

G. A. GREENWOOD.
TYPE WRITING MACHINE.
APPLICATION FILED JULY 8, 1908.

Patented Feb. 9, 1909.

2 SHEETS—SHEET 1.

912,118.

FIG. 1.

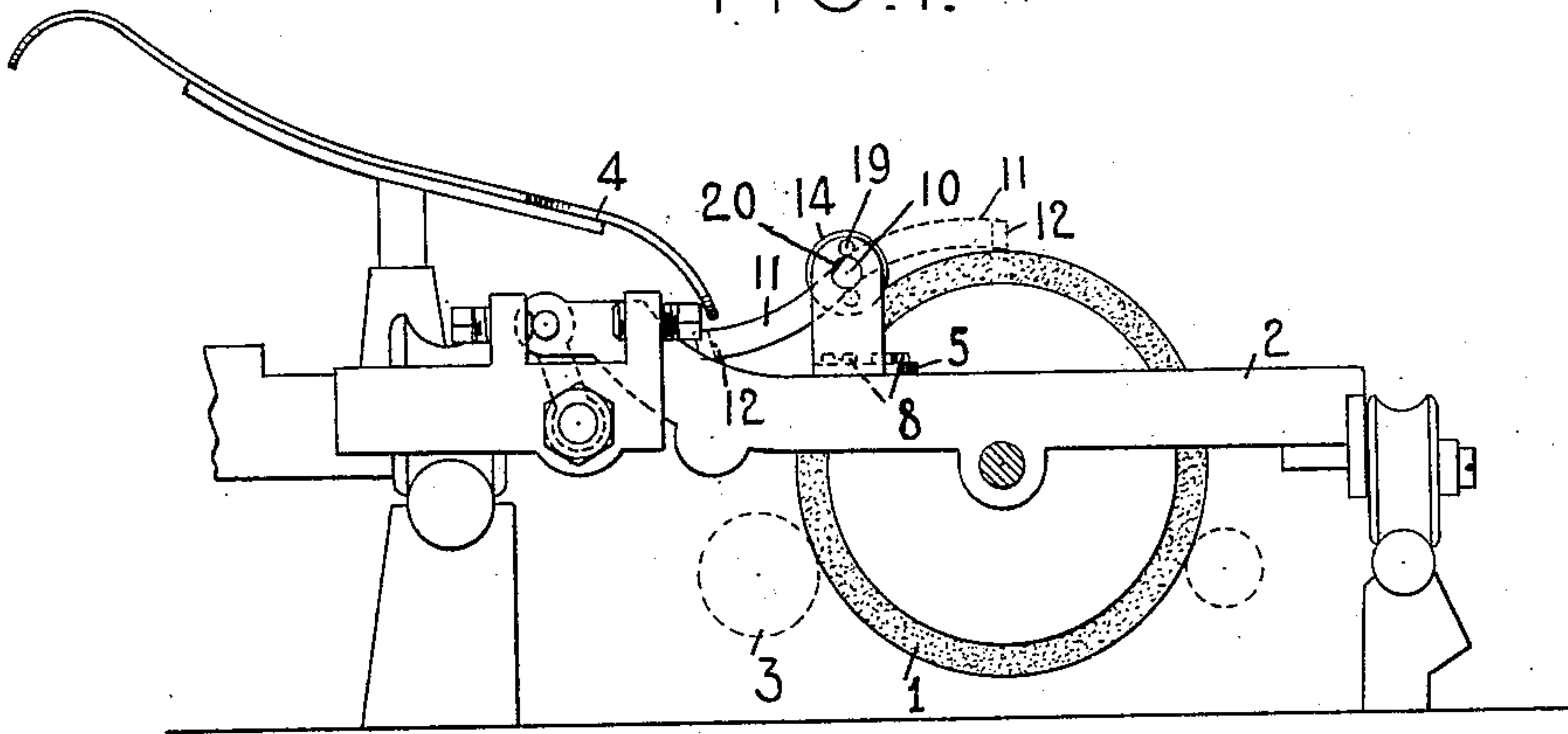
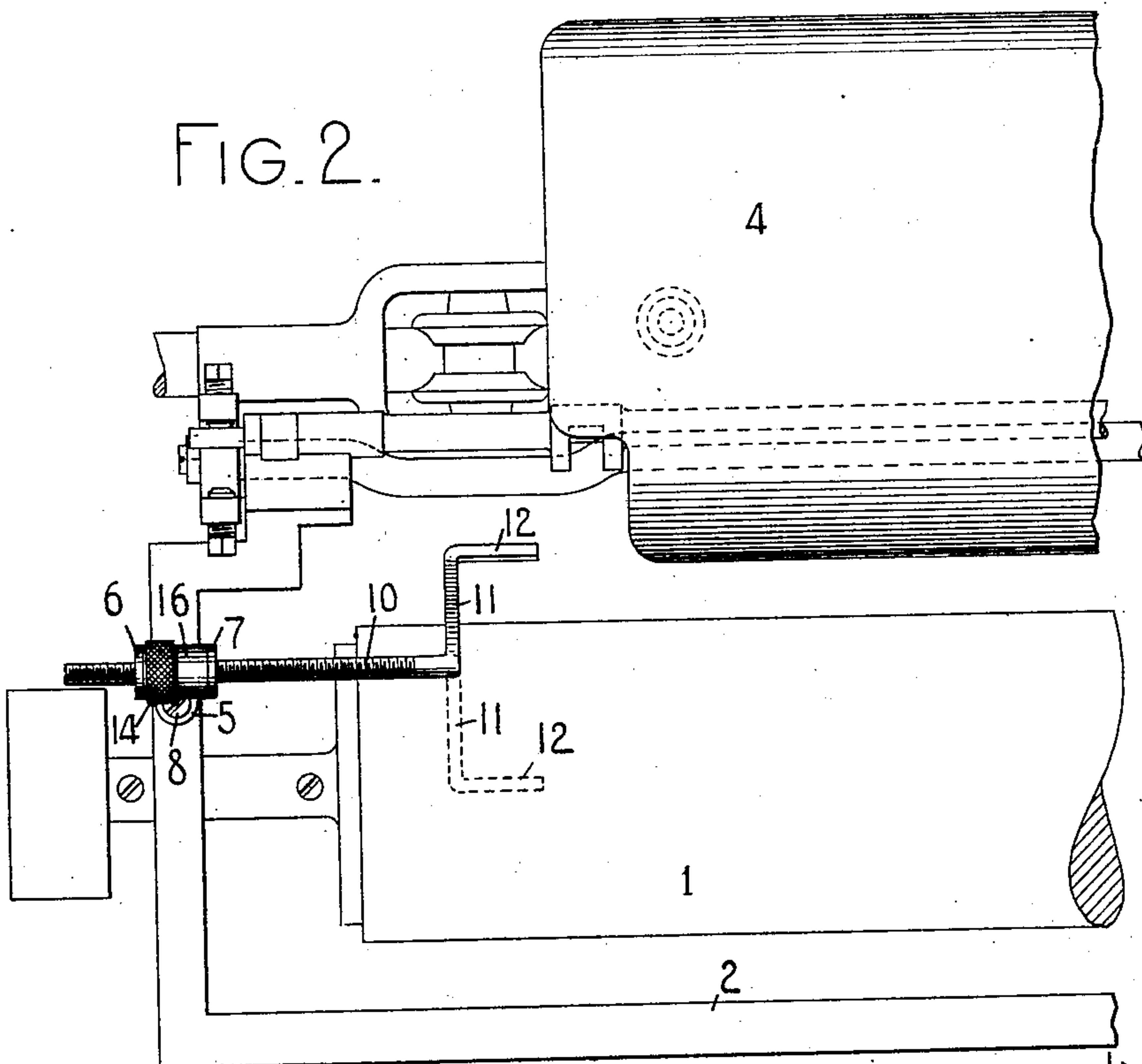


FIG. 2.



WITNESSES:

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J. B. Reeves

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2 SHEETS—SHEET 2.

FIG. 3.

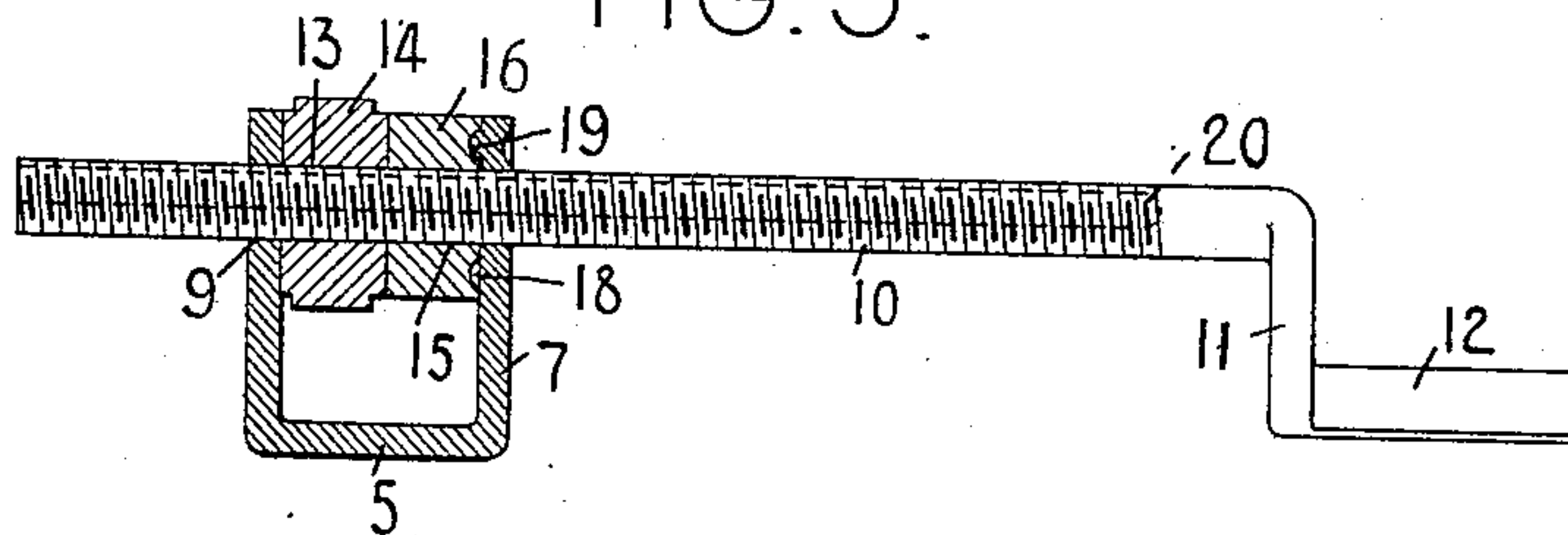


FIG. 4.

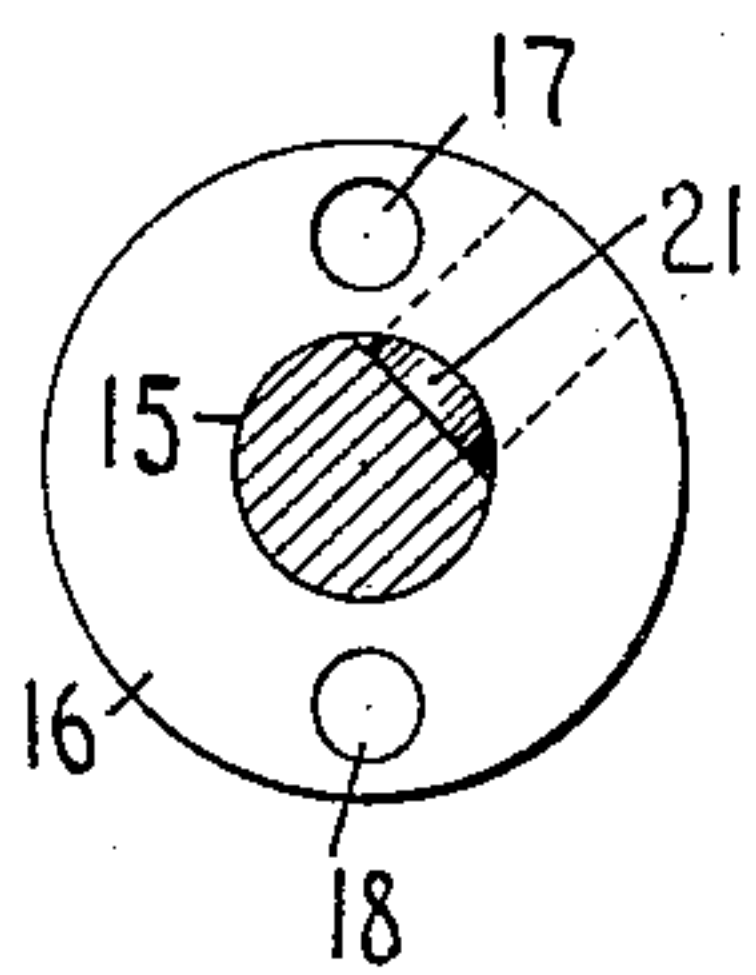


FIG. 5.

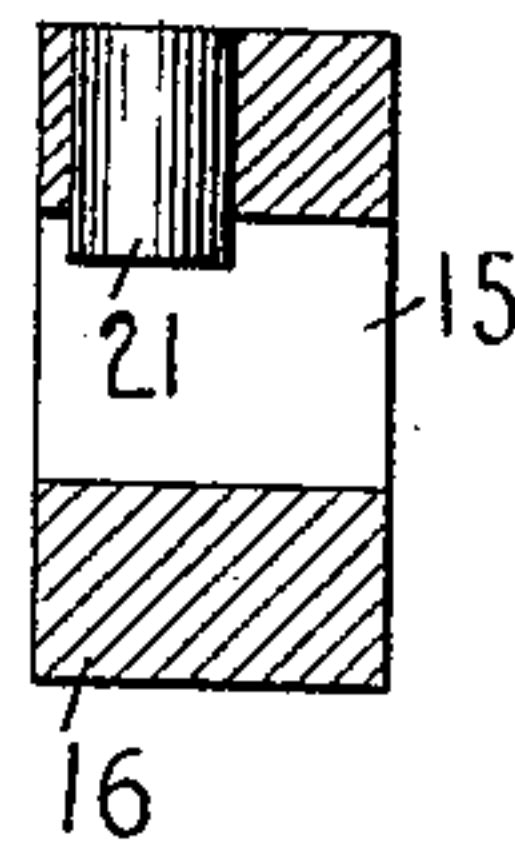
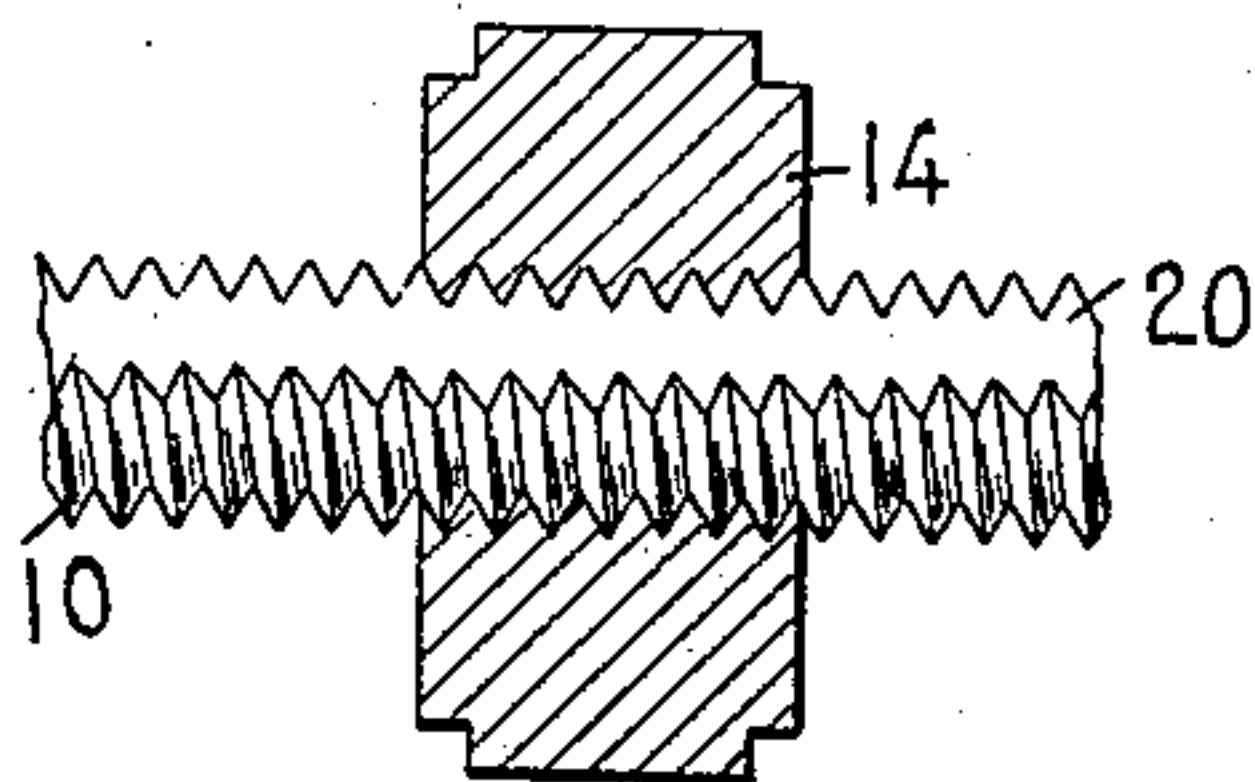


FIG. 6.



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UNITED STATES PATENT OFFICE.

GEORGE A. GREENWOOD, OF PORTLAND, MAINE, ASSIGNOR TO REMINGTON TYPEWRITER COMPANY, OF ILION, NEW YORK, A CORPORATION OF NEW YORK.

TYPE-WRITING MACHINE.

No. 912,118.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed July 3, 1908. Serial No. 442,494.

To all whom it may concern:

Be it known that I, GEORGE A. GREENWOOD, citizen of the United States, and resident of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

My invention in typewriters relates to side-edge paper guides, and more particularly to that type of guides or gages set forth in the Letters Patent of Louis P. Diss, No. 849,834, granted April 9th, 1907, and the main objects of my invention are to provide for a finer, quicker and more convenient adjustment of the guide.

To these ends my invention consists in the features of construction, arrangements of parts, and combinations of devices hereinafter fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a Remington No. 6 typewriting machine embodying my improvements. Fig. 2 is a partial plan view thereof. Fig. 3 is an enlarged detail vertical section of the side edge gage and its associated parts. Fig. 4 is a side elevation of the positioning block and a cross section of the screw or threaded shank on which the same is mounted. Fig. 5 is a cross-section of the block. Fig. 6 is an elevation of part of the threaded and flattened shank of the gage device and a cross-section of the nut for feeding the same.

In the various views, the same parts will be designated by the same numerals of reference.

While I have shown my invention embodied in a Remington typewriter, it will of course be understood that it is adapted for any other suitable construction of machines.

Various parts of the typewriter herein shown being well known and also described in the aforesaid Diss patent, they need not be set forth in detail herein.

1 is the platen mounted to rotate on the platen frame 2; 3, the rear feed roll and 4, the paper table.

Mounted upon the left-hand end bar of the platen frame is an upright bracket, U-shaped in cross-section, and comprising a base portion 5 and vertical resilient arms 6 and 7,

the bracket being secured to the end bar 55 by a screw or screws 8. The arms of the bracket are perforated transversely at 9 and in register for the accommodation of the shank or stem 10 of side edge guide or gage device, comprising in this instance offset arms or projections 11 and 12. The shank or stem 10 is threaded for practically its full length and engages a threaded perforation 13 in a nut 14, the perforation being central of the nut and in register with the perforations in the bracket arms. The shank or stem 10 also passes through a coinciding, plain perforation 15 in a circular positioning block 16 formed on one side with two oppositely arranged depressions 17 and 18 adapted to engage one at a time with a projection or detent 19 extending inwardly from the bracket arm 7 and preferably formed integral therewith. There is a fixed relationship between the block 16 and the threaded shank 10 caused by flattening one portion or side of the shank, as at 20, and by providing the block 16 with a radial pin 21 extending into the perforation 15 and bearing at its flattened end against the flattened portion of the shank. By this means the block and the shank are always caused to turn together when the gage is turned from operative to inoperative position and vice versa. The depression 17 and the projection 19, adapted to seat therein, serve to hold the gage device in one or the other of the two positions indicated at Figs. 1 and 2, the operative position of the gage proper being illustrated in full lines and the inoperative position in dotted lines. When in operative position the projection 19 engages the depression 17 and when in inoperative position it engages the depression 18. The block is adapted to be turned from the one position to the other by turning the shank through the medium of the arms 11 and 12. As the block starts to rotate, it cams the projection 19 out of one depression and when the block has been turned substantially a half revolution, this projection snaps into the other depression, the elasticity of the arm 7 permitting these actions.

For the purpose of adjusting the gage lengthwise of the platen for different widths of paper or lengths of envelop, I have threaded the shank or stem 10 and provided the nut 14. The circular nut is slightly

larger in diameter than the circular block 16 and the periphery of the nut is preferably milled, as shown in Fig. 2, to facilitate its rotation. As shown in Figs. 2 and 3 the nut is confined between the left-hand side of the block 16 and the inner side of the arm 6 of the bracket, so that it cannot move axially, the nut and the block or collar filling the space between the arms of the bracket. By rotating the nut, it will cause the screw or threaded shank 10 to feed longitudinally through the perforations in the bracket and the perforation in the block in one direction or another, according to the direction of turning of the nut, and in this wise the side edge guide arm 11 or other suitable device connected to the shank is adjusted longitudinally of the platen. By reason of this screw and nut construction the adjustments may be quickly and conveniently made and they may be as fine or minute as may be desired. The parts are always in position for immediate adjustment by the simple turning of the nut. In the prior construction it was first necessary to unscrew the binding screw with one hand and then with the other slide the stem in the direction of its length. This involved two objections, first, if the binding screw had been in position for a long time it begot a set upon the rod which was often difficult to undo, especially by an operator not having great strength in her fingers; and, secondly, some little time was consumed in adjusting the rod to an exact or nice position, owing to the fact that it would be apt either to slip a little too far or not go far enough. Then after the adjustment of the bar it became necessary to reset the binding screw. Thus the old construction involved three operations to effect an adjustment of the gage, whereas it will be observed from my construction that it is only necessary to turn the nut, which is always ready for operation. It will be understood of course that when the nut is turned the screw threaded shank and the gage arm 11 are moved longitudinally of the platen only, rotation being prevented by the flattened portion of the shank and the pin or lug 21.

While I prefer to use the supporting arm 12 of the gage device, this is not absolutely necessary in all cases. The paper is adjusted to the gage the same as in the Diss patent.

What I claim as new and desire to secure by Letters Patent, is:—

1. In a typewriting machine, the combination with a platen, of a side edge paper guide comprising a threaded shank and off-set arm 11, and a rotatable nut for feeding the shank and guide longitudinally of the platen during the rotary movement of the nut, said arm

being adapted to be shifted to non-working position independent of said nut.

2. In a typewriting machine, the combination with a platen, of a side edge paper guide comprising an arm and a threaded shank, a rotatable nut for feeding the threaded shank and arm longitudinally of the platen, means for enabling the threaded shank and arm to be turned independently of said rotatable nut and means for preventing a turning of the arm and shank during the feeding operation.

3. In a typewriting machine, the combination with a side edge paper guide comprising a threaded shank and an offset portion for the paper to abut against, a rotatable nut for feeding the shank and offset portion longitudinally of the platen, and means for enabling the threaded shank and offset portion to be turned independently of said rotatable nut.

4. In a typewriting machine, the combination with a platen, of a side edge paper guide comprising a threaded shank having a flattened portion, a block or collar through which said shank passes, a pin or projection on said block or collar adapted to bear upon the flattened portion of the threaded shank and a rotatable nut for adjusting the threaded shank longitudinally of the platen.

5. In a typewriting machine, the combination with a platen, of a side edge paper guide comprising a threaded shank having a flattened portion and an offset or lateral arm, a bracket secured to the platen frame and comprising a resilient arm having a stud, a collar or block having a central perforation, a radial pin and side depressions, and a rotatable nut held against endwise movement.

6. In a typewriting machine, the combination with a platen, of a side edge paper guide consisting of a threaded and flattened shank, a paper gage arm, a paper supporting arm, a bracket secured to the platen frame and comprising upright perforated arms, one of which is provided with a projection or detent, a perforated block or collar adjacent said detent and having depressions on opposite sides of said perforation, a pin on said block or collar extending into said perforation and engaging the flattened portion of said shank, and a rotatable nut arranged adjacent said block or collar and with it filling the space between the bracket arms.

Signed at Portland, in the county of Cumberland and State of Maine, this sixth day of July A. D. 1908.

GEORGE A. GREENWOOD.

Witnesses:

CHARLES J. NICHOLS,
EDITH A. DILL.