

Nov. 23 , 1926.

1,608,279

G. F. HANDLEY
TYPEWRITING MACHINE
Filed March 23, 1926

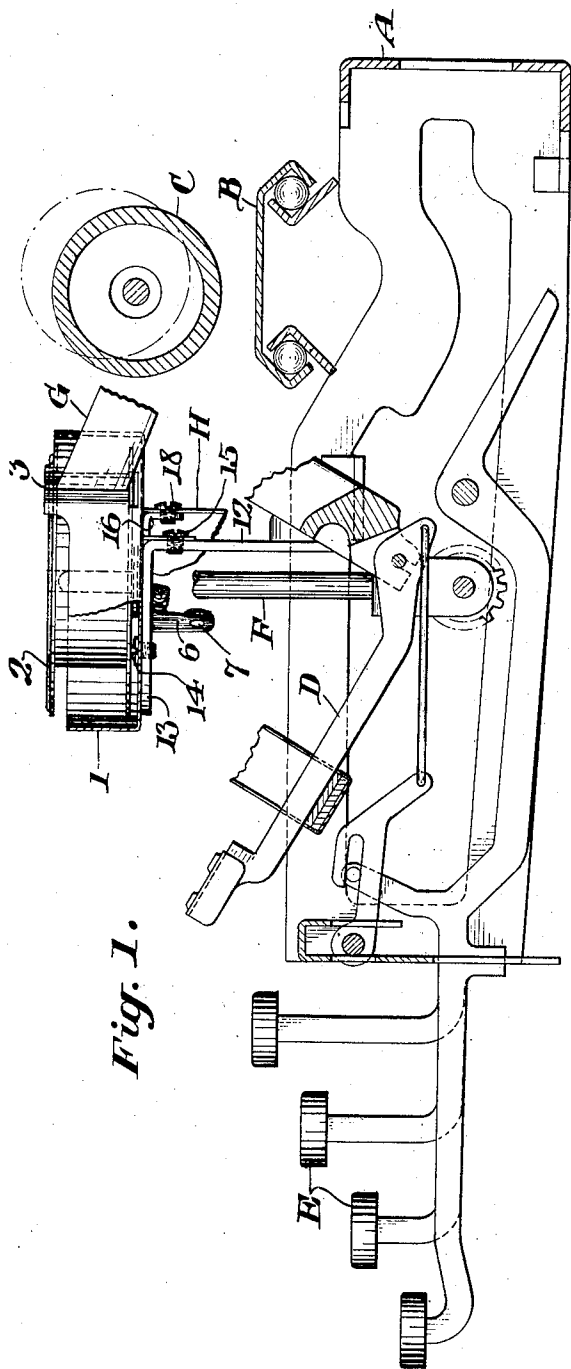


Fig. 1.

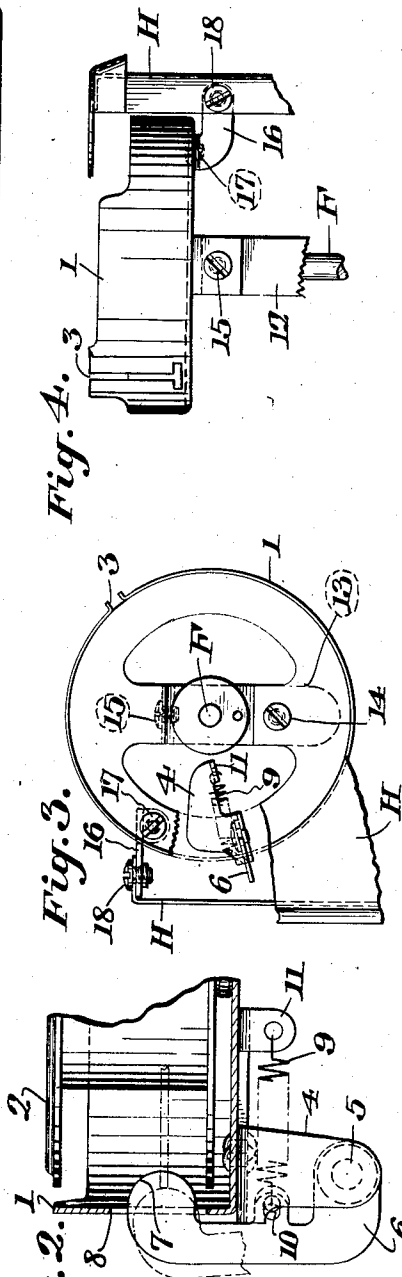


Fig. 2.

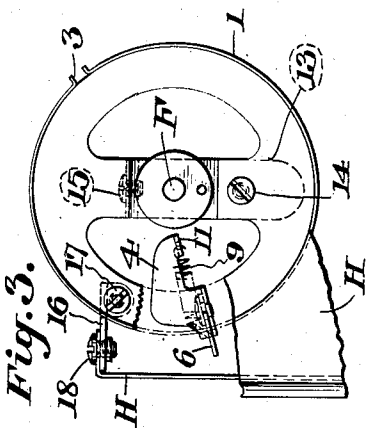


Fig. 3.

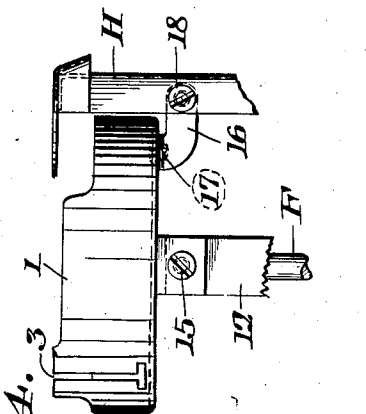


Fig. 4.

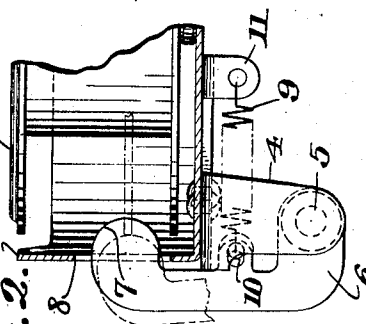


Fig. 5.

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UNITED STATES PATENT OFFICE.

GEORGE F. HANDLEY, OF GLENDALE, NEW YORK, ASSIGNOR TO ROYAL TYPEWRITER COMPANY, INC., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

TYPEWRITING MACHINE.

Application filed March 23, 1926. Serial No. 96,755.

In small portable machines wherein considerations of weight are important, it is common to make the ribbon spool housing of sheet metal with open top. It has been found, particularly in shipping or moving the machine from one place to another, that the ribbon spools are apt to become displaced from their housings. This may also occur when the machine is in ordinary use because of the ribbon spool being caught and lifted accidentally from its housing.

The invention therefore comprises a simple, light and efficient means for normally retaining the ribbon spool in the housing against accidental displacement at any time, but which will permit the spool to be removed when it is desired to change the ribbon.

In the drawings:

Figure 1 is a longitudinal section through a typewriting machine showing the invention applied thereto.

Figure 2 is a section through a portion of the ribbon spool housing, showing the invention, and drawn to a larger scale.

Figure 3 is a top plan view of the ribbon housing and connected parts with the ribbon spool removed.

Figure 4 is a side elevation of the parts shown in Figure 3.

The invention is herein illustrated as applied to a typewriting machine having a main frame A, platen carriage B, carrying platen C, against the front side of which strike type bars D, which are actuated by any suitable mechanism from keys E. The ribbon spools are supported on and driven by shafts F and these spools support a ribbon G which passes from one spool to the vibrator and thence to the other spool in the usual manner.

The type of machine herein illustrated is the little Royal machine, wherein a sheet metal mask is adapted to enclose the main frame A for the purpose of preventing dust and dirt from entering the interior of the machine and also to give the same a pleasing appearance. This mask is fully disclosed in an application filed by E. B. Hess, Ser. No. 19,085, on March 28, 1925, and a fragmentary portion H of said mask is shown on the drawings of this application.

Each ribbon spool housing 1 is adapted to receive the ribbon spool 2 and is provided with a slot 3 through which passes the rib-

bon G. Carried by the bottom of the housing is a bracket 4 to which is pivoted at 5 an upstanding arm 6 which has an upper laterally bent and rounded end 7 adapted to project through a slot 8 in the ribbon housing to the interior thereof. This arm 6 is urged to its operative position by a spring 9 which is attached to an ear 10 of the arm at one end and at its other end to an offset lug 11 on the bracket 4. The movement of the arm and of the tension of the spring is limited by the arm coming in contact with a projecting portion of the bracket 4.

When the arm is in its operative position the end 7 thereof will overlies the lower flange of the ribbon spool sufficiently to prevent any accidental displacement of the spool from its housing. When, however, it is desired to remove the spool it is only necessary to lift the same, whereupon the lower flange comes in contact with the rounded end 7 and cams the arm 6 to the dotted line position of Figure 2, thus allowing the spool to be readily removed. When a new spool is inserted, the reverse operation takes place.

A ribbon spool bracket 12 is attached to the machine frame in any suitable manner and has a horizontal portion 13 to which the bottom of the housing is attached by a screw 14, while the screw 15 attaches a bent down lug of the housing to the vertical portion of the ribbon spool bracket 12.

When the ribbon is removed there will of course be considerable force exerted against the arm 6 which will be transmitted to the ribbon housing. Since as has been previously stated, this ribbon housing is of a light character it has been found desirable to provide an additional support or tie plate 16 which is connected to the bottom of the housing by a screw 17 and is extended into proximity with the front portion of the mask H to which it is attached by a screw 18 as clearly shown in Figures 3 and 4. In this manner the ribbon spool housing is firmly supported against any strains that may be imposed thereon by the removal of the ribbon spool.

It is obvious that the invention so far as many of its features are concerned, may be applied to typewriting machines of widely different character and it is also evident that the precise details of the invention may be varied without in any way departing

from the spirit thereof. Accordingly, the invention is to be regarded as limited only by the scope of the appended claims.

I claim:

- 5 1. In typewriting machines in which the ribbon spool rests within a housing, means for preventing accidental displacement of the spool, said means comprising a bracket carried by the lower portion of said housing, an arm pivoted thereto, and having its upper end projecting through a slot in the housing into position to overlie a portion of the ribbon spool.
- 10 2. Mechanism as recited in claim 1 in which a spring holds the arm in operative position.
- 15 3. Mechanism as recited in claim 1 in which a spring holds the arm in operative position and the upper end of the arm is rounded so that it may be cammed outwardly when removing or replacing a spool.
- 20 4. In typewriting machines in which a housing is provided for a ribbon spool and in which a mask encloses portions of the machine frame, a housing support, means connecting the housing thereto, and a tie plate connected to the housing at one end and at its other end to said mask.
- 25 5. In typewriting machines the combination of a ribbon spool housing of light construction having an open top and a skeleton
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bottom, a plurality of supporting means for said housing, and means pivoted below and outside said housing but supported thereby and projecting into the same to hold a ribbon spool against accidental displacement. 35

6. In typewriting machines in which the ribbon spool rests within a housing, means for preventing accidental displacement of the spool, said means comprising a bracket carried by the base of said housing, an up- 40 standing arm pivoted thereto and having its upper end offset to project through a slot in the housing into position to overlie a portion of the ribbon spool, and means whereby the arm is automatically moved to inoperative position by moving the ribbon spool from the housing. 45

7. In typewriting machines in which the ribbon spool rests within a housing, means 50 for preventing accidental displacement of the spool, said means comprising a bracket carried by the base of said housing, an up-standing arm pivoted thereto and having its upper end offset to project through a slot in the housing into position to overlie a portion of the ribbon spool, means urging the arm to operative position, and means on the bracket for limiting such movement. 55

In testimony whereof, I have hereunto subscribed my name. 60

GEORGE F. HANDLEY.