

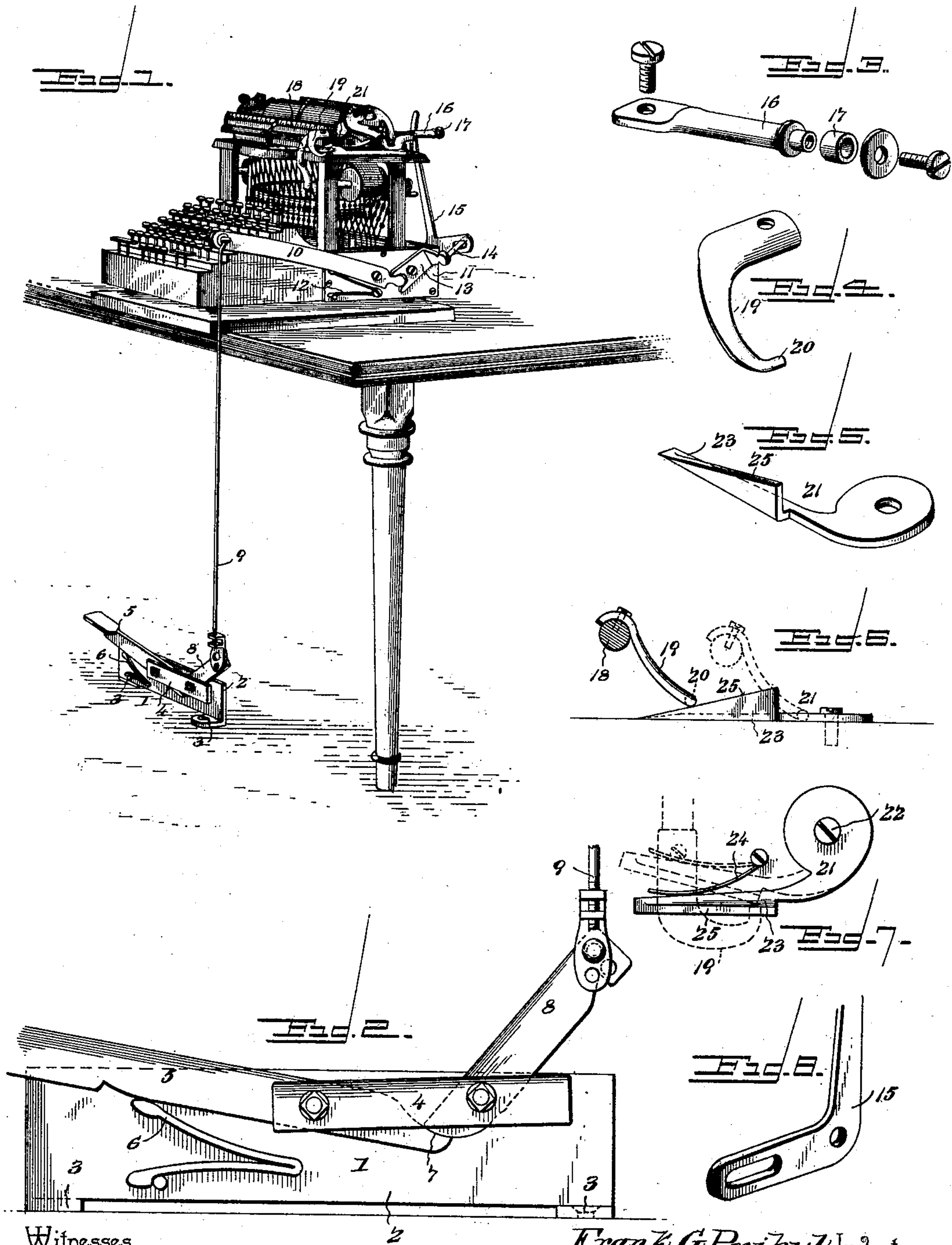
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Patented Sept. 19, 1899.

F. G. PRIBYL.
ATTACHMENT FOR TYPE WRITING MACHINES.

(Application filed Sept. 29, 1898.)

(No Model.)



Witnesses

E. F. Stewart

[Signature]

By *W. S.* Attorneys,

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UNITED STATES PATENT OFFICE.

FRANK G. PRIBYL, OF HOUSTON, TEXAS.

ATTACHMENT FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 633,347, dated September 19, 1899.

Application filed September 29, 1898. Serial No. 692,199. (No model.)

To all whom it may concern:

Be it known that I, FRANK G. PRIBYL, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented a new and useful Attachment for Type-Writing Machines, of which the following is a specification.

My invention relates to attachments for type-writing machines, and particularly to a carriage and platen shift adapted to be applied with slight modification to any typewriter of the ordinary construction having a paper-carriage mounted for movement parallel with the lines of writing; and it has for its object to provide a simple and efficient construction and arrangement of parts adapted to be operated by a foot-treadle for returning the carriage at the end of each line of writing to arrange it in position for the succeeding line of writing.

My invention also contemplates the provision of means for throwing the line-spacing lever on the carriage of a machine of the class indicated for turning the roller-platen a distance necessary to bring a plain portion of the surface of a sheet traversing said platen into the printing-plane.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a carriage-shifting and platen-advancing apparatus embodying my invention applied in the operative position to a typewriter machine of the Smith Premier or analogous type, only so much of the machine being shown as to illustrate the application of my attachment. Fig. 2 is a detail view of the foot-lever and connections. Fig. 3 is a similar view with the parts detached of the pressure pin or stud. Figs. 4 and 5 are detached views of the trip and cam for advancing the paper-roll. Fig. 6 is a front view of the trip and cam mechanism, showing in full and dotted lines different positions of the trip with relation to the cam. Fig. 7 is a plan view of the cam, showing in dotted lines the position of the cam as the trip is moved past the same in a forward direction. Fig. 8 is a

detail view of the short arm of the shifting-lever.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

Mounted upon a suitable support 1, consisting in the construction illustrated of a main plate 2, having attaching-ears 3, adapted to be secured to the floor, and a side plate 4, is a foot lever or treadle 5, fulcrumed at an intermediate point and having a return-spring 6. This foot lever or treadle is provided with a cam-faced extremity 7 for contact with the short arm of an intermediately-pivoted rocking lever 8, also mounted between the side plate 4 and the main plate of the support. The long arm of the rocking lever is connected by a rod or pitman 9 with a spring-retained lever 10, also of the first order, which is fulcrumed upon a securing-plate 11, adapted to be fastened to the side of a typewriter frame, said lever 10 having an actuating-spring 12. The short arm of the lever 10 has an interlocking connection with the short arm of an intermediate or tilting lever 13, also mounted upon said securing-plate 11 and provided with a pin 14 for engagement with the short arm of a shifting-lever 15 of the bell-crank type. The return-spring of the operating-lever 10 is adapted to raise the long arm thereof, and hence raise the connected end of the rocking lever 8 to arrange its beveled short arm contiguous to the beveled extremity of the foot lever or treadle 5. This elevation of the long arm of the operating-lever 10 also has the effect of depressing the short arm of the tilting lever 13, and hence throwing the long arm of the shifting-lever 15 toward the left of the machine, where it is beyond the path of movement of a pressure-pin 16 on the carriage of the machine, said pressure-pin having suitable attaching devices, consisting in the construction illustrated of a flattened extremity engaged by a screw, which is threaded in a suitable part of the typewriter carriage. This pressure-pin also has an antifriction sleeve or roll 17, with which comes in contact the long arm of the shifting-lever. Therefore when the foot lever or treadle is depressed at its free end it depresses the long arm of the rocking lever 8, corre-

spondingly depresses the long arm of the operating-lever 10, throws the tilting lever to depress the short arm of the shifting-lever, and thus draws the long arm of the last-named lever toward the right, thereby causing contact with the pressure-pin and moving the type-writer carriage in opposition to the carriage-feeding devices to a position suitable for commencing a line of writing. When the foot lever or treadle is released, the return-spring 12 elevates the long arm of the operating-lever 10, and hence returns the shifting-lever 15 to its initial position beyond the path of forward movement of said projection on the carriage, whereby no obstacle is offered to the movement of the carriage. Obviously the specific means of attachment of the parts to machines of different kinds and makes may be varied to avoid interfering with the functions of the various parts of the type-writing machine proper.

Secured to the line-spacing lever 18 of the type-writing machine is a trip 19, having a downwardly-extending laterally-deflected or cam-faced arm which terminates in a rearwardly-projecting finger 20, and upon the stationary frame of the type-writing machine is a cam 21, preferably pivoted, as at 22, and having an arm 23, which is limited as to outward or forward swinging movement, but is free to swing rearwardly in opposition to a spring 24, which serves to return said arm to its normal position when the latter is released. This arm carries a bevel-faced rib or flange 25, disposed in the path of the rearward projection 20 of the trip, whereby as the carriage is returned from its position at the left of the machine to its position at the right for the beginning of a new line said rearward projection 20 rides upon the cam, and thereby raises the line-spacing lever 18 to advance the roller-platen one step. After passing the abrupt extremity of the cam the extremity of the trip drops, and owing to the laterally-deflected or cam-faced portion of the trip, as shown in Fig. 6, the subsequent movement of the carriage to the left in the operation of the machine in writing brings the deflected or cam-faced portion of the trip into contact with the abrupt shoulder at the end of the cam 25 and deflects the arm of the cam rearwardly against its actuating-spring, as shown in Figs. 6 and 7, to allow said trip to pass, after which the cam returns to its normal position for subsequent engagement with the rearward projection or stud 20 of the trip. Thus a machine provided with an attachment constructed in accordance with my invention is adapted to be operated in the usual way, with the exception that at the end of each line of writing the foot lever or treadle is depressed to return the carriage to its initial position, and as the carriage approaches such initial position the trip, which is fixed to the line-spacing lever, rides upon the cam on the carriage-frame and is elevated to throw the roller-platen one space, as in the ordinary practice.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. A carriage-shifting attachment for type-writing machines, having a shifting-lever mounted for swinging movement in a plane parallel with the lines of writing, a rearward projection on the paper-carriage, arranged in the path of the shifting-lever, and a spring-returned operating-lever having an interlocking connection with the shifting-lever, to impart movement thereto in either direction, whereby when released the operating-lever returns the shifting-lever to its initial position beyond the limit of forward movement of said projection on the carriage, substantially as specified.

2. A carriage-shifting attachment for type-writing machines, having a shifting-lever provided with a long arm for swinging movement in a plane parallel with the lines of writing, a pressure-pin extending rearwardly from the paper-carriage and arranged in the path of said arm of the shifting-lever, an operating-lever mounted for swinging movement in a plane transverse to the lines of writing, a tilting lever fulcrumed at an intermediate point and having its short arm interlocked with the contiguous short arm of the operating-lever, said tilting lever being provided with a pin operatively engaged with the short arm of the shifting-lever, yielding means for maintaining said levers in their normal positions, with the long arm of the shifting-lever beyond the path of said pressure-pin during the advance movement of the paper-carriage, and a foot lever or treadle operatively connected with said operating-lever, substantially as specified.

3. A carriage-shifting attachment for type-writing machines, having a shifting-lever mounted for swinging movement in a plane parallel with the lines of writing, a pressure-pin carried by the paper-carriage in the path of the swinging movement of said shifting-lever, an operating-lever mounted for swinging movement in a plane perpendicular to the lines of writing, operating connections between the operating-lever and the shifting-lever, a foot lever or treadle mounted for swinging movement in a vertical plane and having a bevel-faced short arm, a rocking lever having a bevel-faced short arm arranged in the path of the short arm of the foot lever or treadle, and connections between the rocking lever and the operating-lever, substantially as specified.

4. The combination with a type-writing machine having a line-spacing lever, a trip attached to the line-spacing lever and having a rigid rearwardly-extending pin or projection, and a yielding cam mounted upon the frame of the type-writing machine in the path of

said projection or pin, and adapted for temporary displacement by the trip during the forward movement of the carriage, substantially as specified.

- 5 5. The combination with a type-writing machine having a line-spacing lever, a trip 19 fixed to the line-spacing lever of the paper-carriage and having a side inclined or cam face and a rearwardly-projecting terminal
10 stud or pin 20, and a pivotal cam yieldingly mounted upon the frame of the type-writing machine with a beveled surface 25 in the path of said stud or pin of the trip, and spring ac-

tuated to hold it in its normal position, said cam having a terminal shoulder in the path 15 of the side cam of the trip during the advance movement of the paper-carriage, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 20 the presence of two witnesses.

F. G. PRIBYL.

Witnesses:

H. SEFFEY,
C. T. COOMBS.