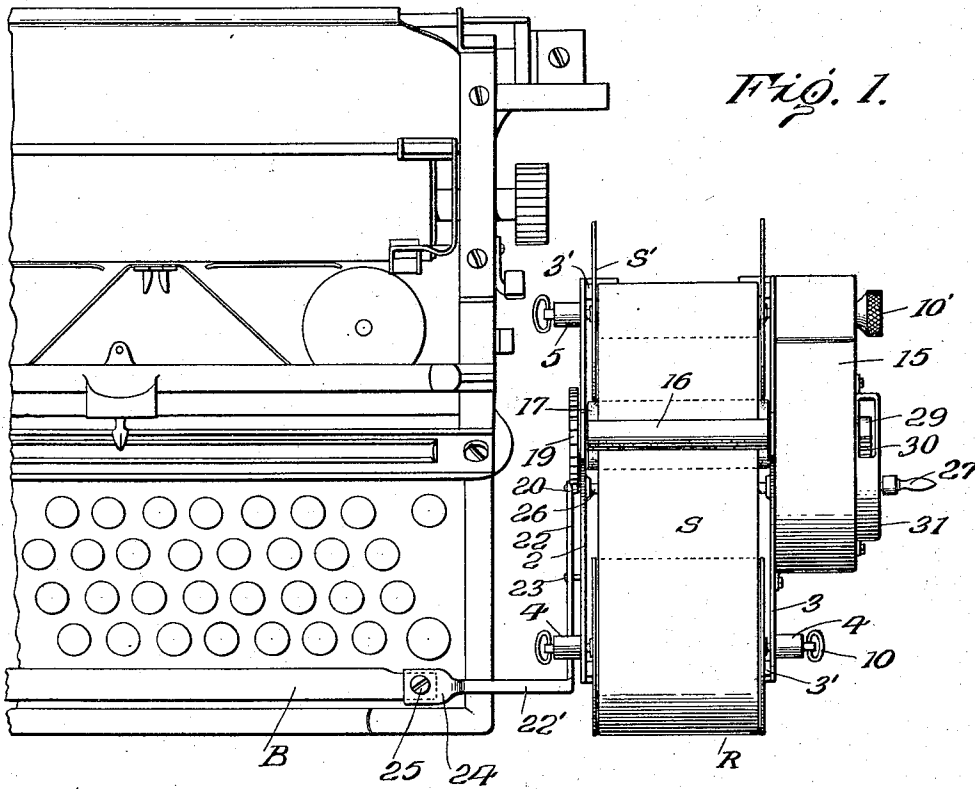
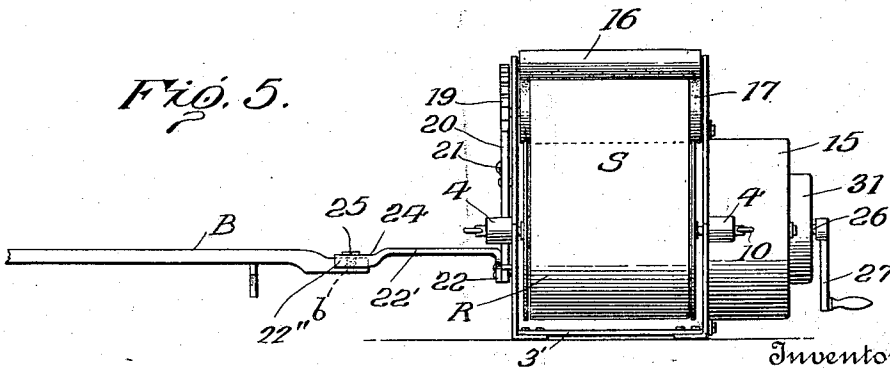


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COPY HOLDER.
APPLICATION FILED JUNE 7, 1915.

1,201,156.

Patented Oct. 10, 1916.
3 SHEETS—SHEET 1.



Witnesses

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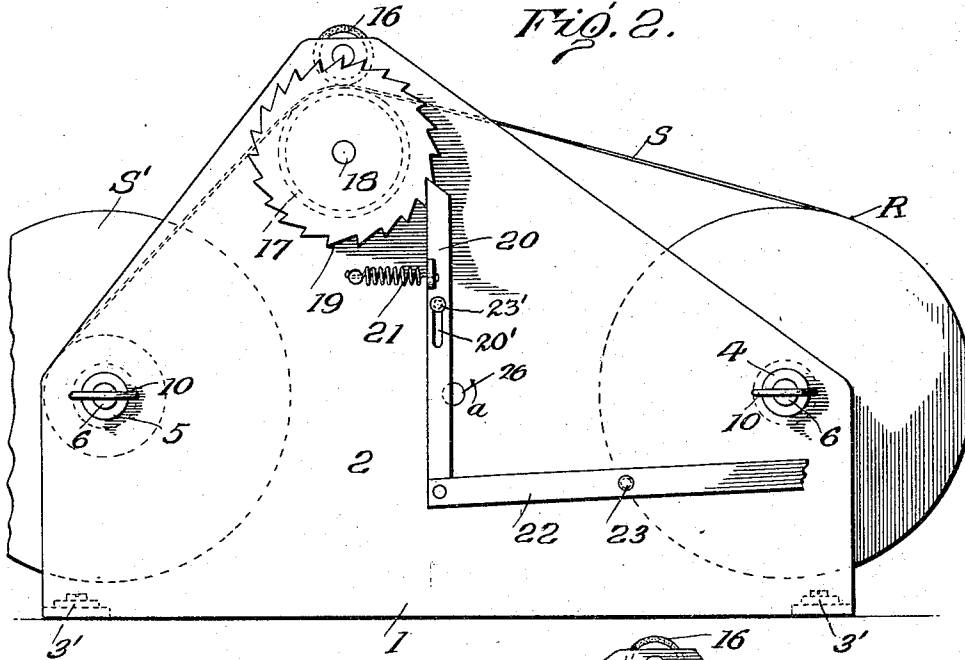
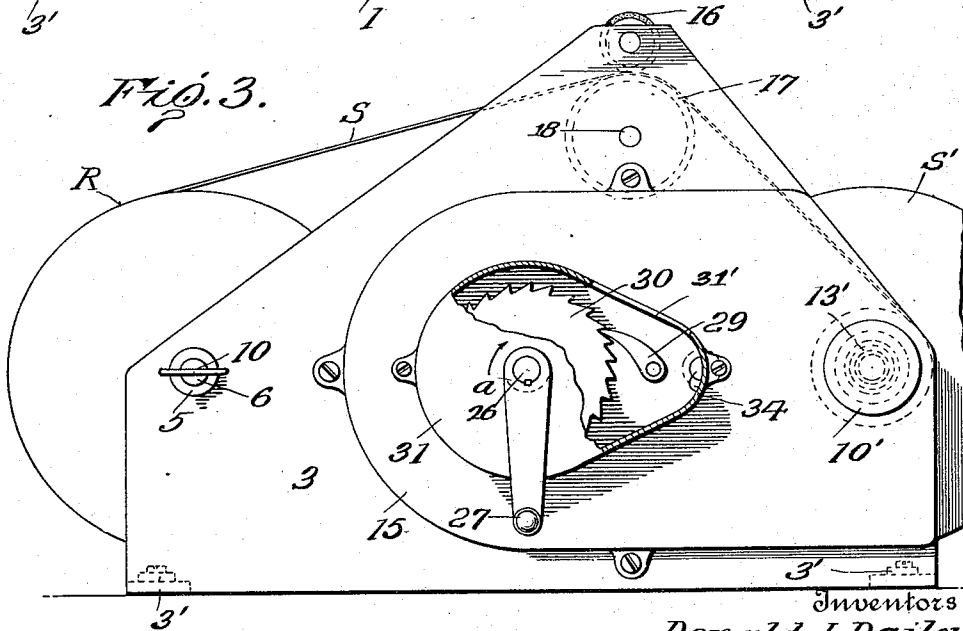
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3 SHEETS—SHEET 3.

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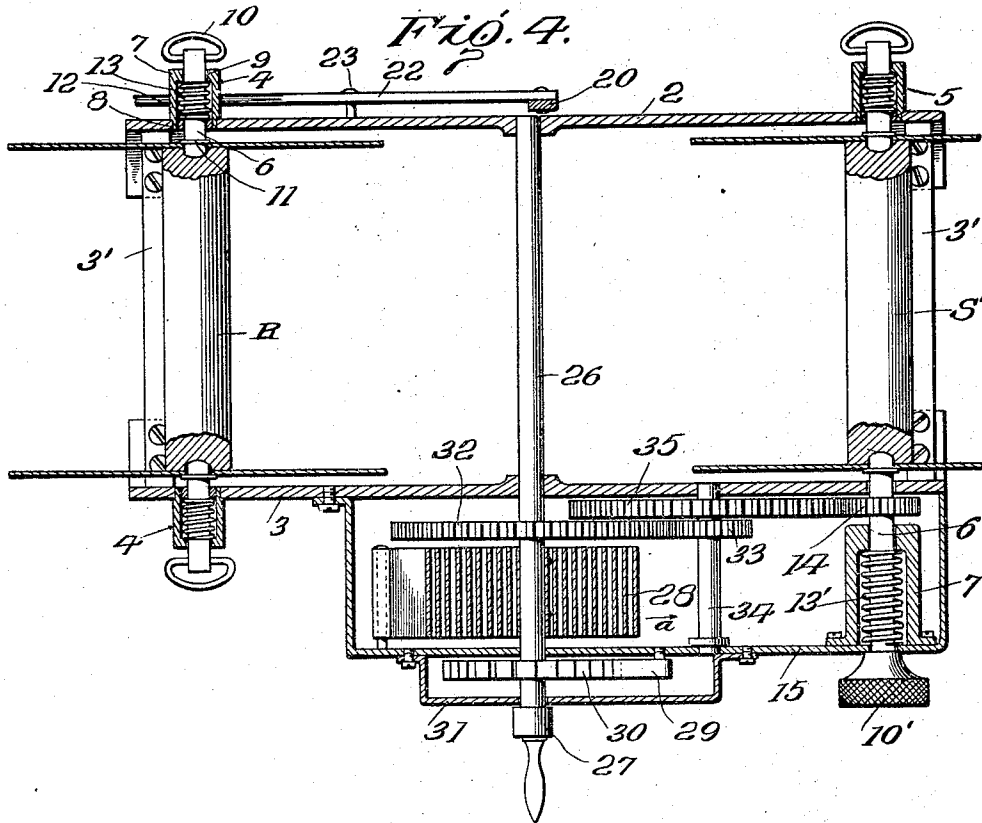
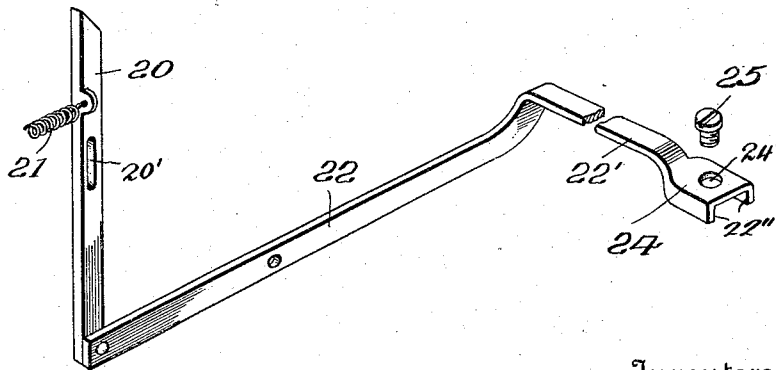


Fig. 6.



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UNITED STATES PATENT OFFICE.

DONALD J. DAILEY AND HUBERT C. MAEL, OF OTTUMWA, IOWA.

COPY-HOLDER.

1,201,156.

Specification of Letters Patent.

Patented Oct. 10, 1916.

Application filed June 7, 1915. Serial No. 32,647.

To all whom it may concern:

Be it known that we, DONALD J. DAILEY and HUBERT C. MAEL, citizens of the United States, residing at Ottumwa, in the county of Wapello and State of Iowa, have invented certain new and useful Improvements in Copy-Holders; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in copy holders for typewriter machines.

The object of the invention is to provide a copy holder adapted for a continuous strip or sheet of paper such as is employed with stenographic typewriting machines and which will enable a considerable portion of the strip to be exposed to view.

Another object is to so construct a copy holder of this type that the operator can readily move the paper step by step, by the manipulation of the space bar, and so that at each manipulation of said bar a new section of the paper will be exposed throughout the full height of the holder.

Another object is to provide a copy holder for a continuous paper sheet or strip with means for transferring the continuous sheet from one reel or spool to another in such a manner that the upper end of the written sheet of paper coming from one reel will be wound upon another empty reel and thus prevent the written strip from becoming entangled during the transcribing of the notes on said strip.

With these and other objects in view, the invention consists of certain novel features of construction and the combination and arrangement of parts hereinafter more fully described and claimed.

In the accompanying drawings: Figure 1 represents a plan view of a typewriter showing this improved holder applied; Fig. 2 is a side elevation of the holder showing a roll of notes mounted therein; Fig. 3 is a similar view taken from the opposite side of the holder; Fig. 4 is a plan view of the holder detached, with parts shown in section; Fig. 5 is a front elevation of the holder showing it applied to the space bar of a typewriter; Fig. 6 is a detail perspective view of the operating lever.

In the embodiment illustrated a supporting frame 1 is shown which may be of any suitable or desired construction and in which

is designed to be mounted a steno-type roll R. This frame 1 comprises two transversely spaced side members 2 and 3 here shown in the form of plates connected by suitable cross bars 3' and in the opposite ends of which are mounted two pairs of spring pressed roller supporting journals mounted in bearings 4 and 5. The journals of each pair are exactly alike and hence one only will be described in detail. Each of these journals comprises a short shaft or pintle 6 slidably mounted in one of the bearings which are mounted on the outer faces of the side members of the frame 1, each of said bearings being in the form of a hollow sleeve registering at its inner end with an opening 8 formed in the plate on which it is mounted. The outer end 7 of this sleeve is closed and provided with a central aperture through which the pintle 6 passes and fits therein, sufficient space being provided to permit the free sliding of said pintle in said opening. This pintle 6 is provided on its outer end with an operating handle 10 and on its inner end with two longitudinally spaced stops 11 and 12 arranged on opposite sides of the plate in which the pintle or journal is mounted for limiting the movement of said pintle in opposite directions. A coiled spring 13 is mounted on said pintle within said sleeve and bears at one end against the stop 12 and at its other end against the closed outer end 7 of the sleeve, said spring being designed to exert its tension to project the inner end of said pintle forwardly into frictional engagement with the bore of the spool which carries the steno-type roll. The journals at each end of the frame are arranged in proper alinement to adapt them to enter the openings in the opposite ends of the roller carrying spool as is shown clearly in Fig. 4.

The journals at the rear end of the frame are like that just above described with the exception of the one on the outer side which shows the pintle 6' elongated to pass through a spring casing 15 mounted on the side plate 3, and on said pintle 6' is fixed a pinion 14 for a purpose to be described. The handle 10' on the outer end of the pintle 6' is here shown in the form of a milled head to facilitate the turning of this pintle by hand when found necessary or desirable. The bearing sleeve 7' in which this pintle 6' is mounted is also slightly different from those of the other journals, said sleeve being elongated

to extend transversely across the casing 15, and is provided at its outer end with a socket in which a coiled spring 13' is mounted and forces the pintle inwardly into locking engagement with the roller spool.

Mounted between the pairs of journals at the opposite ends of the frame 1 and in a plane above the plane occupied by these journals, are two vertically alined rubber covered rollers 16 and 17, the roller 17 being larger than the roller 16 and arranged below it. These rollers 16 and 17 are revolvably mounted in the plates 2 and 3 of the frame, and one end of the shaft 18, which carries the larger roller 17, is projected through the plate 2 of the frame 1 and is provided on said projecting end with a ratchet wheel 19 which is fixed to said shaft 18 and adapted to turn therewith. A pawl 20 is pivoted on the plate 2 in position to engage the teeth of the ratchet wheel 19 and is held in yielding engagement therewith by means of a coiled spring 21 secured at one end to said pawl beyond its pivotal point, and at its other end to the plate 2 as is shown clearly in Fig. 2. This pawl 20 is mounted on the inner end of a lever 22 which is fulcrumed at 23 on the side plate 2, and has its free end curved upwardly and then bent laterally outwardly at right angles to form a horizontal arm 22'. The free end of this arm 22' is offset downwardly, enlarged in width as at 24, and provided with downwardly extending flanges 22''. The pawl 20 has an elongated slot 20' therein slidably engaged with the headed stud 23' which guides and retains said pawl in operative position relative to the ratchet 19. The lever 22 and the pawl 20 have their fulcrums placed at such points as will give the ratchet 19, with the rubber roll 17 attached, the desired circumferential movement at each actuation of the space bar of the typewriter, so that said roll 17 will be actuated a predetermined distance on each actuation of said space bar to withdraw a greater or less amount of the steno-type strip, as will be hereinafter more fully described. The rolls 16 and 17, ratchet 19, pawl 20 and lever 22 all cooperate and compose what will be termed a withdrawing means for the steno-type strip.

Mounted in the casing 15 which is secured to the outer face of the side plate 3 is a means for winding the paper strip upon the spool S' from the spool R when the same has been withdrawn from the latter by the rolls 16 and 17. This winding mechanism, as shown, comprises a shaft 26 which is here shown extending transversely across the frame 1 and projecting at one end beyond the plate 3 and through the casing 15 mounted thereon with its terminal extending beyond the outer face of said casing and provided with an operating lever or handle

27 for actuating said shaft. A coiled spiral spring 28 similar to those used in clocks and the like, is shown mounted in the casing 15 and attached to the shaft 26 and which exerts its tension to normally turn said shaft in the direction of the arrow *a* and which is held against unwinding by means of a pawl 29 mounted on the outer face of the casing 15 which engages a ratchet 30 secured to the shaft 26 outside the casing 15 and inside the handle 27, a cover 31 being provided for housing said ratchet and pawl to protect them against dust and the like. This cover 31 is provided with an opening 31' on its upper side by which an entrance may be had to the interior of the same to disengage the pawl 29 from the ratchet 30 when it is desired to operate the device.

Fixed to the shaft 26 is a large gear 32 which may be of any suitable or desired size, preferably having about seventy-two teeth, more or less, and which is designed to mesh with a pinion 33 carried by a stub shaft 34 mounted in the side walls of the casing 15. Another gear 35 is fixed to the shaft 34 and receives motion from said shaft which it imparts to the pinion 14 mounted on the pintle 6' with which it meshes and through said pintle turns the spool carried thereby, to provide for the rewinding of the paper strip S as said strip is unwound from the roller R.

In the use of this holder, the steno-type roll R, carrying the strip S to be transcribed, is placed between the plates 2 and 3 at the front of the frame 1 and held in operative revolvable position therein by means of the journals 6 which enter the ends of the spool on which said spool R is formed, the spring tension of the journals 6 being sufficient to prevent the roll from unwinding faster than it is used. The end of the strip S is then carried backward and upward and threaded between the rubber rolls 16 and 17, the frictional contact of which exerts a sufficient pulling motion on the strip to withdraw the same from the spool R. The strip is then carried to the spool S' to the rear of the frame, and wound upon the same. The pawl 29 is then disengaged from the ratchet 30 and the gradual unwinding of the spring 28 operates the gearing between the pintle 6' and the shaft 26 which carries said spring and imparts a slow rotary motion to said pintle, thereby turning the pintle and the spool S' connected therewith, so that the strip S which is engaged with said spool is wound up thereon as it is withdrawn from the spool R by the rolls 16 and 17. After the entire strip has been fed through the rolls 16 and 17 and wound on the spool S', said spool may be removed from the frame and the spring wound up again by turning the handle 27, and after it has been wound it

is locked in wound position by engaging the pawl 29 with the ratchet 30, in which position it will be held until it is desired again to wind up a used strip on an empty spool at the rear of the attachment. From the above description it will be obvious that this attachment operates automatically to wind up the strip which has been used and fed by the rollers 16 and 17 and that said feeding is accomplished by actuating the space bar of the typewriter with which it is connected, the device being thus very simple, yet efficient and reliable in operation.

We claim as our invention:

1. The combination with a typewriter having a horizontal vertically movable word spacing bar, of a copy holder arranged alongside of said typewriter and composed of a pair of spools, a strip of paper disposed between said spools, means for withdrawing said strip from one of said spools, said means including a horizontal lever having an arm extending horizontally from the free end thereof, and in alinement with the word spacing bar of the typewriter, means for securing the free end of said arm to the adjacent end of said bar, and spring means connected with the other spool for winding said strip upon the same as it is withdrawn by the above referred to means.

2. The combination with a typewriter

having a horizontal vertically movable word spacing bar, of a copy holder arranged alongside of said typewriter and composed of a pair of spools, one of the latter being arranged in advance of the other, a strip of paper disposed between said spools, a pair of peripherally contacting rolls receiving said strip of paper therebetween, a ratchet connected to one of said rolls, a vertically slidable pawl engaged with said ratchet to operate the same and revolve said rolls, a horizontal lever fulcrumed intermediate of its ends and having one of the latter connected with said pawl, a horizontal arm extending laterally outwardly from the other end of said lever and disposed in longitudinal alinement with the word spacing bar of the typewriter, means for securing the free end of said arm to the adjacent end of said bar, and spring means connected with the rear spool for winding said strip upon the same as it is withdrawn by said rolls.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

DONALD J. DAILEY.
HUBERT C. MAEL.

Witnesses:

JAMES A. McDANIEL,
EMMET A. WORK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."