(No Model.)

J. CHASE.

COPY HOLDER FOR TYPE WRITERS.

No. 425,406. Patented Apr. 15, 1890.

Fig. 1.

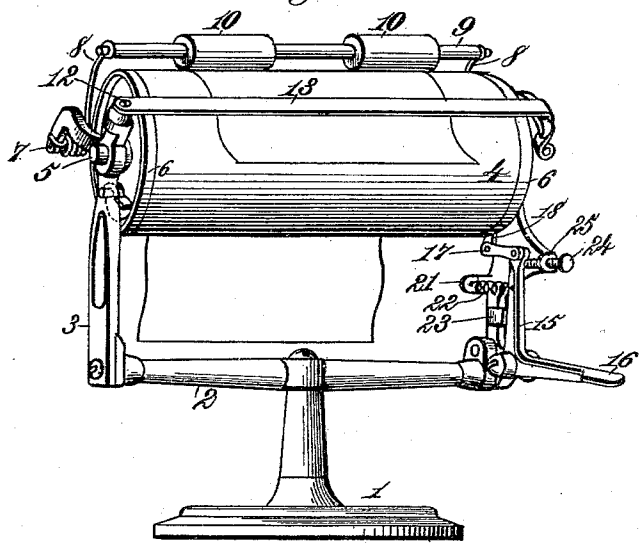


Fig. 2.

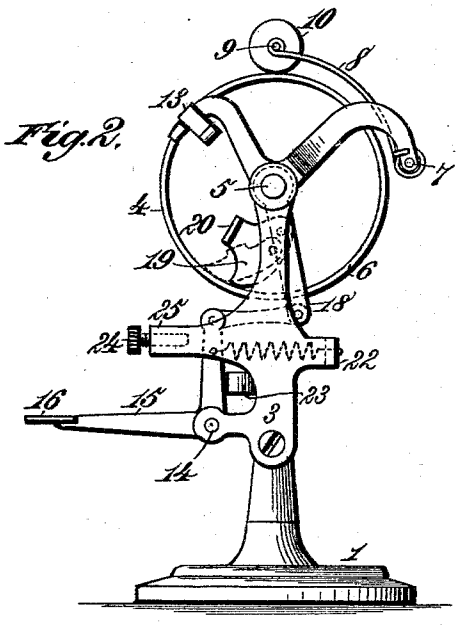
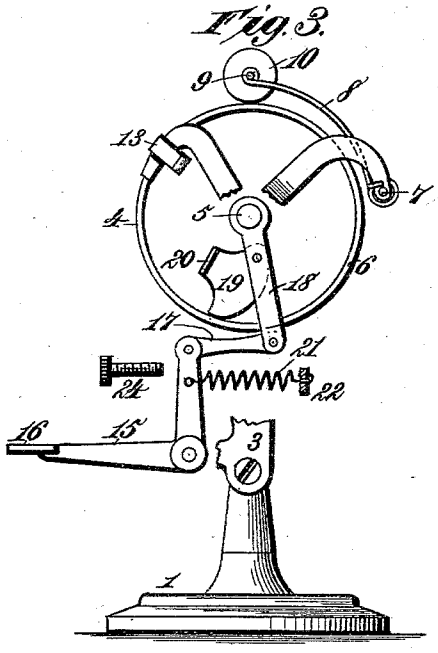


Fig. 3.



Witnesses.
Robt Everett.
J. A. Rutherford.

Inventor.
James Chase.
By James L. Norris
Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES CHASE, OF ROCHESTER, NEW YORK.

COPY-HOLDER FOR TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 425,406, dated April 15, 1890.

Application filed August 23, 1889. Serial No. 321,734. (No model.)

To all whom it may concern:

Be it known that I, JAMES CHASE, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Copy-Holders for Type-Writers, of which the following is a specification.

This invention relates to that type of copy-holders wherein a pivoted swinging key or lever operates a copy-moving cylinder in contradistinction to the types which have a sliding rod that must be pulled lengthwise to operate the cylinder.

The object of my invention is to improve the mechanism that operates the copy-moving cylinder, whereby the swinging key-lever is pivoted to the main frame of the copy-holder and operates a swinging clutch-carrying arm to rotate the copy-moving cylinder for increasing the efficiency and practicable utility of the apparatus and rendering its operation more accurate, perfect, and satisfactory than in those copy-holders where the key-lever is journaled directly on the cylindrical end of a copy-moving cylinder and is extended beyond its pivot to form a clutch-dog that impinges against the cylindrical portion of the cylinder to turn the latter when the lever is depressed.

The object of the invention is also to provide a new and improved copy-holder having a copy-moving cylinder operated by a swinging key-lever for effecting instantaneous and accurate lining of the copy, whereby the action of the hand in operating the copy-moving cylinder is in correspondence with the action of the hand in transcribing on a type-writer.

The invention also has for its object to provide a new and improved copy-holder having a copy-moving cylinder operated through the medium of a swinging key-lever by an off-hand stroke while transcribing on a type-writer, for obtaining great speed in writing and accurate lining of the copy.

The invention also has for its object to provide a new and improved copy-holder whereby the operator can read from a single point in contradistinction to following down the length of the sheet bearing the matter to be copied, for attaining considerable speed with the least possible danger of omissions and other errors.

To accomplish all these objects, my invention involves the novel construction and arrangement or combination of parts, and the principles of operation hereinafter described and set forth in the claims, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of a copy-holder embodying my invention; Fig. 2, an end elevation of the same, and Fig. 3 a detail end elevation omitting portions of the main frame of the copy-holder to more clearly show the operating mechanism.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, where—

The numeral 1 indicates a base or stand supporting the main frame, which comprises a horizontal bar 2, provided at each end with a standard 3, of any form or pattern suitable for the conditions required. The main frame may be stationary on the base or stand, or it may be journaled to turn thereupon, if desired. A copy supporting and moving cylinder 4 is journaled at its ends to the end standards, as by pivots or journals 5, in any desired manner, and at one end the cylinder is formed or otherwise provided with an annular projecting flange 6, for the action of a clutch-dog hereinafter explained.

The main frame is provided with two lateral studs 7, on which are coiled the lower end portions of two spring-arms 8, the upper extremities of which support the ends of a roller-shaft 9, having one or two presser-rollers 10, which act on the copy to press it on the copy-moving cylinder.

The main frame is provided at one end with a pivot in the form of a set-screw 12, to which is hung one end of a line-marker 13, having its opposite end bent to form a spring-catch to engage and disengage a portion of that end of the main frame which is opposite the pivot-screw in such manner that by releasing the catch the line-marker can be swung down in front of the apparatus to be out of the way when introducing the copy between the cylinder and the presser roller or rollers. The line-marker is preferably composed of a flexible strip of steel of suitable thickness, and the presser-roller shaft may be of wire adapted

to rotate, or it may be fixed in the spring-arms and the roller or rollers made to turn on instead of with the shaft.

The end of the main frame adjacent to the flange of the cylinder is provided with a stud 14, on which is pivoted the key-lever 15, which is made, as here shown, as a bell-crank with one arm approximately perpendicular and the other horizontal and furnished with a finger-piece 16. The upper end of the perpendicular arm of the key-lever is jointed to a link 17, pivoted to the lower end of a pendent arm 18, loosely hung on one of the pivots or journals of the copy-moving cylinder and carrying a pivoted clutch-dog 19, which by gravity rests upon the inner surface of the annular flange on the cylinder. The clutch-dog is provided with a lip, forming a finger-piece 20, by which the dog can be swung on its pivot to release it from engagement with the flange, so that the cylinder can be freely turned by hand in either direction, as may be desirable, when adjusting the copy. A spiral or other spring 21 is connected at one end with the perpendicular arm of the key-lever and at the other end with a stud 22 on the main frame for retracting the lever after its horizontal arm has been depressed. A stop-lug 23 on the main frame is arranged in the path of the key-lever to limit its backward movement under the influence of the spring.

The copy may be on sheets or in a book, as usual, and having been introduced over the cylinder and under the presser roller or rollers the line-marker is adjusted to its horizontal position to indicate the lines of the copy. As the key-lever is depressed, it draws the pendent rod forward, and the gravitating clutch-dog, impinging against the annular flange of the cylinder, turns the latter the distance required to move the copy and bring another line directly above the line-marker. When the key-lever is released, the spring retracts it against the stop-lug and places the clutch-dog in its normal position for another stroke.

The copy-holder is very useful for typewriters, for it can be so placed that the key-lever will stand in close proximity to the keyboard of the machine, whereby the action of the hand to line the copy is in correspondence with the action of the hand in transcribing on the type-writer, thus permitting great speed to be attained with the least possible danger of errors.

The arrangement of the clutch-dog is such that it can be raised on its pivot to an inoperative position independent of any movement of the key-lever, which is a very desirable feature in this type of copy-holders, and, further, the arrangement of the clutch-dog is such that it normally stands in engagement with the annular flange of the cylinder, whereby the instant the key-lever commences to move downward under the influence of a stroke the cylinder commences to turn. This renders it possible to attain great speed with accurate and smooth working of the parts.

An important advantage in my improved copy-holder resides in the fact that a very short stroke of the key-lever effects the required movement of the copy-moving cylinder, this result being attained by mounting the clutch-dog on a swinging arm to which the key-lever is connected and causing the dog to operate on a flange at or near the periphery of the cylinder. By this means the cylinder is more easily operated and much greater speed can be attained than where the key-lever forms the clutch-dog and must have a wide range of motion to obtain a small movement of the cylinder.

The stroke of the key-lever can be varied, according to the distance between the lines of the copy by means of a stroke-limiting stop, which, as here shown, is composed of an adjustable screw 24, having a thumb-piece and engaging a screw-threaded socket 25 on the main frame. It is obvious that by adjusting the screw inward the stroke of the key-lever is shortened to feed close-lined copy, while the converse is the case if the screw be adjusted outward.

While I have described the copy-holder as particularly useful in connection with typewriters it is quite obvious that it can be otherwise employed.

To prevent a retrograde movement of the copy-moving cylinder while in operation, I may provide a dog to act upon the inner surface of a flange at that end of the cylinder which is opposite the cylinder-rotating mechanism. Such dog I have indicated by dotted lines in Fig. 2, and it may have a finger-piece to lift it out of engagement with the cylinder-flange.

What I claim is—

1. The combination, in a copy-holder, of a line-marker, a copy-moving cylinder, a swinging key-lever, a support connected with the key-lever, and a dog on the support engaging the cylinder operated by the key-lever and movable out of engagement with the cylinder independent of any movement of the key-lever, substantially as described.

2. The combination, in a copy-holder, of a line-marker, a copy-moving cylinder having an annular flange at one end, a swinging key-lever, and a dog engaging the flange, operated by the key-lever and movable out of engagement with the flange independent of any movement of the key-lever, substantially as described.

3. The combination, in a copy-holder, of a line-marker, a copy-moving cylinder, a swinging dog-carrying arm, a dog loosely mounted on the arm and engaging the cylinder, and a key-lever for swinging the dog-carrying arm, substantially as described.

4. The combination, in a copy-holder, of a line-marker, a copy-moving cylinder having an annular flange at one end, a dog-carrying

arm hung on a pivot or journal of the cylinder, a dog loosely mounted on the arm, and a swinging lever for swinging the dog-carrying arm, substantially as described.

5. The combination, in a copy-holder, of a line-marker, a copy-moving cylinder, a swinging dog-carrying arm, a dog mounted on the arm and engaging the cylinder, a swinging key-lever, and a link connecting the key-lever with the dog-carrying arm, substantially as described.

6. The combination, in a copy-holder, of a line-marker, a copy-moving cylinder having an annular flange at one end, a swinging dog-carrying arm, a dog loosely mounted on the arm, a swinging bell-crank key-lever, and a link connecting the key-lever with the dog-carrying arm, substantially as described.

7. The combination, in a copy-holder, of a line-marker, a copy-moving cylinder, a dog-carrying arm, hung on a pivot or journal of the cylinder, a dog pivoted to the arm and having a finger-piece to swing it from engagement with the cylinder, and a swinging key-lever connected with the dog-carrying arm, substantially as described.

8. The combination, with a main frame carrying a copy-moving cylinder, of a line-marker having at one end a catch to engage the main frame and at the other end hung on a pivot to enable the line-marker to be swung away from the copy-moving cylinder, substantially as described.

9. The combination, with a main frame carrying a copy-moving cylinder and provided with opposite lateral studs, of the spring-arms coiled on the studs and carrying at their upper ends a presser-roller shaft, substantially as described.

10. The combination of a main frame carrying a copy-moving cylinder and provided with the stud 22, stop-lug 23, and screw-socket 25, the swinging bell-crank key-lever 15, pivoted on the main frame, the spring 21, attached at one end to the lever and at the other end to the stud, the screw 24 in the screw-socket, and the swinging arm 18, carrying a pivoted dog 19 and connected with the bell-crank key-lever, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

JAMES CHASE.

Witnesses:
M. K. CRAFT,
WM. H. FARRAND.