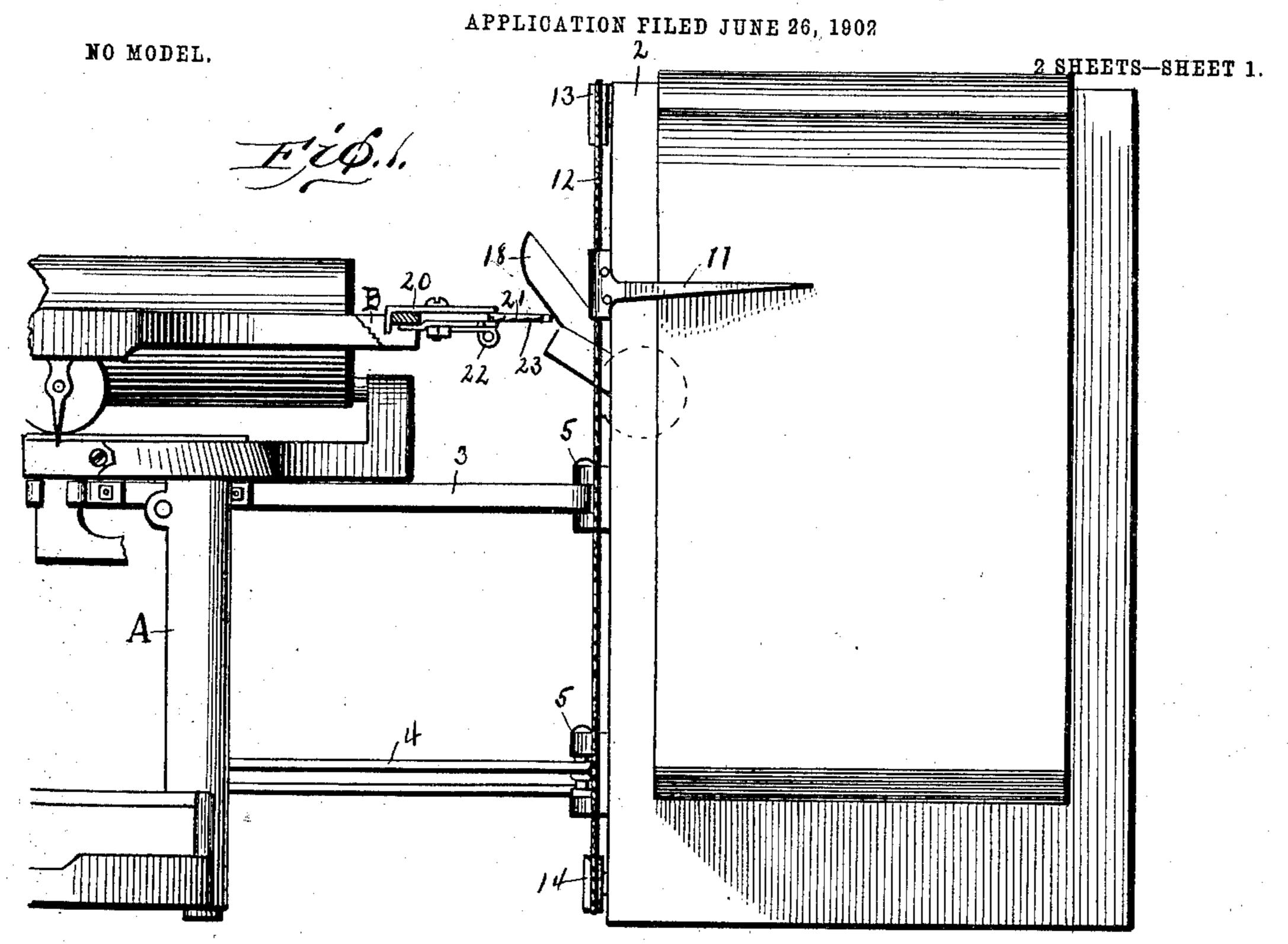
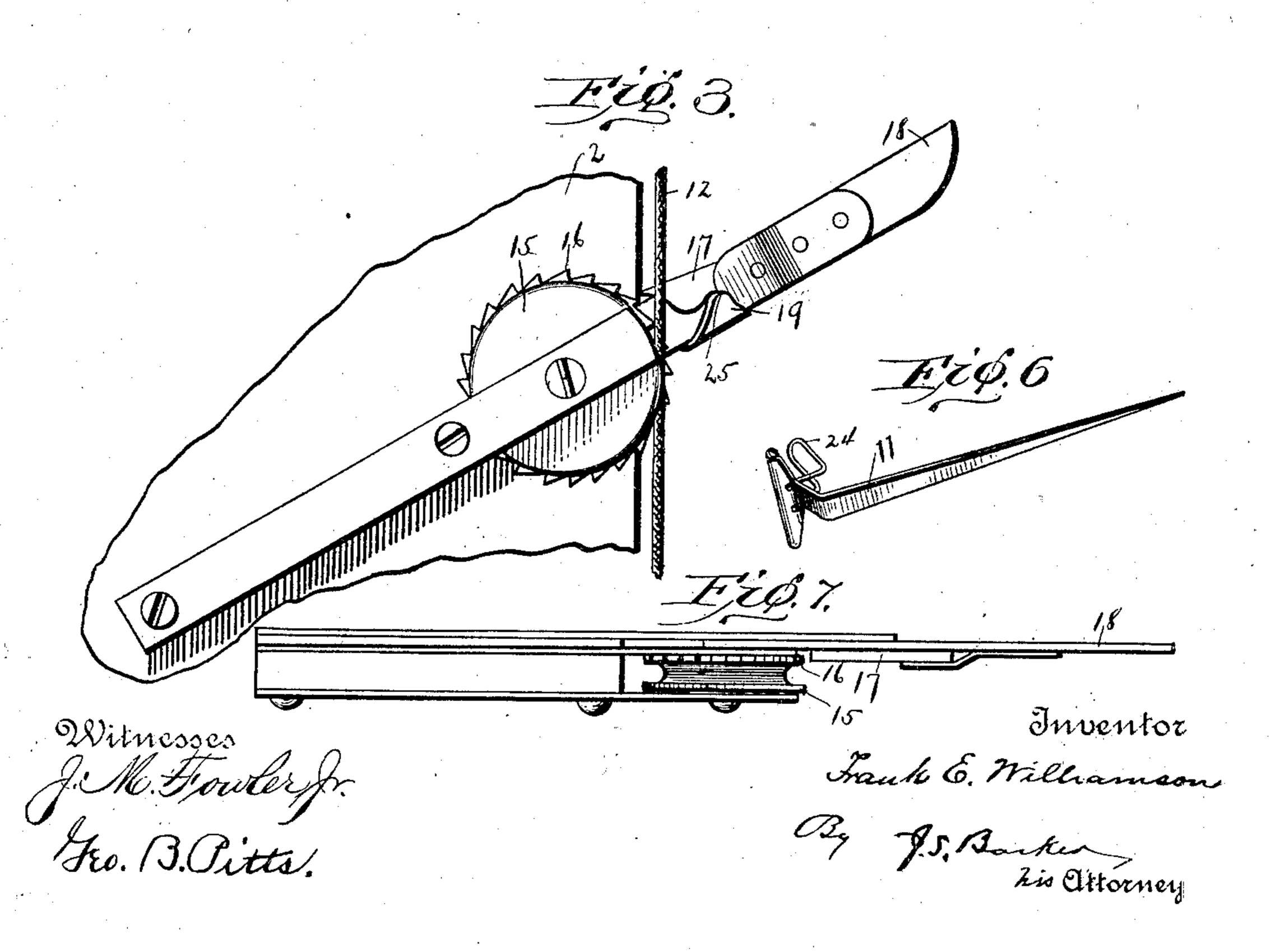
F. E. WILLIAMSON.

COPY HOLDER FOR TYPE WRITERS.





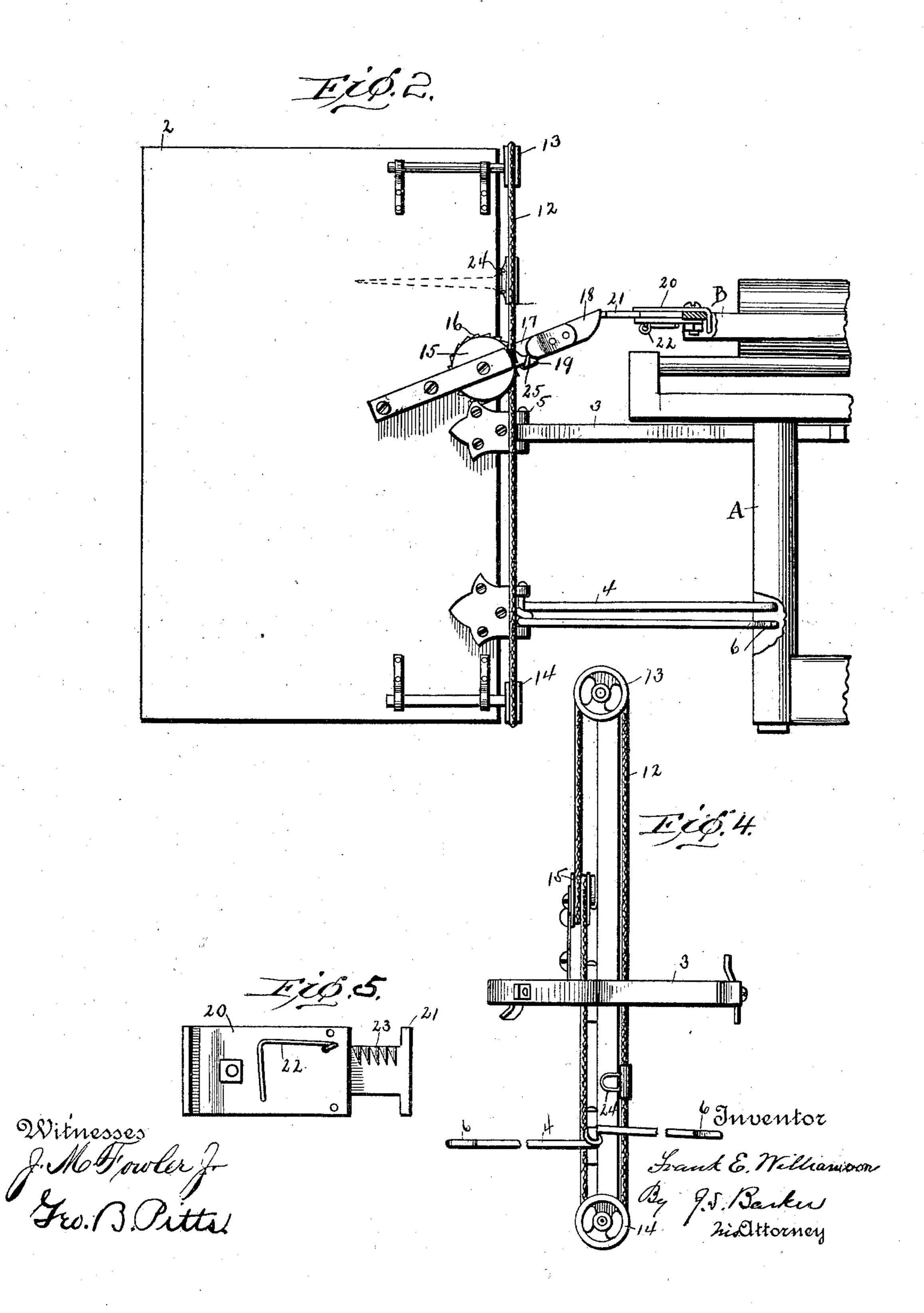
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COPY HOLDER FOR TYPE WRITERS.

APPLICATION FILED JUNE 26, 1902.

NO MODEL.

2 SHEETS-SHEET 2



United States Patent Office.

FRANK E. WILLIAMSON, OF GLASCO, KANSAS.

COPY-HOLDER FOR TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 724,982, dated April 7, 1903.

Application filed June 26, 1902. Serial No. 113, 309. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. WILLIAMSON, a citizen of the United States, and a resident of Glasco, Cloud county, Kansas, but temporarily residing at Washington, District of Columbia, have invented a new and useful Copy-Holder for Type-Writers, of which the following is a specification.

My invention relates to copy-holders in which use is made of pointers or line-markers that are moved across the face of the copy; and it has for its object to produce copy-holders of this character that shall be adapted to be used in connection with type-writers such as employ movable carriages and that are arranged to be operated automatically by the movements of the type-writer carriage.

The invention consists in means whereby this and other objects are attained, as will be 20 hereinafter set forth.

In order that my invention may be the better understood, I have in the accompanying drawings illustrated the preferred embodiment thereof without, however, wishing thereby to limit my invention to the precise construction and arrangement of parts shown.

In such drawings, Figure 1 is a front view of a copy-holder embodying my invention, represented as being applied to a type-writer of a well-known make. Fig. 2 is a rear view of the holder, some of the parts being in a different position from that represented in Fig. 1. Fig. 3 is a detail view, enlarged, of the means for imparting motion to the pointer or marker. Fig. 4 is a detail edge view of the holder. Fig. 5 is an elevation of the adjustable contact-piece. Fig. 6 is a detail perspective view of the pointer or line-marker. Fig. 7 is a top plan view of the means for imparting motion to the cord to which the pointer is attached.

In the accompanying drawings, A represents the stationary frame portion of a type-writer, which may be of any usual or preferred construction, and B the movable carriage. The copy-holder is supported adjacent to one end of the type-writer, preferably near that end toward which the carriage B is moved when it is intended to commence that supported in any desired manner; but I prefer to connect it directly with some of the

stationary frame parts of the type-writer, as I thereby am enabled to insure the holder having a fixed position relative to the type-55 writer when it is set up for use.

The copy-holder consists of a supporting board or back 2. This may be of any preferred size, preferably being about that of a legal-cap sheet of paper, and it may be formed 60 of any suitable material, either wood or metal. It is held in an upright position by the brackets 3 and 4, to the outer ends of which the board is hinged, as indicated at 5. This hinging of the board to its supporting brackets or 65 standards permits of a limited adjustment or change of the inclination of the board to suit the convenience of the user. The upper bracket or supporting-standard 3 is preferably formed of a pair of bars arranged to be 70 clamped to parts of the stationary frame of the type-writer, while I prefer that the lower bracket or standard should be made of highlyelastic wire, the ends of which are formed into hooks 6, adapted to engage with suitable sta-75 tionary parts of the type-writer. I do not wish to be limited to these particular means for supporting the board or back 2; but they are well adapted for use in connection with a type-writer such as illustrated and permit of 80 the holder being quickly applied to or removed from the type-writer, as may be required, and at the same time support it firmly when in use.

11 designates a pointer or line-marker in front of the board 2 and arranged to be 85 moved across the same to indicate the line being copied. It is supported by a cord or other flexible device 12, mounted upon rollers 13 and 14, supported at the edge of the board and preferably near the top and bottom there- 90 of, respectively. In order to move the cord, and through it the pointer or marker, I carry the cord one or more times around a pulley or roller 15, which is arranged intermediate the rollers 13 and 14 and preferably on the 95 back side of the holder. The pulley 15 is formed with or has attached to it a ratchetwheel 16, with which there is adapted to engage a pawl 17, carried by a lever 18. The lever is preferably pivoted in the same frame 100 that supports the pulley 15 and upon the same axis. It extends beyond the inner edge of the board 2 toward the type-writing ma-

riage of the type-writer is moved to the righthand position—that is, the position to begin a new line—either some part of the typewriter itself or an attachment secured there-5 to engages with the lever and moves it backward into the position indicated in Fig. 1. As the lever moves from the normal position, (indicated in Fig. 2,) where it is held by a supporting-piece 19, to the forward position ં (indicated in Fig. 1) the pawl 17 engages with the ratchet-wheel 16 and moves the cord, and with that the pointer.

The support 19 is so disposed as to hold the lever 18 at the proper inclined position to 15 cause it to move in advance of the carriage when the latter or the contact part which it may carry comes into engagement therewith as it comes to its initial position. As the type-writer carriage moves in the other direc-20 tion it gradually leaves the lever, which comes

back to normal position by gravity.

Instead of having some portion of the typewriter carriage engage directly with the lever 18 I prefer to mount a contact-piece upon the 25 carriage and to make this contact-piece adjustable, so that it will give a longer or shorter movement to the lever-arm 18, according to the position to which the contact-piece may be set.

20 indicates a holder which is arranged to be clamped to some suitable part of the movable type-writer carriage, such as to one of the end rails thereof. In this holder there is mounted the adjustable contact-piece proper, which is designated 21 and consists of a plate or bar adapted to slide into and out of the holder 20. One of its faces is ratcheted, and

with such face there engages a spring pawl or dog 22. The ratchet-teeth 23 on the con-40 tact-piece 21 are preferably so constructed as to allow the latter to be freely pulled out, but to prevent its being moved in the opposite direction except when the spring-pawl is posi-

tively moved to free the contact-piece. It 45 will be understood without further explanation that when the contact-piece is pulled out it will give to the lever 18 a longer movement than when it is further pushed into the holder and that the extent to which the pointer

50 moves at each reciprocation of the type-writer carriage depends upon the amount of movement imparted to the lever 18. By these means the operator is relieved of the necessity of adjusting the pointer by hand, it being

55 moved automatically a step at a time as the carriage is shifted in the usual work of typewriting. By adjusting the contact-piece in its holder 20 the operator can easily cause the pointer to move over the face of the copy at

60 a speed which is approximately exactly that at which he is copying. If it should be found that the pointer is not moving at the proper speed to suit the work being done, but, as will often be the case, it moves temporarily

65 too fast and then temporarily too slow, these slight inaccuracies can be easily corrected by

ing it at the proper point. In order to allow of this adjustment by hand either forward or backward, I prefer that the connection be- 70 tween the cord 12 and the means which actuate it should be normally broken. Thus when the lever 18 occupies its normal position (indicated in Figs. 2 and 3) the pawl is held out of engagement with the ratchet-wheel 16, so 75 that the line-marker and the cord which operates it may be moved freely either backward or forward, such movement causing the rotation of the wheel 15 and notbeing in any wise interfered with by the pawl and its car- 80 rying-lever. This I effect by arranging a stop 25 in the path of the pawl and in such a position relative thereto that the nose or engaging end of the pawl is held upward and out of engagement with the ratchet-teeth when 85 the lever 18 occupies its normal position. As soon as the lever begins to move forward the pawl is carried out of engagement with this stop and then falls by gravity directly in engagement with the ratchet-wheel 16.

In order to hold the pointer down upon the copy, I provide its heel end—that is, the end which is connected with the cord 12—with a contact-piece adapted to bear against the adjacent edge of the board 2. This contact- 95 piece may be formed of wire and made elastic.

It is indicated in the drawings at 24.

Having described my invention, what I claim, and desire to secure by Letters Patent,

1. The combination, with a type-writing machine having a reciprocating carriage, of a support for the copy, a line-marker arranged to move over the face of the copy, means for carrying the line-marker supported near the 105 upper and lower edges respectively of the copy-support, and means for intermittently moving the said line-marker carrier arranged to be operated by the carriage of the typewriter and arranged in a position intermediate ate the supports for the line-marker carrier, substantially as set forth.

2. The combination, with a type-writing machine having a reciprocating carriage, of a support for the copy, a line-marker arranged 115 to move over the face of the copy, an endless cord with which the marker is connected, supports over which the cord passes arranged respectively near the top and bottom of the copysupport, and means arranged to be operated 120 by the carriage of the type-writer for intermittently moving the cord, such means having connection with the cord between the supports thereof, substantially as set forth.

3. The combination, with a type-writing 125 machine having a reciprocating carriage, of a support for the copy, a line-marker arranged to move over the face of the copy, the cord with which the line-marker is connected, supports about which the cord passes arranged 130 respectively near the top and bottom of the copy-support, a lever arranged to be actuated by the carriage of the type-writer, connections adjusting the pointer by hand and again start- | between the lever and the cord arranged be-

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tween the supports of the latter, and such connections being broken under normal conditions and made when the lever is actuated,

substantially as set forth.

4. The combination, with a reciprocating carriage of a type-writing machine, of a copy-support, a line-marker arranged to move over the face of the copy, a cord to which the line-marker is connected, pulleys over which the cord passes arranged near the top and bottom respectively of the copy-support, a pulley around which the cord passes disposed in a position intermediate the said pulley-supports, and means for actuating the said intermediate pulley arranged to be operated by the carriage of the type-writer, substantially as set forth.

5. The combination of a support for the copy, a line-marker arranged to move in front of the copy-support, means for carrying the line-marker, and means arranged in rear of the copy-support for actuating the carrier for the line-marker with a step-by-step movement,

substantially as set forth.

support for the copy, an endless cord mounted adjacent to one edge of the copy-support, supporting - pulleys about which the cord passes arranged to bring one run of the cord in front of the board and the other in rear thereof, a line-marker connected with the front run of the cord, and means for intermittently operating the cord connected with the rear run thereof, substantially as set forth.

7. The combination of a support for the copy, a line-marker arranged in front of the support, a carrier for the line-marker, means for giving intermittent motion to the said carrier arranged in rear of the copy-support, and having a projecting arm or lever extending outward to one side of the copy-holder, sub-

stantially as set forth.

8. The combination with the reciprocating carriage of a type-writing machine, of a copy45 holder having a line-marker, a cord to which the line-marker is connected, a pulley around which the cord passes, a ratchet-wheel connected with the said pulley, a pawl for moving the ratchet-wheel, and a lever carrying the pawl arranged to be operated by the carriage of the type-writing machine, substantially as set forth.

9. The combination with a reciprocating carriage of a type-writer, of a copy-holder having a line-marker, means for moving the line-marker arranged to be intermittently operated by the reciprocating carriage of the

type-writer, and means for varying the extent to which the line-marker shall be moved at each reciprocation of the carriage, substan- 60

tially as set forth.

10. The combination with a reciprocating carriage of a type-writer, of a copy-holder having a line-marker, means for intermittently moving the line-marker, and an ad-65 justable contact-piece carried by the type-writer carriage and arranged to engage with and operate the line-marker-moving means, substantially as set forth.

ports, and means for actuating the said intermediate pulley arranged to be operated by the carriage of the type-writer, substantially as set forth.

5. The combination of a support for the copy, a line-marker arranged to move in front intermediate the said pulley-supports, and means for actuating the said intercarriage of a type-writer, of a copy-holder having a line-marker, a lever, connections between the lever and the line-marker for moving the latter, and an adjustable contact-piece carried by the carriage of the type-75 writer, and arranged to move the lever, sub-

stantially as set forth.

12. The combination of a copy-holder and the supporting-brackets therefor, arranged to engage with the frame of a type-writing ma- 80 chine, one of the said brackets being elastic and provided with hooks, substantially as set forth.

13. The combination of a copy-holder, supporting-brackets therefor, and the hinges 5 85 connecting the copy-holder and the brackets,

substantially as set forth.

14. The combination of a copy-holder, a line-marker, an endless cord to which the line-marker is secured, a ratchet device for mov- 90 ing the cord with which the cord has frictional engagement, a pawl for engaging the ratchet device, a lever which carries the pawl, a stop device for holding the lever in a predetermined position and another stop for holding 95 the pawl out of engagement with the ratchet device when the lever is held in the said predetermined position, whereby, under such conditions, the line-marker is left free to be moved by hand in either direction, substan- 100 tially as set forth.

15. The combination of a copy-holder, a line-marker, a cord to which the line-marker is secured arranged adjacent to the edge of the copy-holder, and a contact-piece 24 carried by the line-marker arranged to engage with the edge of the copy-holder and hold the line-marker against the face of the copy-

holder, substantially as set forth.

FRANK E. WILLIAMSON.

Witnesses:

J. S. Barker, Geo. R. Linkins.