

J. RABER.
GOVERNOR FOR TYPE WRITER CARRIAGES.
APPLICATION FILED JAN. 18, 1909.

1,005,781.

Patented Oct. 10, 1911.

Fig. 1.

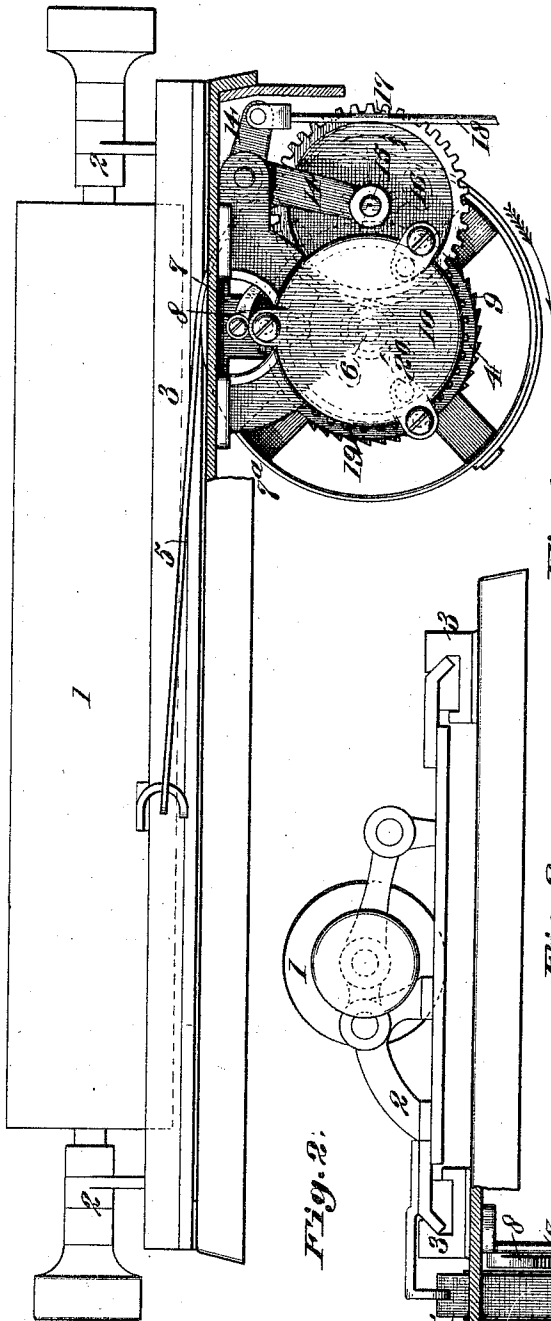


Fig. 2.

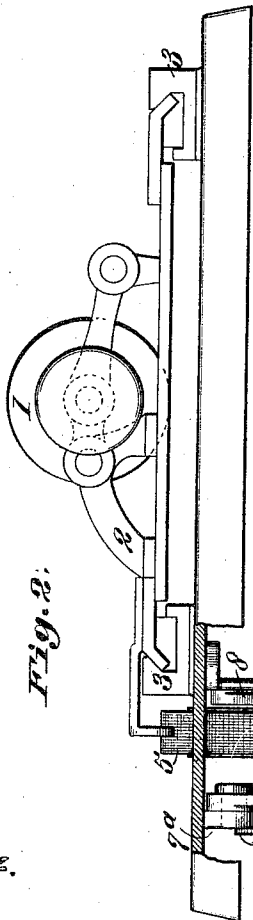


Fig. 3.

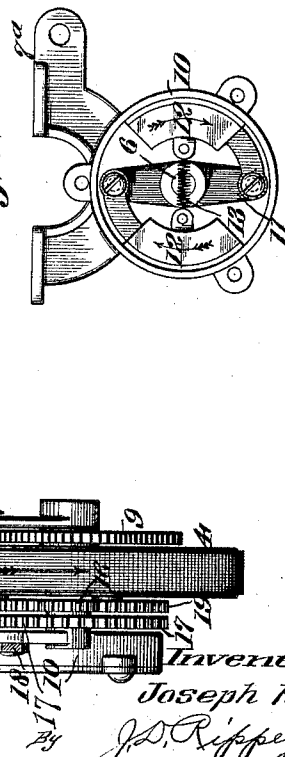
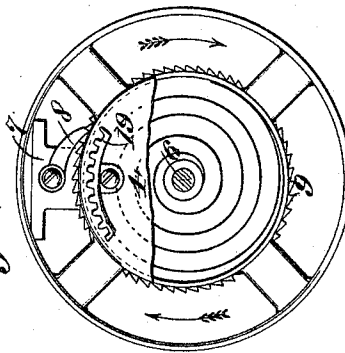


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH RABER, OF POPLAR BLUFF, MISSOURI, ASSIGNOR TO DALTON ADDING MACHINE COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

GOVERNOR FOR TYPE-WRITER CARRIAGES.

1,005,781.

Specification of Letters Patent.

Patented Oct. 10, 1911.

Application filed January 18, 1909. Serial No. 472,826.

To all whom it may concern:

Be it known that I, JOSEPH RABER, a citizen of the United States, residing at Poplar Bluff, Missouri, have invented a new and useful Governor for Type-Writer Carriages, of which the following is a specification.

This invention relates to typewriting and recording machines, and more particularly to mechanism for controlling the lateral movements of the paper carriage in tabulating and column work.

The object of this invention is to provide in combination with the laterally movable paper carriage of typewriting and recording machines and the controlling mechanism thereof, a governing or speed regulating mechanism operable to control the paper carriage when released for its movements as required for tabulations and column records. The governing mechanism is arranged to coöperate with the carriage motor to restrain the latter from too rapid operation, thereby to permit the motor to move the carriage with desirable speed and force to the various positions required, and to avoid injurious results to the carriage of unrestrained operation of the motor.

In the drawings, Figure 1 is a rear elevation of a paper carriage and motor illustrating the governing mechanism in connection with the motor. Fig. 2 is a side elevation. Fig. 3 illustrates one form of governor or speed regulator adapted for use as part of my invention. Fig. 4 is a detail view illustrating the construction and arrangement of the carriage motor.

The platen 1 is mounted in the carriage 2 which is arranged to travel laterally upon the rails 3, being actuated by a motor 4 to which is connected one end of a tape 5 leading to the carriage. The motor 4 is in the form of a wheel and drum mounted upon a shaft 6, which is supported by brackets 7 secured to the under side of the top of the machine. The motor may be adjusted to hold the carriage under any desired degree of tension, and be held in such adjustment by means of a pawl 8 pivoted to one of the brackets and engaging with a ratchet wheel 9 secured to the drum and wheel comprising the motor. Within a casing 10 attached to one of the brackets 7 an arm 11 is secured to the shaft 6, on which

the motor drum is revoluble, said casing being cylindrical in form. Two governor weights 12 are pivoted to the arm 11 and are connected by a spring 13. Rotation of the shaft 6 throws the weight 12 into contact with the inner surface of the casing 10, and thereby tends to decrease the speed of rotation of said shaft 6. A swinging link 14 supports a shaft 15 to which is attached a pinion 16 and a gear wheel 17. A link 18 connected to the lateral extension of the arm 14 is arranged for connection in any known manner with the tabulating or carriage release key (not shown), whereby, when said tabulating or release key is operated, the link 14 will be moved, such operation resulting in meshing the pinion 16 with the gear wheel 19 attached to the motor drum, and in entraining the wheels 17 with a pinion 20 attached to the shaft 6. In this manner whenever the carriage is released by the tabulating device, the motor is automatically entrained with the governor, which acts as a brake to restrain too rapid movement of the carriage.

I am aware that there may be modifications and alterations in the construction and arrangement of the parts embodying this invention without departure from the spirit and scope of the invention, and I do not restrict myself to identical features of construction or arrangement, but

What I claim and desire to secure by Letters Patent is—

1. The combination with a carriage, a shaft, and a motor on said shaft for moving said carriage laterally, of a gear wheel rotated by said motor, a cylinder case, an arm on said shaft inside said case, weights pivoted to said arm and arranged to engage frictionally with said case, a gear wheel on said shaft, a swinging support, entraining gears carried by said support out of mesh with the aforesaid gears, and means for moving said entraining gears into mesh with the first named two gears, substantially as specified.

2. The combination with a paper carriage, a shaft, a motor on said shaft for moving said carriage laterally, and a gear wheel rotated by said motor, of a governor on said shaft, a gear wheel attached to said governor, a swinging support, and gear wheels carried by said support adjustable to

entrain said first named wheel with said second named wheel, substantially as specified.

3. The combination with a paper carriage, a motor for moving said carriage, and a gear wheel rotated by said motor, of a speed governor, a gear wheel attached to said governor, a movable support, entraining gears carried by said support, and a tabulating connection for moving said en-

training gears into mesh with said two first-named gears, substantially as specified.

In testimony whereof, I hereunto affix my signature to this specification this eleventh day of January 1909 in the presence of two witnesses.

JOSEPH RABER. [L.S.]

Witnesses:

JOHN E. GREVE,
CHARLES PICKLES.

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