

(No Model.)

3 Sheets—Sheet 1.

B. W. SCOTT.

WRITING TABLET AND MANUSCRIPT HOLDER.

No. 514,777.

Patented Feb. 13, 1894.

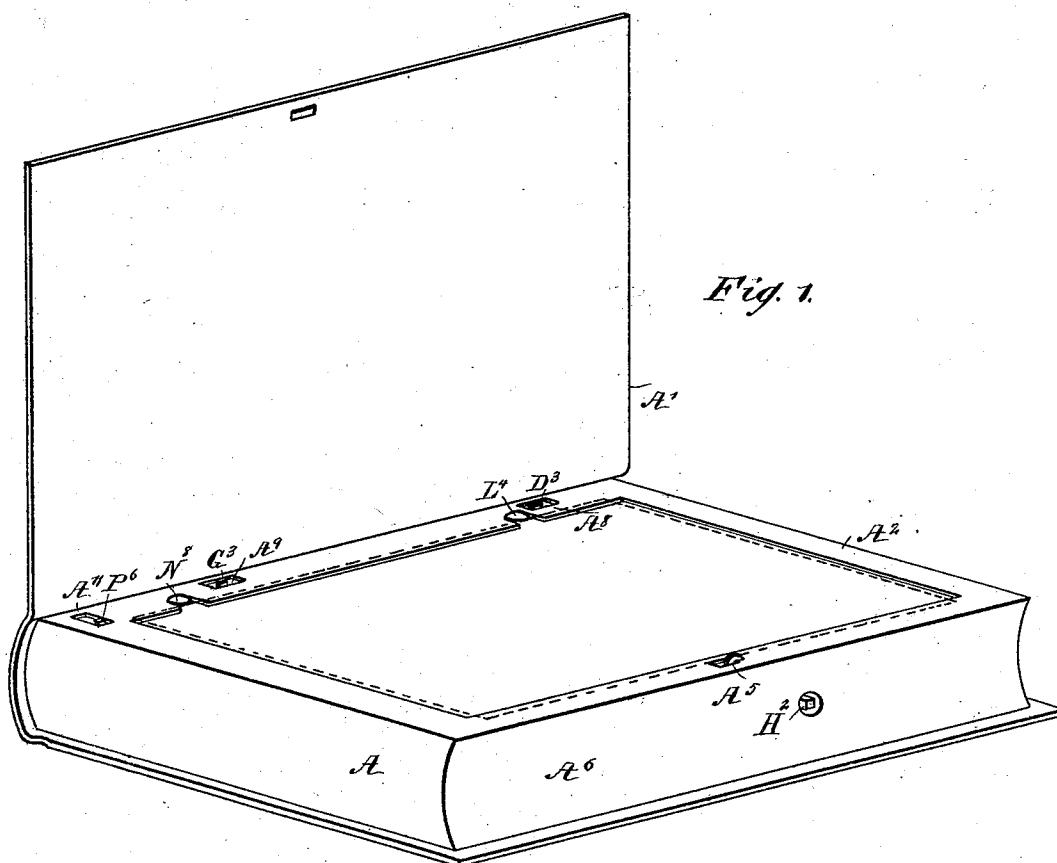


Fig. 1.

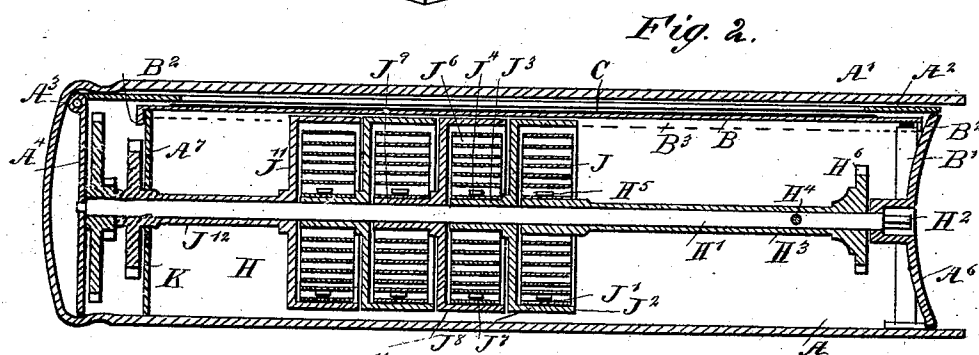


Fig. 2.

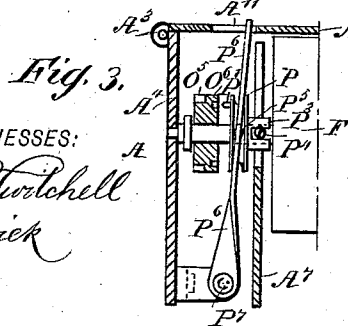


Fig. 3.

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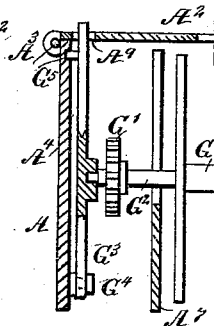


Fig. 4.

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(No Model.)

3 Sheets—Sheet 2.

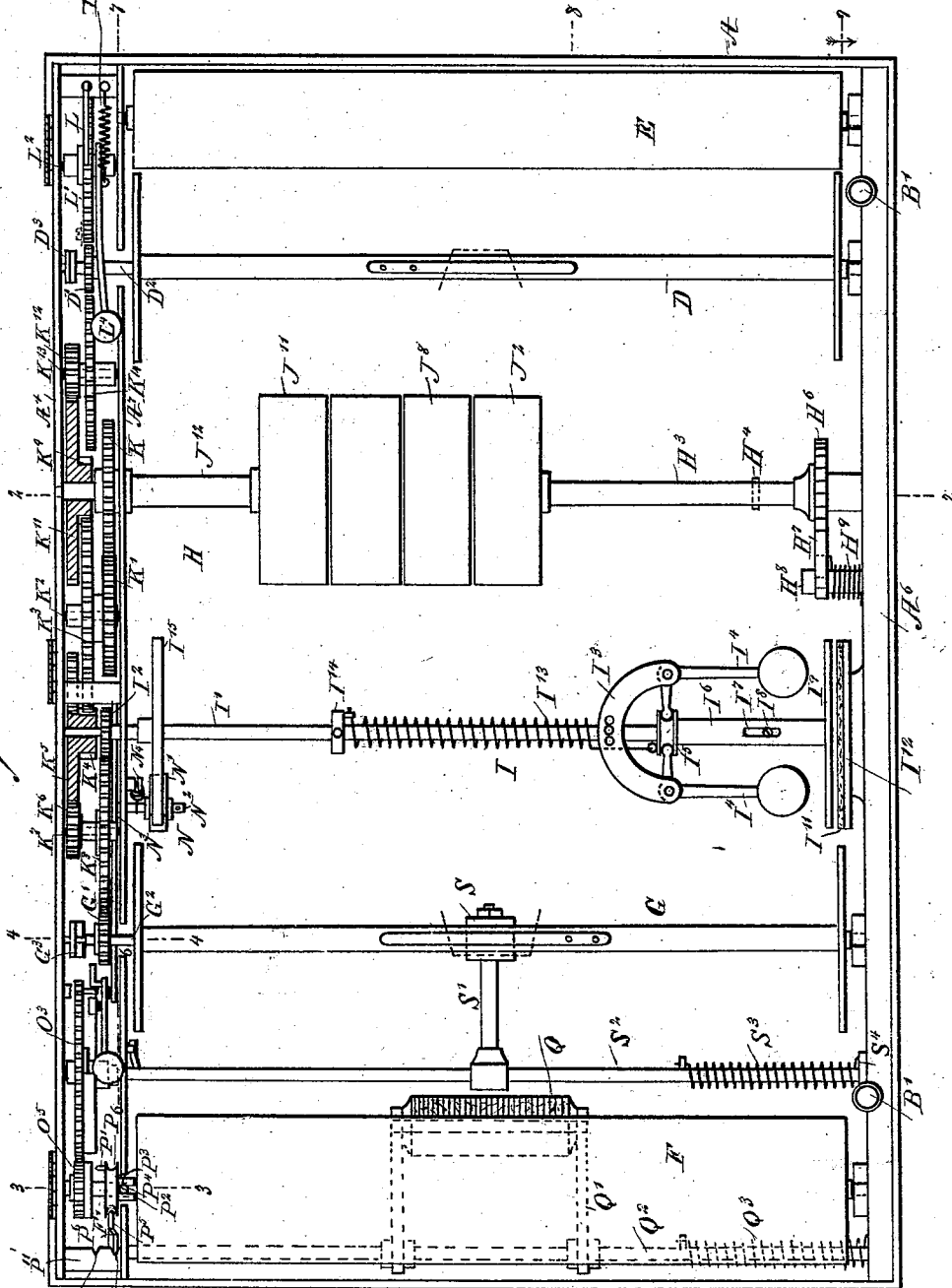
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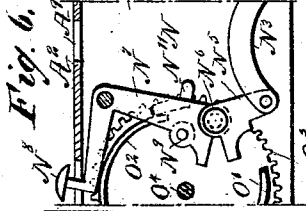
Fig. 5.



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Fig. 6.



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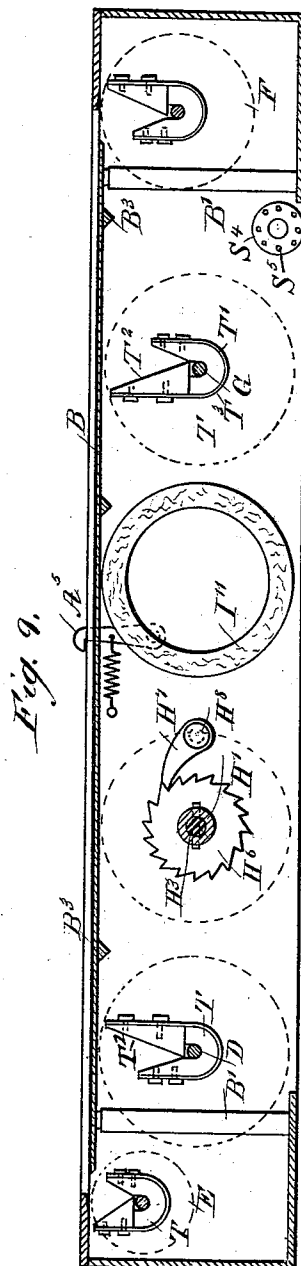
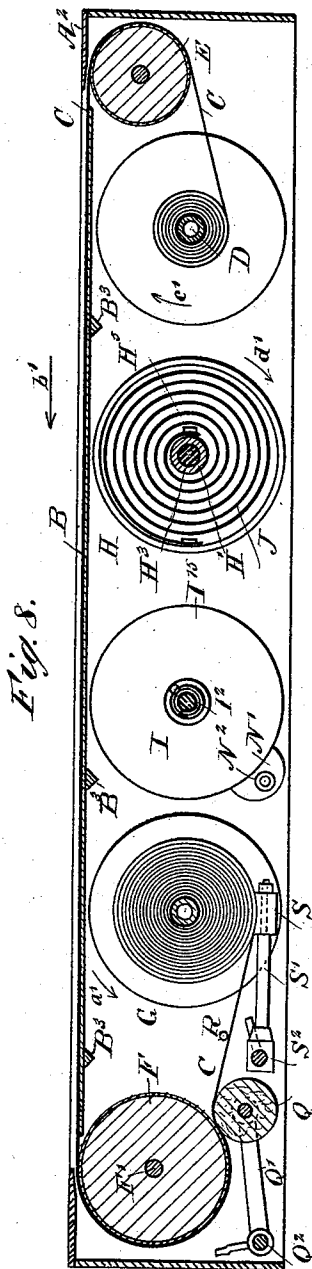
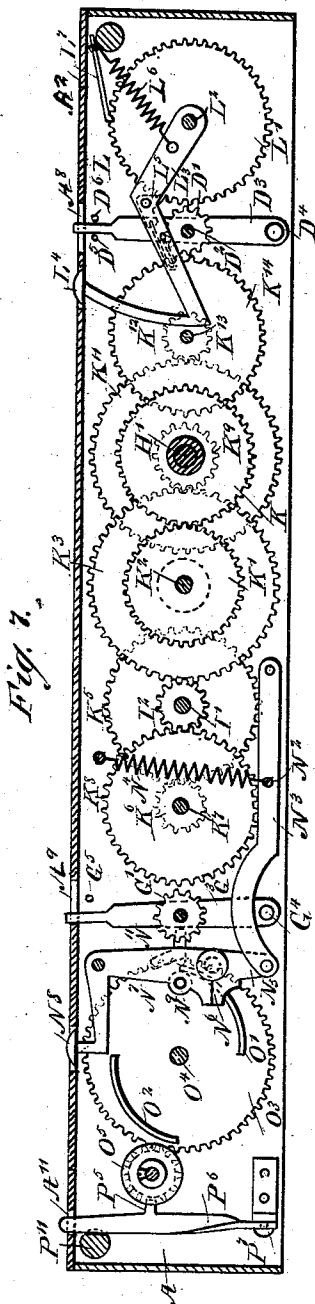
3 Sheets—Sheet 3.

B. W. SCOTT.

WRITING TABLET AND MANUSCRIPT HOLDER.

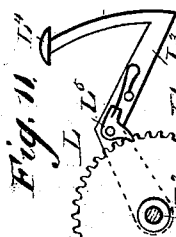
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Fig. 10.



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UNITED STATES PATENT OFFICE.

BARTON W. SCOTT, OF SAN JOSÉ, ASSIGNOR TO HIMSELF, AND WILLIAM RICE, OF SARATOGA, CALIFORNIA.

WRITING-TABLET OR MANUSCRIPT-HOLDER.

SPECIFICATION forming part of Letters Patent No. 514,777, dated February 13, 1894.

Application filed January 17, 1893. Serial No. 458,637. (No model.)

To all whom it may concern:

Be it known that I, BARTON W. SCOTT, of San José, in the county of Santa Clara and State of California, have invented a new and Improved Writing-Tablet or Manuscript-Holder, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved writing tablet and manuscript holder, which is simple and durable in construction, actuated by a spring motor, and more especially designed for the use of reporters, writers, public speakers, type setters and others, and arranged to permit of conveniently writing the subject matter on a continuous sheet or web of paper, and displaying the written matter in the proper position either for the speaker when delivering the speech or for the copyist or the type setter to work from, or for other purposes.

The invention consists of a casing made in the shape of a book and provided with two winding rollers for the paper, and a spring actuated mechanism arranged in the said casing and adapted to be connected with either roller for imparting a traveling motion to the paper in either direction.

The invention also consists of certain parts and details, and combinations of the same, as will be hereinafter described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement showing the cover of the book casing open. Fig. 2 is a transverse section of the same on the line 2—2 of Fig. 5. Fig. 3 is an enlarged transverse section of part of the improvement on the line 3—3 of Fig. 5. Fig. 4 is a similar view of part of the improvement on the line 4—4 of Fig. 5. Fig. 5 is a plan view of the improvement showing the cover and lid removed, parts being shown in section. Fig. 6 is a sectional side elevation of part of the improvement on the line 6—6 of Fig. 5. Fig. 7 is a longitudinal section of the improvement on the line 7—7 of Fig. 5. Fig. 8 is a similar view of the improvement on the line 8—8 of Fig. 5. Fig. 9

is a rear sectional side elevation of the same on the line 9—9 of Fig. 5. Fig. 10 is a face view of one of the wheels of the mechanism; and Fig. 11 is a side elevation of a lever and ratchet wheel mechanism.

The improved writing tablet and manuscript holder is provided with a casing A preferably made of a light sheet metal such as aluminum or other material, the casing being arranged in the shape of a book as plainly illustrated in Fig. 1, with one of the covers A' arranged to swing open to present a rectangular frame A² hinged at A³ to the top edge of the rear side A⁴ of the casing A, the front end of the said rectangular frame A² resting on the top edge of the front side A⁶, as plainly shown in the drawings. This hinged frame A² is locked in place at its front side by a spring pressed latch A⁵ pivoted to the inside of the front side A⁶.

Under the rectangular frame A² is arranged a table B over which passes the paper C made in a continuous sheet or web and on which the subject matter is written or the matter written thereon is read from, in delivering a speech or copying the subject matter, as the case may be. The table B is supported at its front on posts B' erected inside of the casing A, at the front side A⁶ thereof, as plainly shown in Fig. 2, the rear of the said table resting on a longitudinally-extending partition A⁷ formed in the casing near the rear end A⁴, as plainly illustrated in Figs. 2 and 5. The front and rear ends of the table B are bent downward to form flanges B² fitting over the posts B' and the partition A⁷, to securely hold the said table in place. The table B is preferably made of a light sheet metal and is strengthened on its under side by a series of transversely-extending ribs B³, as plainly indicated in Fig. 8. The front and rear sides of the table B project beyond the opening of the frame A², while the ends of the said table do not quite reach to the ends of the frame opening, as will be readily understood by reference to Figs. 8 and 9. The paper C is in the form of a continuous sheet of any desirable length, and is adapted to be wound up or unwound from a transversely-extending paper drum D, from which the paper passes over a roller E located in the upper end of the casing A and

journaled at its ends in the front side A⁶ and the partition A⁷ of the said casing, as plainly shown in Fig. 5. The top of the roller E is in alignment with the top of the table B, so that the paper passes from the roller onto and over the top of the table B, to finally pass from the lower end of the latter under the frame A² upon a second roller F arranged transversely in the lower end of the casing A and likewise journaled in the front and rear sides of the casing A. The paper passes from the lower end of the roller F to a paper drum G arranged in front of the roller F and extending transversely, parallel to the other drum D and the rollers E and F, as will be readily understood by reference to Fig. 5. In order to hold the ends of the paper in place on the drums D and G, I provide each of the latter with a suitable clamping spring (see Fig. 5), or other device for the same purpose. Now, it will be seen that when the paper drum G is turned in the direction of the arrow a', then the paper C is wound on the said drum and unwound from the drum D, the paper passing over the table A in the direction of the arrow b'. When, however, the drum D is rotated in the direction of the arrow c', then the paper winds up on the drum D and unwinds from the drum G, the paper then passing over the table B in the inverse direction of the arrow b'.

In order to impart the movement described to the paper drums D and G, I provide a spring action mechanism H, arranged within the casing A and constructed in such a manner as to be connected with either of the said drums to rotate the same in the directions mentioned for imparting a traveling motion to the paper C in either a forward or backward direction, that is in the direction of the arrow b', or the inverse direction thereof. In order to regulate the speed of this spring action mechanism H, I provide a governor I, also arranged within the casing A and connected with the spring action mechanism to govern the speed of the same to regulate the speed of the traveling sheet of paper. This spring action mechanism presently to be described, is provided with a transversely extending shaft H' journaled in suitable bearings held on the front and rear sides A⁶ and A⁴ of the casing A, the said shaft being located between the drums G and D, as plainly illustrated in Fig. 5. The forward end H² of the shaft H' projects into a recess formed on the outside of the front side A⁶ of the casing A, as illustrated in Fig. 2, and this outer end of the shaft H' is made square for receiving a key to wind up the spring action mechanism, as will be hereinafter more fully described.

On the shaft H' is fitted a sleeve H³ secured in place by a pin H⁴, and on the rear end of the sleeve H³ is secured a pin H⁵ engaged by the inner end of a coil spring J, connected at its outer end with a pin or hook J' secured to the inside of a spring barrel J² having a hub J³ mounted to rotate loosely on the shaft H', see Fig. 2. On this hub J³ of the spring

barrel J² is secured a pin or hook J⁴ similar to the pin or hook H⁵ and connected with the inner end of a second coil spring J⁶ attached at its outer end, to a pin or hook J⁷ secured to the inside of the rim of a second spring barrel J⁸, the hub J⁹ of which is mounted to rotate loosely on the shaft H'. This hub likewise carries a pin and is connected with a third coil spring attached at its outer end to a third spring barrel also mounted to rotate loosely on the shaft H', and also connected with a fourth coil spring attached at its outer end to a fourth spring barrel J¹¹, having a hub J¹² mounted to rotate loosely on the shaft H'. The sleeve H³ previously mentioned and connected with the first coil spring J is provided at its front end with a ratchet wheel H⁶, see Figs. 2, 5 and 9, engaged by a pawl H⁷ hung on a stud H⁸ secured to the inner surface of the front side A⁶ of the casing A, the said pawl being pressed on by a spring H⁹ to hold the pawl in mesh with the ratchet wheel H⁶, to prevent a return movement of the shaft H' after the several springs are wound up.

When the several coil springs are unwound and it is desired to wind up the mechanism, then the operator applies a key or other tool on the square end H² of the shaft H and turns the same in the direction of the arrow d', so that the sleeve H³ secured on the said shaft winds up the several springs J, J⁶, &c., as the said springs are coupled together in the manner above described. As a return movement of the shaft H' is prevented by the pawl H⁷ engaging the ratchet wheel H⁶, the several springs unwind, causing the barrel J¹¹ to turn in the inverse direction of the arrow d', until the entire mechanism is run down. This spring actuating mechanism H drives the governor I, which latter regulates the speed of the machine, and for this purpose, the hub J¹² carries a gear wheel K in mesh with a gear wheel K' mounted to turn loosely on a stud K² secured on the rear side A⁴ and the partition A⁷, as plainly shown in Fig. 5.

On the face of the gear wheel K' is secured a larger gear wheel K³ in mesh with a pinion K⁴ mounted to rotate loosely on the shaft I' of the governor I, the rear face of the said pinion carrying a gear wheel K⁵ in mesh with a pinion K⁶ mounted to rotate loosely on a shaft K⁷ also held on the rear side A⁴ and the partition A⁷. On the hub of the pinion K⁷ is secured a large gear wheel K⁸ in mesh with a pinion I² secured on the shaft I' of the governor I. The shaft I' is journaled in suitable bearings in the sides of the casing A and carries near its front end a U-shaped arm I³ on which are fulcrumed the ball levers I⁴ engaging with their short arms a grooved pulley I⁵ secured on a sleeve I⁶ mounted to turn with and to slide on the shaft I', the sleeve being mounted for this purpose loosely on the shaft I' and is provided with a slot I⁷ through which extends a pin or screw I⁸ secured on the said shaft I'.

On the front end of the sleeve I⁶ is fastened

a disk I⁹ adapted to move in contact with a disk or ring I¹¹ made of felt or other suitable material so that the frictional contact between the two disks I⁹ and I¹¹ causes a uniform running of the governor, thus controlling the speed of the entire machine. The felt disk I¹¹ is secured on a disk I¹² made of sheet metal or other material and fastened to the inner surface of the front side A⁶ of the casing A. A spring I¹³ is connected at one end with the rear face of the pulley I⁵, the said spring being coiled on the shaft I¹ and attached at its other end to a collar I¹⁴ secured on the said shaft I¹. The spring I¹³ serves to draw the sleeve I⁶ with its disk I⁹ rearward out of contact with the felt disk or ring I¹¹, when the speed of the machine decreases. It is understood that the rotary motion given by the spring-actuated mechanism H to the hub J¹², as above described, causes a turning of the train of gear wheels K, K', K³, K⁴, K⁵, K⁶, K⁸, and I², so that the shaft I¹ is rotated at a high rate of speed, and the governor ball-levers I⁴ are thrown outward to move the disk I⁹ in frictional contact with the disk I¹¹ to regulate the speed of the machine, as above described.

In order to turn the paper drum D in the direction of the arrow c', from the spring-actuating mechanism H, the following device is provided. The gear wheel K³, previously mentioned also meshes into a pinion K⁹ mounted to rotate loosely on the rear end of the shaft H' of the aforesaid mechanism H, as will be readily understood by reference to Fig. 5. On the rear face of this pinion K⁹ is secured a large gear wheel K¹¹ in mesh with a pinion K¹² mounted to rotate loosely on short shaft K¹³ journaled in suitable bearings on the rear side A⁴ and the partition A⁷, of the casing A. On the hub of this pinion K¹², is secured a large gear wheel K¹⁴, adapted to be engaged by a pinion D', secured on the reduced end D² of the shaft of the drum D. The rear reduced end of this shaft D² is journaled in suitable bearings held in a lever D³ arranged vertically and pivoted at its lower end at D⁴ to the inner surface of the rear side A⁴ of the casing A. The upper end of the lever D³ is reduced to form a handle which extends through an opening A⁸ in the rear side of the frame A²; see Figs. 1 and 7; so that the end of this lever can be taken hold of, on top of the casing A, by the operator, when the cover A' is swung back. The longitudinal swinging motion of the lever D³ is limited by a stop pin, not shown, and secured to the back of the lever D³ near its handle end, the said pin being adapted to engage either of two dents D⁵ or D⁶, formed in the rear side A⁴, as shown in Fig. 7. The movement of the lever D³ is limited by a similar stop pin adapted to engage recesses or dents G⁵ formed in the rear side A⁴, see Figs. 4 and 7. Now, it will be seen that when the lever D³ is moved to the left, the pinion D' is thrown in mesh with the gear wheel K¹⁴, and as the latter receives a

rotary motion by the train of gear wheels K¹², K¹¹ and K⁹, from the revolving gear wheel K³ driven from the spring actuated mechanism H, a rotary motion is given to the paper drum D in the direction of the arrow c', to wind up the paper.

In order to rotate the paper drum D by hand at the will of the operator, I provide the mechanism L arranged in the upper end of the casing A between the partition A⁷ and the rear side A⁴; see Figs. 5 and 7. When the lever D³ is moved to the right, the pinion D' is thrown in mesh with a large gear wheel L' mounted to rotate loosely on a short shaft L² held in suitable bearings in the partition A⁷ and the side A⁴. A lever L³ is loosely fulcrumed on the shaft L² and is provided with an upward extension adapted to pass through a notch formed on the frame A³ near the opening A⁸, as shown in Fig. 1. The outer end of this extension of the lever L³ carries a button L⁴ adapted to be pressed on by the operator. On the lever L³ is held a spring pressed pawl L⁵ engaging the gear wheel L' so that when the button L⁴ is pressed the said lever L³ swings downward and the pawl L⁵ imparts a rotary motion to the gear wheel L', which, on account of being in mesh at the time with the pinion D', rotates the paper drum D in the direction of the arrow c'. A spring L⁶ is connected with the lever L³ to draw the latter back into its uppermost position as soon as the pressure on the button L⁴ ceases. A dog L⁷ engages the gear wheel L' to prevent a return movement of the latter. The distance the button L⁴ is pressed down regulates the distance the sheet of paper C is wound on the paper drum D. Usually, however, the button L⁴ is pressed such a distance as to move the paper forward the distance between two lines ruled on the paper, so that every time the button L⁴ is pressed a new line is presented to the operator writing on the paper, the hand being supposed to be stationary. When the lever D³ is in a vertical position, as shown in Fig. 7 its pinion D' is out of mesh with either the gear wheel K¹⁴ or the gear wheel L'. This intermediate position of the lever D³ is necessary so that the paper can unwind from the paper drum D and be wound up on the drum G by the mechanism presently to be described.

In order to keep the actuating mechanism locked during the time the paper is to remain at a standstill, I provide a brake mechanism N under the control of the operator. This brake mechanism N is provided with a brake block N' adapted to be held in frictional contact with the periphery of a brake wheel I¹⁵ secured on the shaft I' of the governor I; see Figs. 5 and 8. The brake block N' is held on a pin N² projecting from the brake lever N³ arranged between the partition A⁷ and the rear side A⁴, the fulcrum of the lever being on the partition. A spring N⁴ secured on the casing is connected with the said lever N³ so as to move the latter upward to hold the brake block N' in frictional contact with

the brake wheel I¹⁵ to lock the governor and consequently the actuating mechanism H with the said governor, as before explained. The free end of the brake lever N⁸ is pivotally-connected with an arm N⁵ connected by an articulated joint N⁶ with one arm of a bell crank lever N⁷ pivoted to the casing and provided on its upper arm with a button N⁸ projecting through a recess in one edge of the frame A² so that the said button is under the control of the operator. A tripping mechanism O is connected with the brake mechanism N, and for this purpose, the lower or downwardly-extending arm of the bell crank lever N⁷ is provided with a friction roller N⁹ and a fixed L-shaped arm N¹¹ adapted to engage opposite sides of cams O' and O² formed on the front face of a gear wheel O³ mounted to rotate loosely on a shaft O⁴ journaled in the partition A⁷ and the rear side A⁴. The gear wheel O³ is in mesh with a pinion O⁵ mounted to rotate loosely on the shaft F' of the roller F, the said pinion O⁵ being provided at its front face with a series of recesses O⁶ arranged in a circle; see Fig. 10, and adapted to be engaged by a pin P' projecting rearwardly from the rear face of a grooved shifting wheel P, mounted to slide on and to turn with the shaft F' of the roller F; see Fig. 5. The hub P² of the wheel P is provided for this purpose with a slot P³ engaged by a pin P⁴ fastened on the shaft F', the said pin permitting the wheel P to slide to engage the pin P' with one of the apertures O⁶ and at the same time the pin causes the wheel P to revolve at the time the roller F is turned by the traveling of the paper. The groove in the periphery of the wheel P is engaged by a pin P⁵ projecting from a lever P⁶ fulcrumed at its lower end at P⁷ on the rear side A⁴, as plainly shown in Fig. 3. The upper end of this lever P⁶ extends through an aperture A¹¹ in the frame A², so that the outer end of the lever is under the control of the operator, who can shift the lever transversely to move the pin P' in or out of contact with an aperture O⁶. In order to lock the lever P⁶ in place in either an inward or outward position, I engage the said lever, with notches P⁸ and P⁹ formed in a bar P¹¹ extending transversely and secured on the partition A⁷ and the rear side A⁴, as illustrated in Fig. 5. When the paper travels over the roller F, the latter is rotated and when the lever P⁶ is then shifted transversely to move the pin P' in contact with an aperture O⁶ in the gear wheel O⁵, then the latter is rotated with the said roller F and imparts a rotary motion to the gear wheel O³, so that the cams O' and O² on the said gear wheel O³ can act on the friction roller N⁹, so as to open the articulated joint N⁶ connecting the arm N⁵ with the bell crank lever N⁷. This is done to stop the traveling motion of the paper at the time the latter moves in the inverse direction of the arrow b', and has moved the distance of one page, that is the

distance exposed to view in the opening of the frame A².

When the lever N³ is in its usual position, as shown in Fig. 6, then the brake shoe N' is applied on the wheel I¹⁵, the button N⁸ of the bell crank lever N⁷ then being in an uppermost position, and the articulated joint N⁶ being open. Now, when it is desired to start the spring actuating mechanism H, the operator presses on the button N⁸ so that a swinging motion is given to the bell crank lever N⁷ which, by its connection with the arm N⁵ pivoted to the lever N³ causes the latter to swing downward, thus moving the brake shoe N' out of frictional contact with the wheel I¹⁵. As the governor is thus released or unlocked, the spring actuating mechanism H, by its springs, as above described, can impart a rotary motion to the hub J¹² which sets the several trains or gear wheels in motion. It is understood that when the wheel P is with its pin P', out of contact with the gear wheel O⁶, the latter, as well as the gear wheel O³ is at a standstill and the cams O' and O² are out of action as regards the opening and closing of the articulated joint N⁶ connecting the arm N⁵ with the bell crank lever N⁷. The paper on the under side of the roller F is pressed in contact with the latter near the middle by a roller Q made of felt or other suitable soft material and journaled in a frame Q' projecting from a transversely-extending shaft Q² mounted to turn in suitable bearings arranged in the front side A⁶ and partition A⁷. A spring Q³ is coiled on the said shaft Q² and fastened with one end to the side A⁶ and at its other end on a pin secured on the shaft Q², so as to hold the roller Q always in contact with the under side of the paper C to press the latter against the roller F. The latter, as well as the roller E in the upper part of the casing A, is preferably covered with rubber or other suitable elastic material to increase the adhesion of the paper on the said rollers to prevent slipping. A brake shoe S presses the paper on the paper drum G, the said brake shoe being arranged on the under side of the paper and secured on an arm S' projecting from a transversely-extending shaft S² journaled in suitable bearings in the side A⁶ and the partition A⁷. A spring S³ is coiled on one end of the shaft S² and secured at one end to a disk S⁴ fixed to the side A⁶, and provided with a series of apertures S⁵ one of which is engaged by the end of the spring. The latter is attached at its other end to a pin on the said shaft S², the said spring serving to hold the arm S' upward to move the brake shoe S in firm contact with the paper on the increasing and diminishing of the roll of paper, as it accumulates or lessens on the drum G. The disk S⁴ serves to increase or decrease the tension of the spring S³. The bearings T for the shafts of the drums G and D, and the shafts of the rollers E and F on the front side A⁶, are preferably of the construction illustrated in Fig. 9, each bearing T being formed with a semi-

circular lower seat part T' and a beveled top part T² secured on a spring T³ fastened to the lower part T'. One side of the latter is slightly beveled so as to form a V-shaped groove when the upper part T² is over the seat for the shaft, as plainly shown in Fig. 9. Now, it will be seen that in order to place one of the shafts in its bearing T, the end is simply passed down the beveled parts of the bearing so that the upper part T² finally swings to one side, its spring T³ permitting such movement until the shaft has dropped into the opening in the lower part T'. The spring pressed upper part T² then snaps over the end of the shaft and holds the same securely in place in the bearing. As previously described, the opposite bearings of the shafts G and D are in the levers G³ and D³ respectively.

The operation is as follows: In using the machine for writing on the paper C, the operator places his right hand and pen or pencil on the manuscript paper in the position most convenient for him, with his left hand on the open cover A', so as to hold the latter in an open position. The operator then places the left fore-finger on the button L⁴ held in an uppermost position by the spring L⁶ and on pressing the said button, the lever L³, by its pawl L⁵, turns the gear wheel L' in mesh with the pinion D', so that the paper drum D winds up the paper, the drum turning in the direction of the arrow c', and the paper then moving over the table B in the inverse direction of the arrow b'. Now, as soon as the operator has finished a line, he presses the button L⁴ down again to again move the paper forward, the distance of one or two lines, according to the depth the button L⁴ is depressed. The paper C is of sufficient length to enable a reporter or other person to note down a lengthy speech or other matter. Now, in case the operator desires to review and correct the writings wound up on the paper drum D he moves first the lever P⁶ into the notch P⁸ so that the pin P' is disconnected from the pinion O⁵. He then shifts the lever G³ to the right to throw the pinion G' in mesh with the gear wheel K⁸. He then moves the lever D³ to the left to throw the pinion D' out of mesh with the gear wheel L'; the lever then standing in a vertical position with its pinion out of mesh on either side. The operator next presses the button N⁸ to disengage the brake block N' from frictional contact with the brake wheel I¹⁵, so that the power of the springs of the spring-actuating mechanism H sets these several gearings in motion in such a manner that the shaft G turns in the direction of the arrow a' to wind back the paper, the latter at the same time unwinding from the paper drum D and traveling over the table B. When the paper has finally been wound up again on the paper drum G until the first word the operator has written again appears in the opening of the frame A² and the party desires to correct or read off the written matter or to copy the same, he then moves the lever P⁶ transversely

to engage the same in the notch P⁸, at the same time moving the pin P' into one of the openings O⁶ in the pinion O⁵ so that the latter will rotate with the roller F. The lever D³ is then shifted to the left to move the pinion D', in mesh with the gear wheel K¹⁴. The operator then shifts the lever G³ to the left to move the gear wheel G' out of mesh with the gear wheel K⁸. The operator now reads off the written matter or copies the same or otherwise disposes of the first page so-called, that is the matter appearing in the opening of the frame A². As soon as this has been done, the operator presses the button N⁸ so that the spring actuating mechanism is again started, whereby the paper is wound up on the paper drum D, and at the same time unwinds from the drum G and rotates the roller F, which, by the pinion O⁵, rotating with it, imparts a rotary motion to the gear wheel O³, so that the cams O' and O² thereon actuate the bell crank lever N⁷ by one of the cams coming in contact with the friction roller N⁹ and the arm N¹¹, so as to hold the brake-block N' off the wheel I¹⁵ until the paper has traveled the distance of one page, after which the friction roller N⁹ and the arm N¹¹, pass off the respective cam to again permit the spring N⁴ to swing the lever N⁸ upward, so as to apply the brake to stop the actuating mechanism at the time the bottom of the first page disappears in the upper end of the opening of the frame A². A second page appears now in the opening of the frame A², and is disposed of as described, after which the operator again presses the button N⁸, to start the spring actuating mechanism H to cause the paper to travel in the inverse direction of the arrow b', at the same time actuating by the roller F, the gear wheel O³ carrying the cams O' and O², which automatically actuate the brake mechanism N, to apply the brake block N' at the time the bottom line of the second page disappears in the upper end of the opening of the frame A². It will be seen that in this manner the machine will display before a public speaker his notes or his full manuscript, for use in delivering the speech, or the written matter is presented before a type setter, as his copy, or before a player at a musical instrument, as his written music.

I do not claim the governor and the brake mechanism specifically, as these parts form the subject matter of another application for a patent, filed May 31, 1893, Serial No. 476,007.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a device of the class described, the combination, with a casing having an apertured top frame arranged under one cover, a table located under the frame and adapted to support the paper, rollers journaled in the ends of the said casing and onto which passes the paper from the ends of the said table, and paper-winding drums arranged in the said casing be-

tween the said rollers and onto which wind the ends of the paper, of a ratchet mechanism adapted to be operated by hand, for winding the paper at intervals on the upper winding drum, a motor arranged in the casing independently of the said ratchet mechanism, separate handle levers to shift either of the drums into gear with the motor to impart a traveling motion to the paper in either direction, an actuating button and means for starting and stopping the mechanism, substantially as described.

2. In a device of the class described, the combination with a spring actuating mechanism, a train of gear wheels connected with the said mechanism, and a governor for automatically regulating the speed of the said train of gear wheels, of a spring-controlled brake mechanism, constructed to act on the governor, for stopping and starting the same, the train of gear wheels and spring-actuating mechanism, substantially as shown and described.

3. In a device of the class described, the combination with a casing having an apertured top frame and a table under the said frame and over which passes the paper, of rollers journaled in the ends of the said casing and over which pass the ends of the paper after leaving the said table, paper winding drums arranged in the said casing and onto which wind the ends of the paper, a spring actuated mechanism arranged in the said casing, a train of gear wheels connected with the said spring actuated mechanism, a governor driven from the said train of gear wheels, and means substantially as described, for throwing either of the said paper winding drums in gear with the said train of gear wheels, substantially as shown and described.

4. In a device of the class described, the combination with a casing having an apertured top frame and a table under the said frame and over which passes the paper, of rollers journaled in the ends of the said casing and over which pass the ends of the paper after leaving the said table, paper winding drums arranged in the said casing and onto which wind the ends of the paper, a spring actuated mechanism arranged in the said casing, a train of gear wheels connected with the said spring actuated mechanism, a governor driven from the said train of gear wheels, means substantially as described, for throwing either of the said paper winding drums in gear with the said train of gear wheels, and a brake mechanism for stopping and starting the said driving mechanism composed of the gear wheels and spring actuating mechanism, substantially as shown and described.

5. In a device of the class described, the combination with a casing having an apertured

top frame and a table under the said frame and over which passes the paper, of rollers journaled in the ends of the said casing and over which pass the ends of the paper after leaving the said table, paper winding drums arranged in the said casing and onto which wind the ends of the paper, a spring actuated mechanism arranged in the said casing, a train of gear wheels connected with the said spring actuated mechanism, a governor driven from the said train of gear wheels, and means substantially as described, for throwing either of the said paper winding drums in gear with the said train of gear wheels, a brake mechanism for stopping and starting the said driving mechanism composed of the gear wheels and spring actuating mechanism, and a device actuated from one of the said rollers to automatically hold the said brake mechanism in a releasing position, to permit the driving mechanism to actuate one of the said winding drums to wind up the paper for a certain distance, substantially as shown and described.

6. A device of the class described, provided with a spring actuating mechanism comprising a winding shaft, a coil spring connected at its inner end with the said shaft, a spring barrel connected with the outer end of the said spring, a second spring connected with the hub of the said spring barrel, a second spring barrel connected with the outer end of the said second spring and mounted to rotate loosely on the said shaft, a third spring connected with the hub of the said second spring barrel, and a fourth spring barrel mounted to rotate loosely on the said shaft and which is connected with the outer end of the said third spring, substantially as shown and described.

7. A device of the class described, provided with a spring actuating mechanism comprising a winding shaft, a coil spring connected at its inner end with the said shaft, a spring barrel connected with the outer end of the said spring, a second spring connected with the hub of the said spring barrel, a second spring barrel connected with the outer end of the said second spring and mounted to rotate loosely on the said shaft, a third spring connected with the hub of the said second spring barrel, a fourth spring barrel mounted to rotate loosely on the said shaft and which is connected with the outer end of the said third spring, and a ratchet and pawl mechanism connected with the said shaft for preventing a return movement of the latter, substantially as shown and described.

BARTON W. SCOTT.

Witnesses:

C. R. STETSON,
WM. RICE.