W. A. DAVIS.

TYPE WRITER ATTACHMENT.

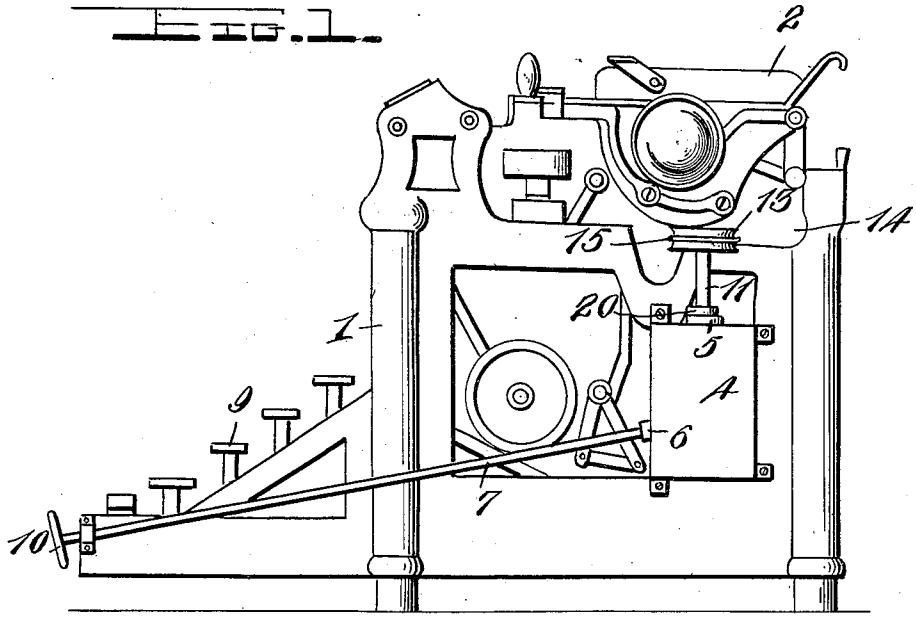
APPLICATION FILED JULY 22, 1911.

1,018,411.

Patented Feb. 27, 1912.

2 SHEETS—SHEET 1.

FIG. 1.



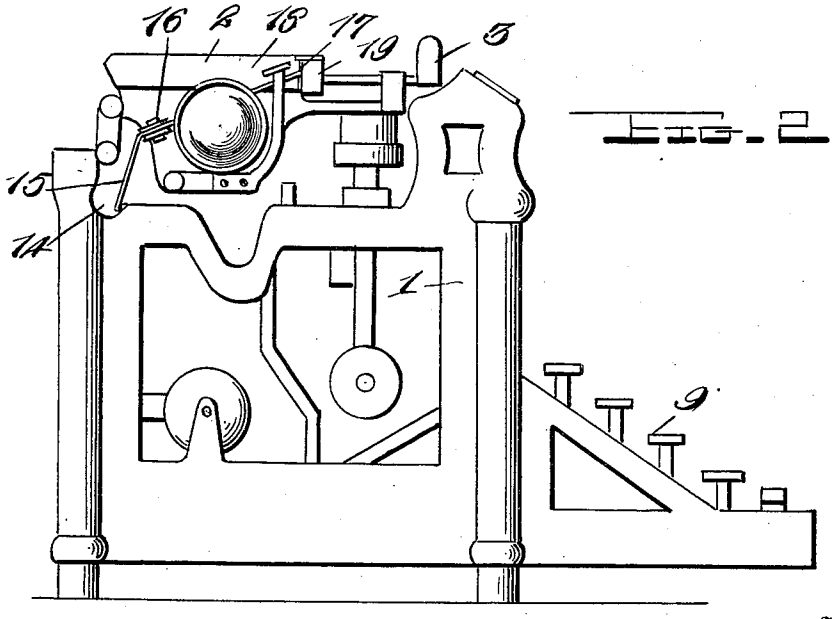


FIG. 2.

Inventor

W. A. Davis,

Witnesses

Chas. L. Grisbauer.

L. G. Ellis.

By Watson E. Coleman.

Attorney

W. A. DAVIS.

TYPE WRITER ATTACHMENT.

APPLICATION FILED JULY 22, 1911.

1,018,411.

Patented Feb. 27, 1912.

2 SHEETS—SHEET 2.

FIG. 3.

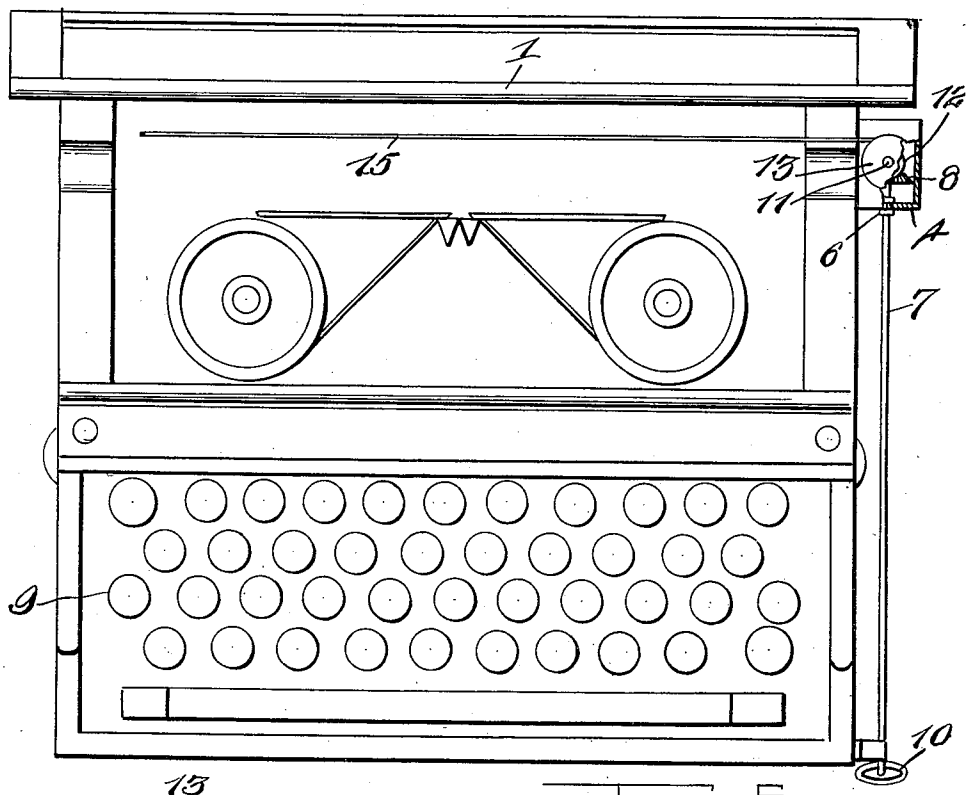


FIG. 5.

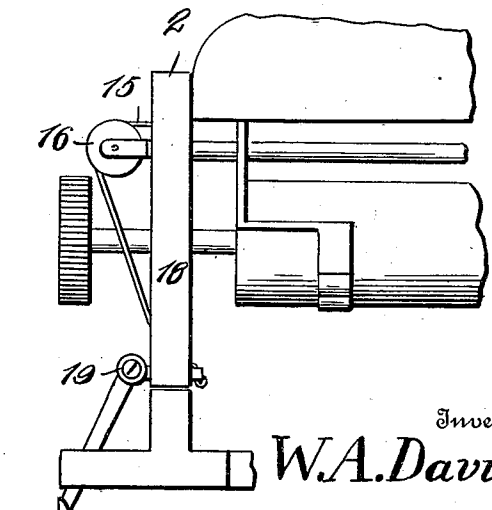
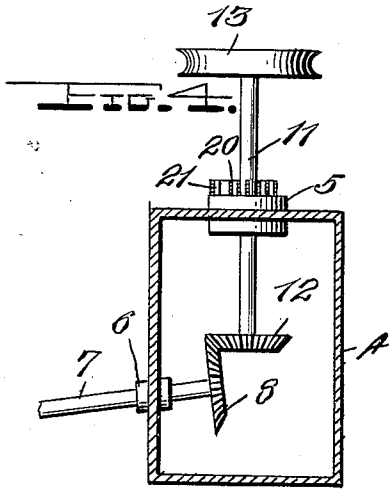


FIG. 4.



Witnesses

Chas. L. Griesbauer.

L. G. Ellis.

Inventor

W. A. Davis,

By Watson E. Coleman.

Attorney

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM A. DAVIS, OF CLOVIS, NEW MEXICO.

TYPE-WRITER ATTACHMENT.

1,018,411. Specification of Letters Patent. Patented Feb. 27, 1912.

Application filed July 22, 1911. Serial No. 639,983.

To all whom it may concern:

Be it known that I, WILLIAM A. DAVIS, a citizen of the United States, residing at Clovis, in the county of Curry and State of New Mexico, have invented certain new and useful Improvements in Type-Writer Attachments, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to new and useful improvements in attachments for typewriters and more particularly to an attachment for a well known form of typewriter wherein the spacing mechanism is operated simultaneously with the return of the carriage to its initial position, and my object is to provide a device of this character which will lessen the exertion necessary for the completion of this operation.

A further object is to provide means whereby the machine may be spaced and the carriage returned to its initial position without raising the fingers from the key-board.

Still another object of the invention resides in the provision of a cable which is adapted to be connected with the spacing lever, whereby when said cable is drawn, the lever will operate the ratchet with which it is adapted to be engaged and simultaneously draw the carriage to one end of the machine.

A further object of the invention resides in the provision of a hand wheel disposed in close proximity with the key-board, which hand wheel has indirect connection with said cable, whereby the same may be readily operated.

With these and other objects in view, my invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claims.

In the accompanying drawings forming a part of this application, Figure 1 is a side elevation of a typewriter showing my improvements applied to use. Fig. 2 is an opposite side elevation of the machine showing the connection of the cable with the spacing lever. Fig. 3 is a top plan view of the machine with the carriage removed and parts of the casing covering the operating parts of my improvements also removed. Fig. 4 is an enlarged vertical section through the casing for the gears, and, Fig. 5 is a fragmentary top plan view of the carriage showing the connection of the tape with the spacing lever.

In carrying out my invention, I shall refer to the drawings in which similar reference characters designate corresponding parts throughout the several views and in which—

1 indicates a typewriter of the class wherein the carriage may be moved to one end of the machine simultaneously with the turning of the roller to space the machine, and 2 indicates the movable carriage thereon. The usual spacing lever 3 is provided on the left side of the machine, and in applying my improvements, a casing 4 is clamped in any desired manner on the right side of the machine. This casing is of substantially rectangular design and has an opening in the top and one of the side walls thereof, said openings being surrounded by the bearings 5 and 6, respectively, and rotatably mounted on the bearing 6, is a shaft 7, the inner end of which is disposed within said casing and has mounted thereon, a bevel gear 8. This shaft extends along the side of the machine to a point immediately adjacent the key-board 9 of the machine and has mounted on the free end thereof, a hand wheel or the like 10, whereby the same may be readily operated.

A stub shaft or the like 11 is also provided and extends through the bearing 5 to a point within the casing, said shaft 11 being provided on its inner end with the smaller bevel gear 12 which meshes with the gear 8, and the outer or upper end of the shaft 11 has mounted thereon, a grooved roller or drum 13 of a type used in machines of this character. This roller or drum 13 is so disposed as to be substantially in alinement with the channel or the like 14 which is formed in the bed of the machine immediately below the movable carriage, and engaged with said roller 13 so as to be readily wound thereon, is a cord, tape or cable 15 which extends through the channel 14 beneath the carriage to a point at the other side of the machine. Mounted on a stationary portion of the carriage at the left side thereof, is a small grooved roller or the like 16, over which said tape or cord 15 is adapted to extend, and the free end of said tape or cord is provided with a hook which is passed through a space 17 formed between the casing 18 covering the spacing ratchet and the pivot point 19 of said spacing lever, to be engaged with said spacing lever on the

adjacent side of said pivotal point. A coil spring member 20 is also provided and has one end thereof engaged with a pin or the like 21 on the bearing 5, while the opposite end thereof is engaged with an opening in the stub shaft 11, whereby it will be seen that the tendency of said spring member will be to turn the roller 13 and correspondingly wind the tape or cord 15 thereon. Under these conditions, it will be seen that the tape or cord 15 will, therefore, be retained taut throughout the operation of the machine.

In operation, it will be seen that when it is desired to draw the carriage 2 to the right side of the machine and simultaneously turn the roller to space the machine, it is only necessary to give the hand wheel 10 on the end of the shaft 7 one or more turns, which will, through the medium of the gears 8 and 12, turn the roller 13, thereby drawing upon the tape or cord 15. This drawing upon the tape or cord will operate the spacing lever and simultaneously draw the carriage to the desired side of the machine.

From the foregoing, it will be seen that I have provided a device for positioning the carriage on one end of the machine simultaneously with the turning of the roller to space the same, which means is of such improved design as to lessen the exertion which is now required to accomplish this result. It will further be seen that in operating this improved means, the necessity of removing the fingers from the key-board will be eliminated. It will still further be seen that my device is of such simple construction as to be readily and cheaply applied to new or old machines now in use, and further is of very durable construction and an improvement which is necessary and will be effective and useful in operation.

What I claim is—

1. In a typewriter attachment of the class described, the combination with a frame supporting a main bed, a movable carriage on said bed and a spacing lever; of a shaft rotatably mounted on one side of the frame, said shaft being provided on its inner end with a bevel gear, an additonal shaft rotatably and vertically supported on the same side of the frame, said last mentioned shaft being provided with a bevel gear meshing with the first mentioned gear, a roller carried on the upper end of said last mentioned shaft, a flexible connection extending from said roller across the bed of the machine below said carriage and engaging said spacing lever, a coil spring having one end thereof engaged with a stationary member and the other with the second mentioned shaft, and a hand wheel on the outer or free end of said first mentioned shaft.

2. In a typewriter attachment of the class described, the combination with a frame supporting a main bed, a movable carriage thereon and a spacing lever; of a shaft rotatably mounted on one side of the frame opposite the side upon which said spacing lever is disposed, a bevel gear mounted on the inner end of said shaft, a stub shaft vertically supported on the same side of the frame, a bevel gear on the lower end of said stub shaft meshing with the aforesaid gear, a casing clamped to said frame covering said gears, a roller carried on the upper end of said stub shaft, a flexible connection having one end thereof engaged with said roller and extending across said bed below said carriage, an additional roller carried on said carriage over which said connection is adapted to extend, the opposite end of said connection being engaged with said spacing lever, and a hand wheel on the outer end of the first mentioned shaft.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WILLIAM A. DAVIS.

Witnesses:
B. F. Moss,
Florence Coleman.