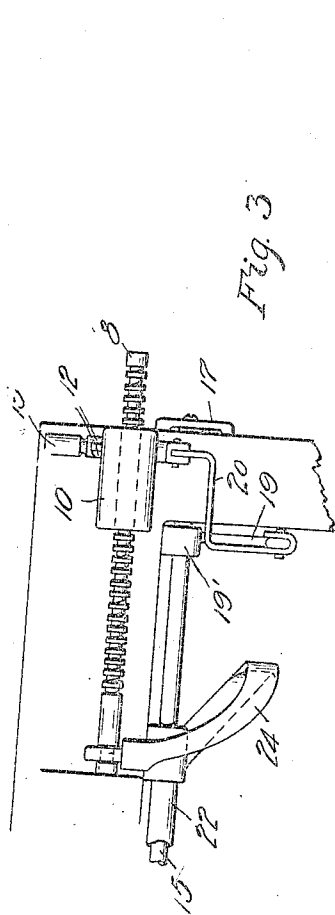


1,047,412.

E. L. HOLMES.
LINOTYPE MOVABLE JAW ADJUSTING DEVICE.
APPLICATION FILED FEB. 23, 1911.

Patented Dec. 17, 1912.
2 SHEETS-SHEET 1.



WITNESSES:

L. J. Zesbaugh
E. Peterson

INVENTOR
Edward L. Holmes
BY
P. H. Barnes
ATTORNEY

E. L. HOLMES.
 LINOTYPE MOVABLE JAW ADJUSTING DEVICE.
 APPLICATION FILED FEB. 23, 1911.

1,047,412.

Patented Dec. 17, 1912.

2 SHEETS—SHEET 2.

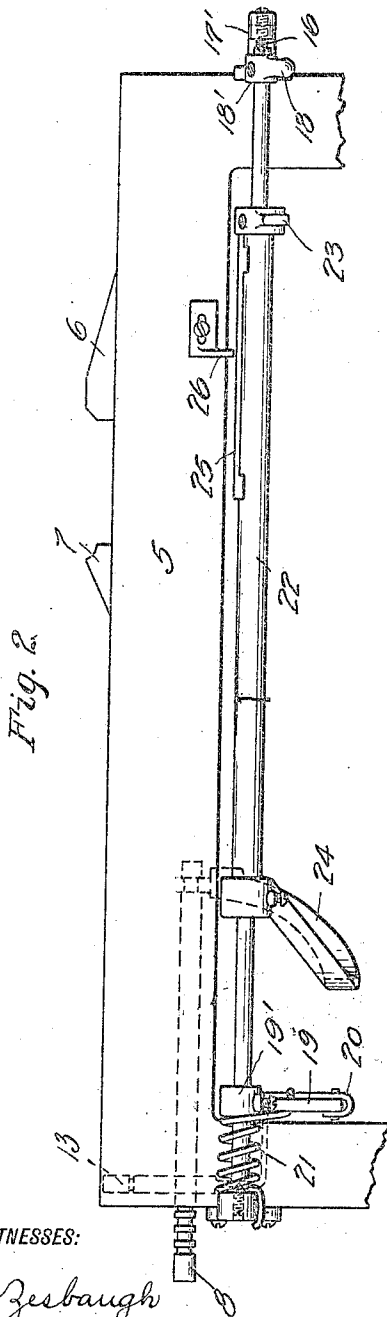


Fig. 2

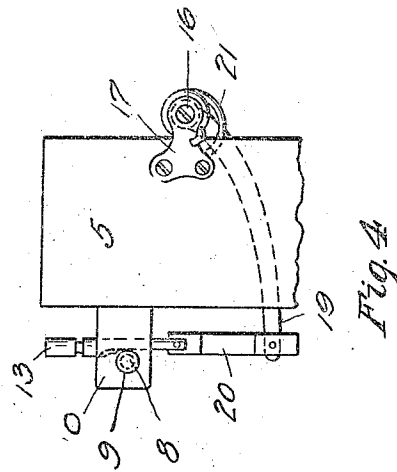


Fig. 4

WITNESSES:

L. J. Zeebaugh
 E. Peterson

INVENTOR

Edward L. Holmes

BY

Pierre Barne
 ATTORNEY

UNITED STATES PATENT OFFICE.

EDWARD L. HOLMES, OF SEATTLE, WASHINGTON.

LINOTYPE MOVABLE-JAW-ADJUSTING DEVICE.

1,047,412.

Specification of Letters Patent.

Patented Dec. 17, 1912

Application filed February 23, 1911. Serial No. 610,340.

To all whom it may concern.

Be it known that I, EDWARD L. HOLMES, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Linotype Movable-Jaw-Adjusting Devices, of which the following is a specification.

This invention relates to setting devices for the vise movable jaws of the Mergenthaler linotype machines.

The object of my invention is to improve devices of the above character whereby the movable jaw may be accurately and conveniently manipulated by the operator from his position in front of the key board of the machine.

The invention consists in the novel construction and combination of parts, which I will now describe with reference to the accompanying drawings, whereof—

Figure 1 is a plan view of my invention applied to the vise frame of a linotype machine; Fig. 2 is a front elevation of the same; Fig. 3 is a rear elevation of a portion thereof; and Fig. 4 is an end elevation viewed from the left of Figs. 1 and 2.

The reference numeral 5 represents the vise frame carrying, at its rear, jaws 6 and 7 between which a line of matrices is clamped during the casting operations. The jaw 7 is slidable to and from the other jaw to afford various spaces, designated by a scale of conventional ems, to accommodate the matrices. To such ends, the machine is provided with an adjusting rod 8 arranged laterally with respect to the frame and movable endwise through a bore 9 provided in a block 10 which is rigid with the vise frame and positioned to the rear of its left-hand side. This adjusting rod is provided with annular ridges 11 for engagement with longitudinal ridges 12 formed in a recess of a locking pin 13 which is vertically movable in a hole 14 of said block.

To adjust the position of the jaw 7, the locking pin 13 is first raised to disengage the same from the adjusting rod 8, whereupon the latter may be moved in one lateral direction or the other and accompanied by the jaw; that is, when the jaw is to be moved toward the right, the rod is correspondingly shoved by hand to push the jaw therebefore, and when the jaw is to be moved in the contrary direction, the jaw is accordingly moved to displace the rod. After the jaw is

properly set, the pin 13 is pushed down to reengage and lock the adjusting rod in place.

The above described parts, except as to features hereinafter referred to, are, or may be, constructed and operated as heretofore in the Mergenthaler machine.

According to my invention, there is provided a horizontal bar 15 at the front of the vise frame and secured therewith upon the conical ends of adjustment screws 16 extending through bracket attachments 17 and 17' of the frame. The bar 15 is of a length approximating the width of the vise frame and has connected to its right hand end an arm 18 within convenient reach of the operator. At the other end of the bar is an arm 19 extending rearwardly through the opening in the frame and connected by a link 20 with the locking pin 13 below the block 10. A spring 21 is employed to swing the arm 19 downwardly for the purpose of moving the pin 13 into operative engagement with said adjusting rod when the arm 18 is released by the operator. Intermediate the arms 18 and 19, said bar has mounted thereon a sleeve 22 which carries at its right hand end an arm 23 and its other end an arm 24 which extends rearwardly and is connected with the adjusting rod 8 in proximity to its right end as by a fork provided on arm 24 engaging within an annular groove provided in the adjusting rod. The length of the sleeve 22 is such that when shifted to the right or left to effect the ultimate movements of the jaw 7, its ends will respectively encounter the collars 18' and 19' of the arms 18 and 19 and through which said bar 15 extends. Upon the sleeve 22 and near its right hand end is secured an em-scale 25 to indicate the required movements of the sleeve with reference to a pointer 26 secured to the vise frame 5 at the right of the elevator, which is not shown in the drawings.

The operation of my invention is as follows: By a finger pressure exerted upon the arm 18 the operator depresses the same to give a partial turn to the bar 15 thereby imparting an upward swinging movement to the arm 19 to cause the uplifting of the locking pin 13 through the medium of the link 20. Such movement of the pin effects its disengagement from the adjusting rod 8 to enable the operator to shift the same in one direction or the other by applying suitable pressure against arm 23 to correspondingly shift the adjusting rod. When the

adjusting rod is moved toward the right the jaw 7 will be urged forwardly thereby, while an opposite movement on such rod will retract the same from the jaw so that the latter may be shoved by hand thereagainst.

In the aforesaid settings of the adjustment-rod the em-scale 25 will indicate with respect to the stationary pointer 26 the position assumed by the movable jaw 7 when the jaw is in juxtaposition with the adjusting rod.

By reason of the bar 15 and the sleeve 22, which respectively control the unlocking and operative movements of the adjusting rod 8, being operable from the side of the vise frame adjacent to the operator, he is enabled to adjust the jaw without leaving his seat. In practice, the em-scale is desirably arranged to be illuminated by the incandescent lamp which is employed upon that part of the machine known as the "intermediate channel" or "front plate" and, consequently, said scale may be inspected without the necessity of disturbing the position of the lamp or employing a second light.

It will be noted that the described construction provides for complete regulating of the adjusting rod and the movable jaw; and that the device is extremely convenient to be manipulated by the operator in the performance of his work.

What I claim, is—

1. In a linotype machine, the combination with the vise frame, the movable jaw, the adjusting rod for said jaw, and the locking pin, of a bar supported from said frame for rotary movement, an arm carried by the bar and connected with said pin, means for imparting a rotary movement to the bar for effecting the disengagement of said locking pin from the adjusting rod, and a sleeve slidably mounted on said bar and connected with said adjusting rod for shifting the latter endwise.

2. In a linotype machine, the combination with the vise frame, the adjusting rod and devices for securing said adjusting rod in predetermined positions, of means whereby said devices may be rendered temporarily inoperative, means operated from the front of the frame and operatively connected with

said rod for effecting the movement of said rod in either longitudinal direction, said movement effecting means for the rod supported by the means for rendering said devices inoperative and coöperative devices respectively carried by said vise frame and the second named means whereby the movements of the adjusting rod are regulated.

3. In a linotype machine, the combination with the vise frame, the adjusting rod, and the locking pin, of a bar supported from said frame, a spring tending to maintain said pin in engagement with the adjusting rod, operative connection between said bar and the locking pin whereby the pin may be disengaged from the adjusting rod through a rotary movement imparted to said bar and in opposition to said spring, and means mounted upon said bar and operatively engaging with said rod for effecting a longitudinal movement to the adjusting rod when said pin is disengaged therefrom.

4. In a linotype machine, the combination with the vise frame, the adjusting rod, and the locking pin, of a bar supported from said frame, operative connection between said bar and the locking pin whereby the pin may be disengaged from the adjusting rod through a rotary movement imparted to said bar, and means mounted upon said bar and operatively connected with said rod for effecting a longitudinal movement of the adjusting rod when said pin is disengaged therefrom.

5. In a linotype machine, the combination with the vise frame, the movable jaw, the adjusting rod for said jaw, and the locking pin, of a bar supported from said frame for partial rotary movement, an arm carried by said bar and connected with said locking pin, means for imparting a partial rotary movement to the bar for effecting the disengagement of the locking pin from the adjusting rod, and means slidably-mounted on said bar and connected with said adjusting rod for shifting the latter endwise.

EDWARD L. HOLMES.

Witnesses:

PIERRE BARNES,
E. PETERSON.