Feb. 24, 1942. N. DODDS 2,273,841

COPYHOLDER

Filed Oct. 17, 1939

FIG. 1.

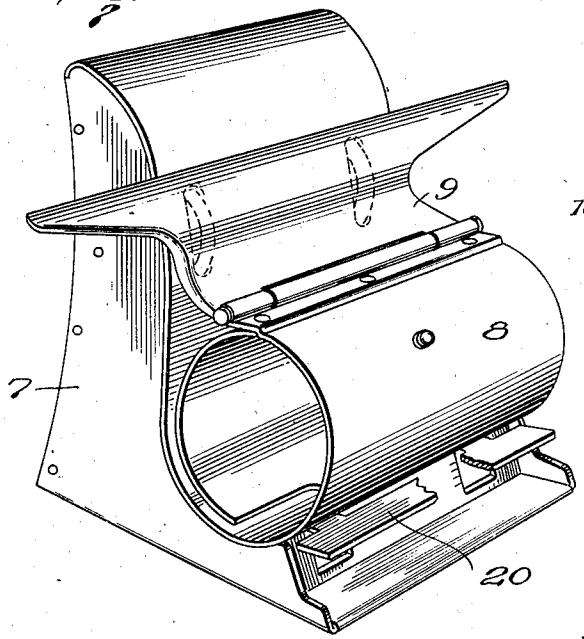
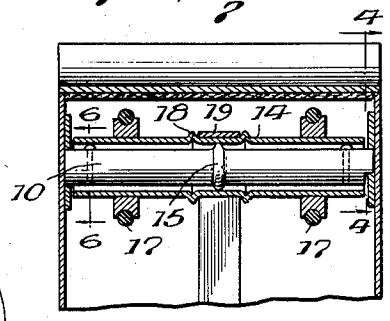


FIG. 3.



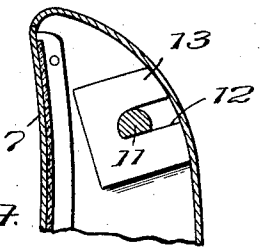


FIG. 4.

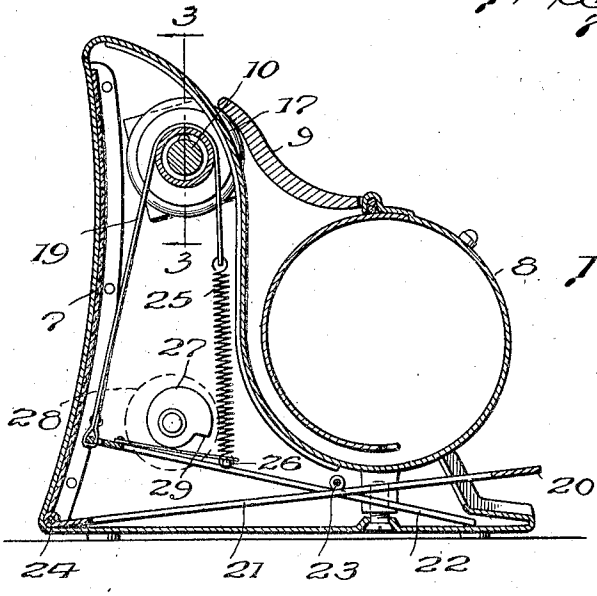


FIG. 2.

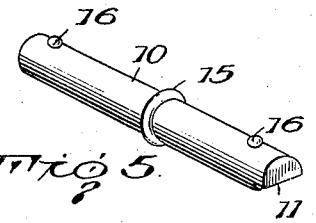


FIG. 5.

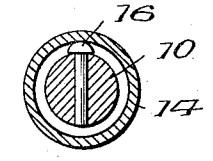


FIG. 6.

Inventor

Nugent Dodds,

By Bernard F. Harvey

Attorney

Patented Feb. 24, 1942 2,273,841

UNITED STATES PATENT OFFICE

2,273,841

COPYHOLDER

Nugent Dodds, Washington, D. C.

Application October 17, 1939, Serial No. 299,906

6 Claims. (Cl. 120—32)

The present invention consists of a copyholder embodying improvements over my former Patents No. 1,939,671, December 19, 1933 and No. 2,162,706, June 20, 1939.

In the present invention I provide novel drive means for the feed roller effecting more delicate spacing of the copy, yet retaining the desirable spacer bar and adjusting means.

I have found that it is desirable at times to feed copy more or less than a certain number of set spaces to which my previous machines are limited. It is consequently the desideratum of the present invention to provide a copyholder wherein the copy may be fed to any extent desired by the operator down to the smallest fraction of an inch, thereby permitting universal spacing.

The means employed in the present invention for effecting universal spacing has been found, after much experiment, to be extremely accurate and sensitive and is capable of facile adjustment to change the degree of spacing at the option of the operator.

Other objects of the invention will be apparent from the following description of the invention, taken in connection with the accompanying drawing, wherein

Fig. 1 is a perspective view of a copyholder,

Fig. 2 is a vertical sectional view showing to advantage the feed roller drive means of the present invention, the latter being shown in side elevation,

Fig. 3 is a detail fragmentary sectional view taken on the line 3—3 of Fig. 2, and showing to advantage the improved axle of the present invention and manner of mounting the same,

Fig. 4 is a detail fragmentary sectional view taken on the line 4—4 of Fig. 3 showing the manner of mounting one end of the axle in one of the casing ends,

Fig. 5 is a perspective view of the axle per se, and

Fig. 6 is a cross sectional view taken on the line 6—6 of Fig. 3.

The device of this invention consists of a casing 7 which is of the same general construction as that heretofore employed by me, especially as illustrated in my Patent No. 2,162,706. This casing also includes a copyholder 8 and is likewise equipped at the top with a copy or paper presser 9. The copy is inserted in the holder in the manner explained in my previous patents and is permitted to rest against the front wall of the casing beneath the presser 9.

Mounted within the casing, near the top of the latter, is an axle 10, the ends of which are flattened, as indicated at 11, and mounted in complemental slots 12, formed in plates 13, the latter being mounted in the ends or the sides of the casing. A feed roller 14 is sleeved over the axle 10 and is spaced from the latter by an annulus 15. The annulus is formed on the axle approximately midway its ends, as illustrated to advantage in Fig. 3. To prevent tilting of the ends of the roller on the axle 10, I equip the latter with protuberances 16, one of the latter being formed adjacent each terminal of the axle. Paper feed rings 17 are mounted on the roller 14, portions of the peripheries thereof being projected through complemental slots formed in the front wall of the casing and employed in a manner well known in the art.

The feed roller 14 is formed to provide spaced annular rings 18, having therebetween a runway over which a belt 19 is trained. Both ends of the belt are anchored to hold the intermediate portion thereof in frictional engagement with the periphery of the roller in the runway between the rings 18, the latter, of course, preventing lateral displacement of the belt.

For the purpose of operating the belt 19, I employ a spacer bar 20 which is similar in construction to that shown in my Patent No. 2,162,706, and is adapted to be operated in the same manner. The spacer bar, however, in the present invention, forms a part of the compound levers 21 and 22, these levers being hingedly connected, as indicated at 23. The inner end of the lever 21 is hingedly connected, as indicated at 24, to the casing 7, at the juncture of the rear and bottom walls of the casing. The terminal of the lever 22 is engaged with the floor of the casing at the front of the latter, while the rear terminal is engaged with one end of the belt 19. The opposite end of said belt is secured to one end of a coil spring 25, the opposite end of said spring being anchored, as indicated at 26, to the upper face of the lever 22, at a point remote from the terminals of the latter. By this arrangement pressure on the spacer bar 20 urges the inner or rear end of the lever 22 downwardly to drive the feed roller 14. As soon as pressure is released on the spacer bar 20, the latter is returned to an operative position through recoil of the spring 25.

In order that the extent of movement of the roller 14 may be adjusted, I employ suitable means, such for instance, as a cam 27. The cam is mounted to ride on the lever 22, under operation of a handle grip 28. There is interposed

between the periphery of the cam **27** and lever **22**, a sound dampener or deadener **29**, to eliminate the noise incident to impact of the lever with the cam upon return of the spacer bar to a normal operating position.

In using the invention, after the copy has been placed in the holder, it may be moved by rotation of the paper feed rings **17**. The feed rings are, of course, rotated through action of the roller drive means, the latter in the present instance consisting of the belt **19** and its associated mechanism, including the spacer bar **20**. By this construction the operator is not limited to any predetermined spaces which must of necessity be employed. He can optionally select any space within the limits of operation of the machine.

It is, of course, to be understood that various changes may be made in the details of construction, proportion and arrangement of parts, within the scope of the claims hereto appended.

What is claimed is:

1. A copyholder comprising a casing equipped with an axle and a paper feed roller sleeved thereover, the latter being spaced from the axle and rotatable on the latter, and means mounted on the axle to prevent relative radial movement of the roller on the axle.

2. A copyholder comprising a casing equipped with an axle, the terminals of the latter being flattened, plates mounted on opposite walls of said casing and provided with slots complementing the flattened portions of said axle, the terminals of the axle projected through said slots into engagement with the casing walls, and a paper feed roller rotatably mounted on said axle.

3. A copyholder comprising paper feed mechanism movable about a fixed axis, drive means for the mechanism, and manual operating means connected to the drive means and operable to effect movement of the latter, the drive means including a slip belt and compound levers for positively actuating the mechanism any degree, predetermined by the operator, within the range of movement of the mechanism.

4. A copyholder comprising a copy feed roller, a hand operating slip belt trained over the roller, and means in operative connection with the belt to move the latter to a fixed predetermined degree for effecting a corresponding degree of movement of the feed roller, said means including compound levers one of which levers is engaged with said belt and the other anchored beneath the roller.

5. A copyholder comprising a paper feed roller rotatable about a fixed axis, and drive means for the roller operable to move the roller to any predetermined fixed degree within the limits of movement of the roller operating mechanism, said means including coacting levers and a slip belt, an intermediate part of the latter engaging the roller, one end of the belt being engaged with one of said levers.

6. A copyholder comprising a copy feed roller, a manually operable drive belt trained over the roller, means in operative connection with the belt to move the latter longitudinally around the periphery of the roller to effect movement of the latter, said means including levers engaged with the belt.

NUGENT DODDS.