(No Model.) 2 Sheets—Sheet 1.

J. C. A. DEAN.

COPY HOLDER AND REGISTER.

No. 399,503. Patented Mar. 12, 1889.

Fig. 8.

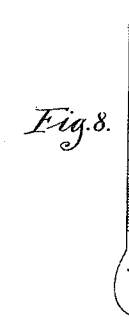


Fig. 1.

Fig. 10.

Fig. 9.

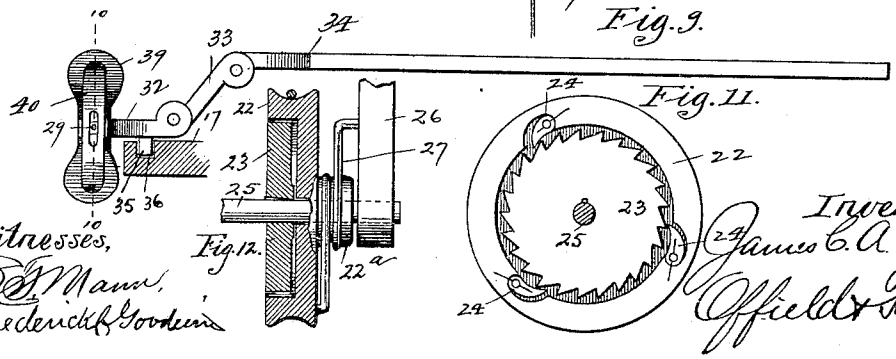


Fig. 12.

Fig. 11.

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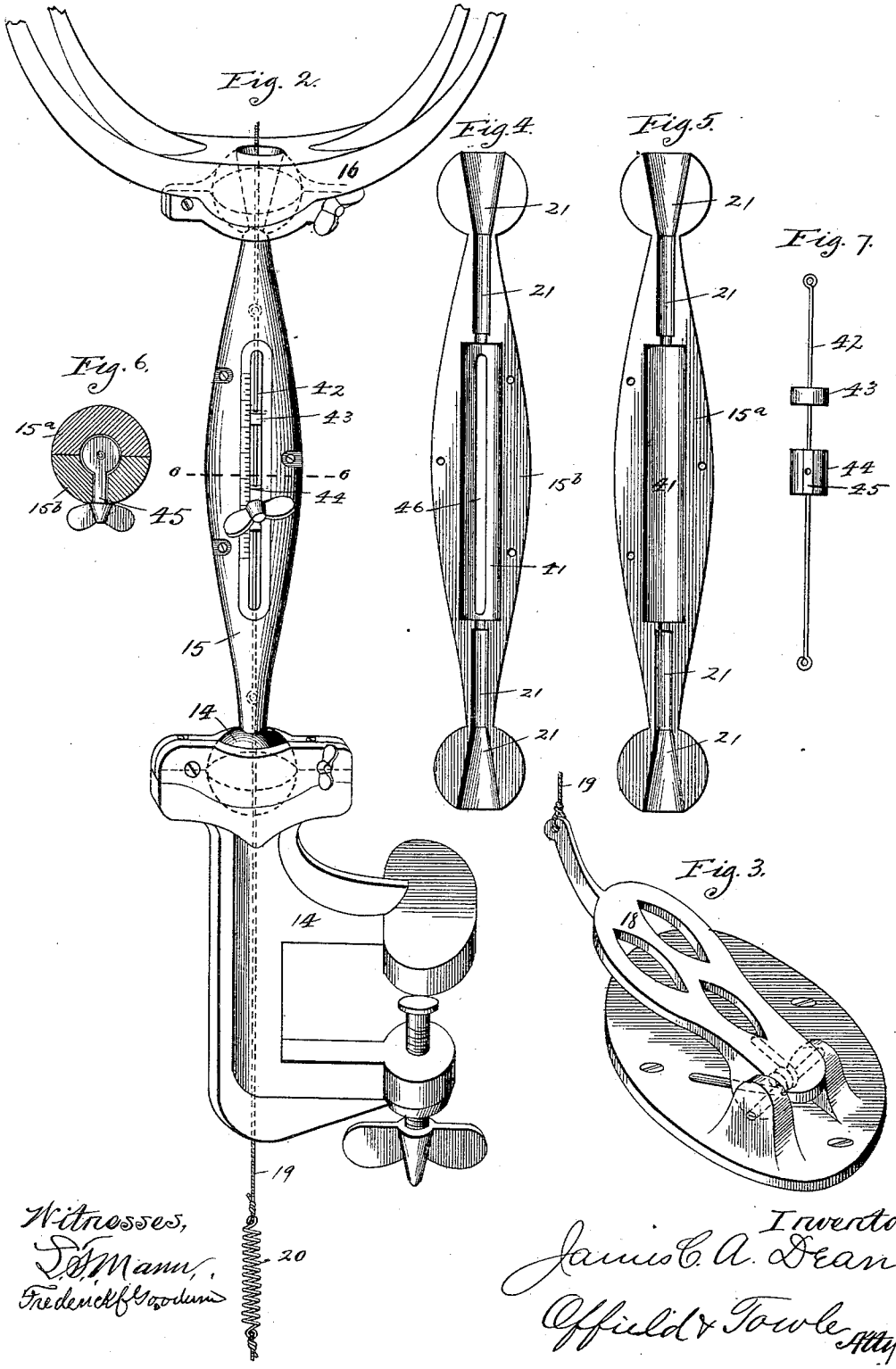
N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

J. C. A. DEAN.

COPY HOLDER AND REGISTER.

No. 399,503. Patented Mar. 12, 1889.



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UNITED STATES PATENT OFFICE.

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COPY HOLDER AND REGISTER.

SPECIFICATION forming part of Letters Patent No. 399,503, dated March 12, 1889.

Application filed October 13, 1888. Serial No. 288,016. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. A. DEAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Copy Holders and Registers, of which the following is a specification.

My invention relates to a copy-holder for the copy of type-writers, printers, and other copyists, which is provided with a register or marking-finger, so connected and adapted as to be operated by the foot, whereby to move it from line to line of the work; and my invention consists in the devices and combinations of devices for securing these ends, as hereinafter described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my improved copy holder and register secured to the edge of a table. Fig. 2 is a perspective view of the bracket, standard, and spider, whereby the copy-holder is secured to and supported upon the table. Fig. 3 is a perspective view of the pedal by which the register or marking-finger is actuated. Figs. 4 and 5 are detail views of portions of the standard. Fig. 6 is a cross-section on the lines 6 6 of Fig. 2. Fig. 7 is a side elevation of a connecting-rod forming a portion of the connection between the pedal and the marking-finger. Fig. 8 is a plan view of the marking-finger or register. Fig. 9 is a side elevation of the same, and Fig. 10 is a section on the line 10 10 of Fig. 9. Fig. 11 is a side elevation of parts of a device for operating the marking-finger or register; and Fig. 12 is a detail view showing in section the parts shown in Fig. 11, and showing, also, a portion of an operating-shaft and connected parts in side elevation.

In the drawings, 13 represents the edge of a table, shelf, or cabinet-top to which my improved copy-holder may be attached by means of the clamping device 14, (shown particularly in Fig. 2.) The upper end of said clamping device has a divided bearing or socket to receive a ball, 14, on the lower end of a standard, 15, which standard has a ball-and-socket connection at its upper end with a spider, 16, to which the copy-holder is secured.

The copy-holder consists of the table 17, which is adjustable to any desired angle on its support by means of the ball-and-socket joints before described.

18 represents a pedal, to which a cord, 19, will be connected, and the latter has preferably a spring-section, 20. Said cord is carried upwardly through a longitudinal opening, 21, of the bracket-arm, balls, and standard, and its end is secured to a loose disk-wheel, 22. (Shown in dotted lines in Fig. 1 and in detail in Figs. 11 and 12.) Said disk is hollowed out preferably on one side to contain a ratchet-wheel, 23, and spring-actuated pawls 24 are pivoted in recesses of the rim of the disk, in position to engage the teeth of the ratchet, as shown in Fig. 11. The disk 22 and wheel 23 are mounted on a shaft, 25, the former loosely and the latter keyed to the shaft. The shaft itself may be secured in bearings formed in hangers 26, depending from the bottom of the table 17. The disk 22 has a hub or boss, 22^a, about which the body of a spring, 27, is coiled, the ends of said spring being secured, respectively, to the disk and to the hanger 26, as clearly shown in Fig. 12.

The shaft 25 carries upon its outer end a pulley, 28, over which is passed a belt, 29, which is carried over pulleys 30 31 at the corners of the table 17, and these pulleys may be adjustably secured to the table, so that the cord 29 can be kept taut.

The register or marking-finger is particularly shown in Figs. 1, 8, and 9. It comprises the base portion 32, the intermediate section, 33, and the finger 34, the intermediate section being hinged to the base and finger, respectively, whereby the marking-finger can be lifted to pass over a thick book, or straightened out so as to move over the surface of a single sheet of paper, or thrown back to permit the turning of the leaf. The base portion 32 has a stud, 35, which travels in a slot, 36, on the edge of the table 17, and said base portion has the clamping-jaws 38, between which the cord 29 passes, one of said jaws being pivoted at one end, as shown in Figs. 1 and 10. The extensions 39 of these clamping-jaws 38 have a bow-spring, 40, secured between their outer ends in such manner that the reactive force of the spring operates to clamp the movable jaw upon the

cord and thereby secure the register to move with said cord.

In order to so adapt the device that lines of different widths may be marked by the finger 40, I have provided special mechanism. (Shown in Figs. 2, 4, 5, 6, and 7 of the drawings.) The standard marked 15 is formed in two sections, 15^a 15^b, having the opening 21, which opening communicates with a larger opening through the middle and thicker part of the standard. In Figs. 4 and 5 the two parts are shown separated, and each has the semi-cylindrical cavity 41, so that when placed together a cylindrical cavity is formed, the end walls of which are square. A rod, 42, Fig. 7, having its ends adapted for connection to the operating-cord, is placed within the cylindrical cavity of the parts 15^a 15^b. This rod carries the fixed stop 43 and the adjustable stop 44, which may be secured in any desired position by means of a set-screw, 45, which projects through a slot, 46, in the part 15^b. A scale may be marked on the part 15^b at the margin of the slot, as shown at 47, Fig. 2, and the block 44 will be adjusted with its top a distance below the upper surface of the block 43, to govern the distance between the lines of the copy. Now the movement of the marking-finger will depend upon the length of the arc through which the disk 22 oscillates, and this may be varied by varying the size of the disk or by adjusting the block 44. The rod 42 moves freely through the block 44, and the block 43 reciprocates in the space between the block 44 and the upper end of the cylindrical chamber.

In operation the copy-holder will be secured to the table or desk-top and the copy-table will be adjusted on its bearings, so as to bring the copy in proper relation to the eye of the copyist. When a line has been copied and it is desired to move the marking-finger, the pedal 18 will be depressed, exerting a downward pull on the cord 19, spring 20, rod 42, and the connection of said rod to the disk 22, thereby rocking said disk, which, through the engagement of the pawls 24 with the ratchet 23, will turn the shaft 25 in its bearings, carrying with it the pulley 28, and turning the belt 29, to which the marking-finger is attached, thus moving the latter over one space. The function of the spring 20 is to prevent any injurious shock or strain which might be caused by striking the pedal too hard with the foot; but if proper care is exercised the spring 20 might be omitted. When the foot is removed from the pedal 18, the latter will be thrown up by the spring shown in Fig. 3, and the spring 27 will cause the rotation of the disk 22 backward, thus taking up the belt 19. I prefer to actuate the pawls by springs, so that they will be operative in all positions and will engage the teeth as soon as the force of spring 27 is spent.

Modifications of the construction herein shown and described may be made within wide limits without departing from the spirit of my invention.

The table herein shown and described constitutes a feature of my invention independently of the marking-finger and may be used without said finger.

When the marking-finger reaches the bottom of the page, it may be readily slipped back along the belt to the top of the page by grasping the extensions 39, so as to compress the spring.

I claim—

1. A copy-holder comprising, in combination, a table for the copy and a standard having a universal ball-and-socket joint therein, and suitable means whereby to secure the copy-holder, substantially as described.

2. A copy-holder comprising, in combination, a table secured to a spider, and a standard connected at one end by a ball-and-socket joint to a bracket-clamp, whereby to secure the device, substantially as described.

3. The combination, with a copy-holder, comprising a table and a suitable standard or support, of a marking-finger secured to an endless traveling belt or cord, and a foot-pedal and connections between said traveling belt and the foot-pedal, whereby the marker may be moved by depressing the pedal, substantially as described.

4. The combination, with a copy-holder, of a marking-finger secured at one end to an endless cord or belt, a rotatable shaft bearing a sheave, over which said belt is passed, a ratchet-and-pawl mechanism adapted to rotate said shaft, a foot-pedal, and a cord connecting the foot-pedal and the ratchet mechanism, substantially as described.

5. The combination, with a foot-pedal and disk, of a cord secured to the pedal at one end and at the other to the periphery of the disk, a ratchet-wheel concentric to the disk, pawls pivoted upon the rim of the disk and adapted to engage the ratchet-teeth, a shaft bearing both disk and ratchet and a belt-pulley, a belt passed over said pulley, and a marking-finger connected to said belt, substantially as described.

6. The combination, with a copy-holder, of a marking-finger connected to an endless traveling belt, a shaft and pulley for moving said belt, a ratchet device for rotating the shaft, a cord or rod connecting the ratchet with the foot-pedal, and stops whereby to limit the movement of the marking-finger, substantially as described.

7. In combination with a copy-holder, a movable marking-finger and a traveling belt, said finger having spring-clamping jaws, whereby to secure it to the belt, substantially as described.

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