

No. 674,966.

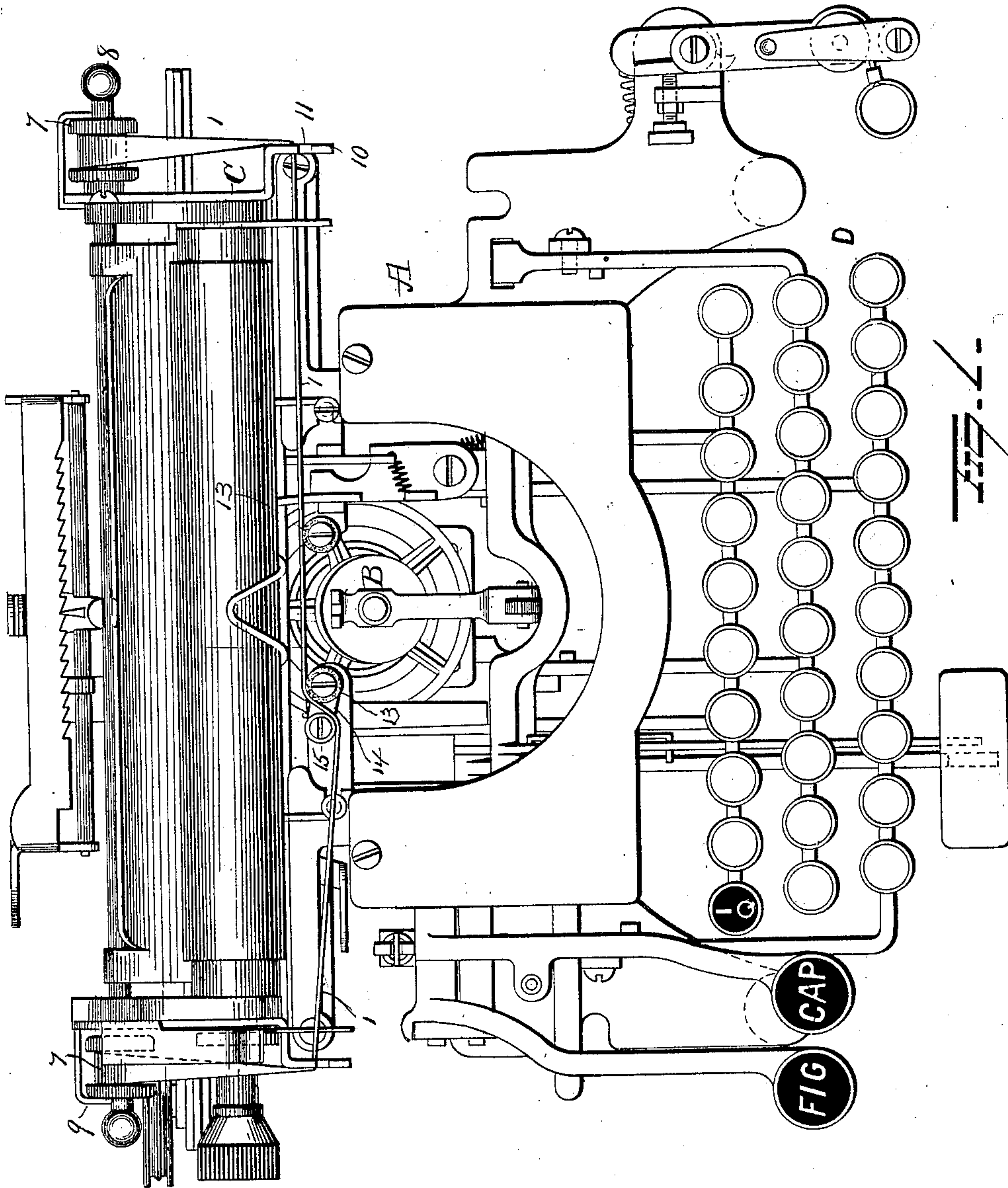
Patented May 28, 1901.

J. J. GREEN.
TYPE WRITING MACHINE.

(Application filed May 12, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES
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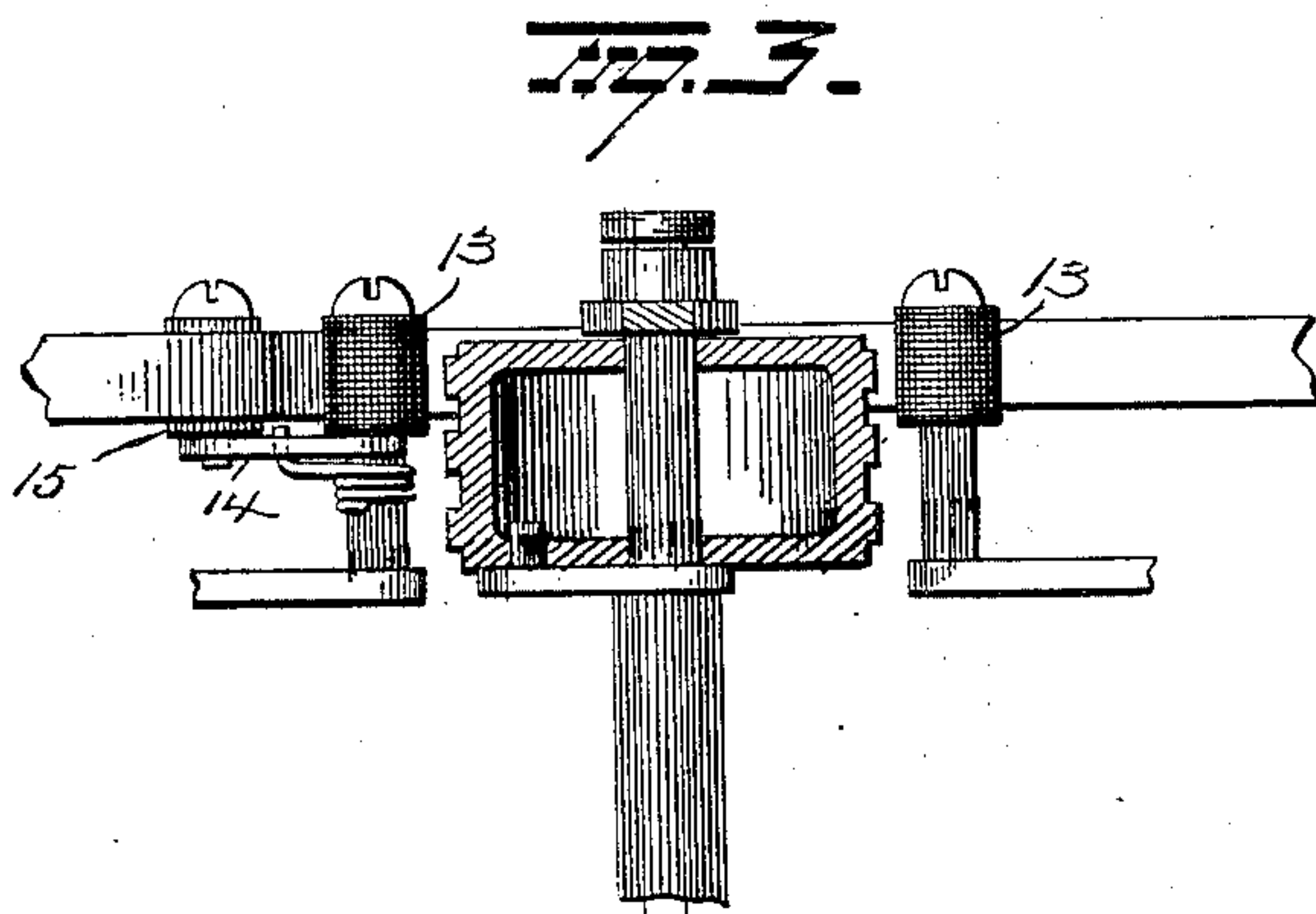
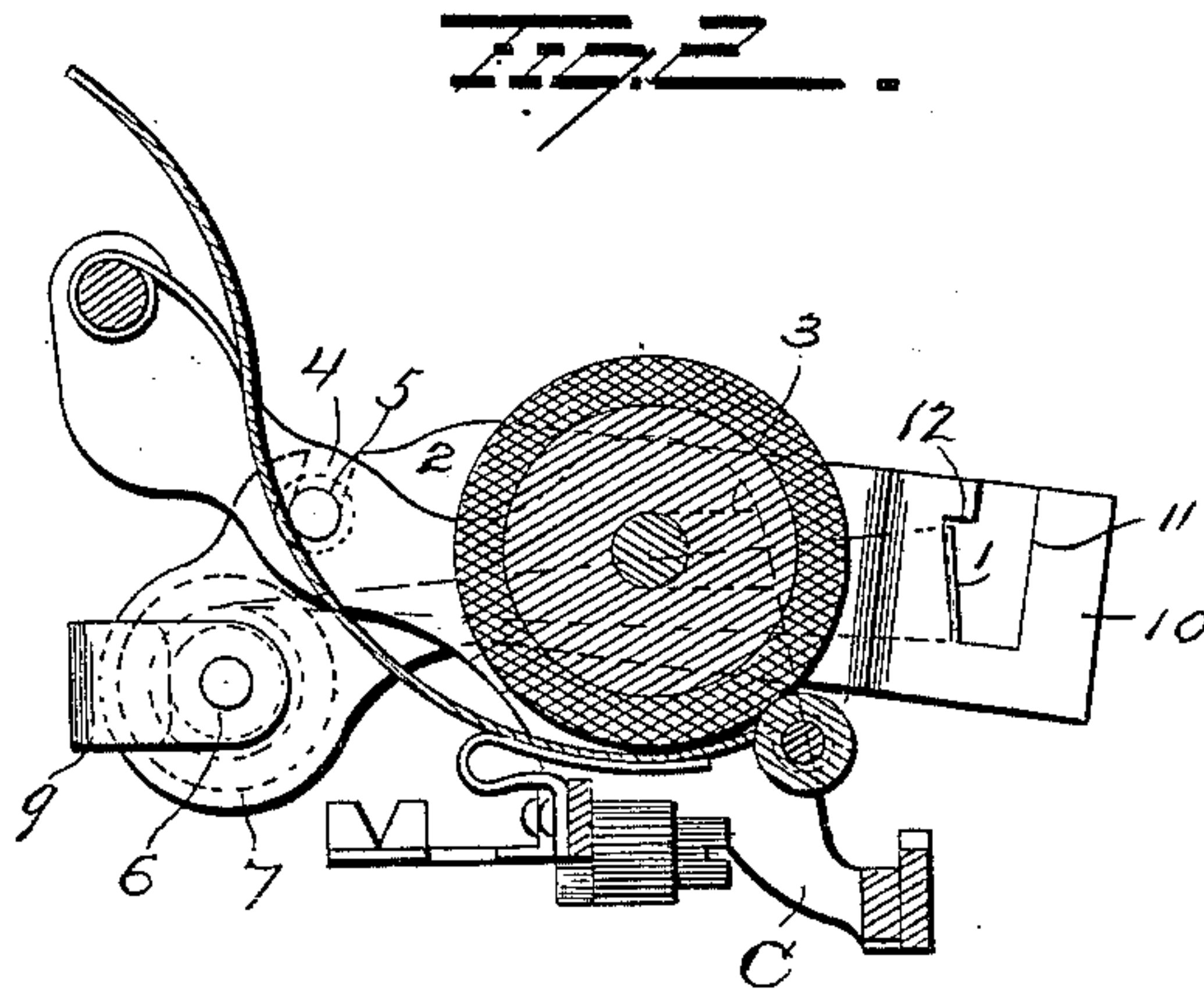
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UNITED STATES PATENT OFFICE.

JOHN JAY GREEN, OF BOONTON, NEW JERSEY.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 674,966, dated May 28, 1901.

Original application filed December 20, 1899, Serial No. 741,035. Divided and this application filed May 12, 1900. Serial No. 16,496. (No model.)

To all whom it may concern:

Be it known that I, JOHN JAY GREEN, of Boonton, in the county of Morris and State of New Jersey, have invented certain new and useful Improvements in Type-Writing Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in type-writing machines, and more particularly to inking mechanism therefor, the same being a division of application for patent filed by me December 20, 1899, Serial No. 741,035.

One object of the invention is to simplify inking means for type-writing machines.

A further object is to so construct inking devices that they can travel with the paper.

A further object is to construct and arrange a type-writing machine in such manner that the inking means can be mounted on the carriage and move with it.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of a type-writing machine, showing the application of my improvements thereto. Figs. 2 and 3 are views illustrating details.

A represents the frame of the machine; B, the printing devices; C, the carriage, and D the keys for controlling the operation of the printing mechanism and the carriage.

The inking-ribbon 1 is attached to and moves with the platen-carriage C and is supported and guided by means of devices which will now be described.

At respective ends of the carriage plates 2 are loosely mounted between their ends on the journals of the platen-roller, one of which journals is mounted in a hole in one end piece of the carriage and the other journal is mounted in an open slot 3 in the other end piece of the carriage. The rear portion of each plate 2 is made with an open slot 4, through which a screw 5 passes and enters the carriage-frame. The rear ends of the plates 2 are provided with horizontal pintles 6, on which rib-

bon-reels 7 are mounted and provided with knobs 8 for turning them to run the ribbon from one reel to the other. Spring-tongues 9 bear against said reels and normally prevent them from turning and also serve to prevent their displacement. The inner ends of the plates 2 are bent laterally and then inwardly toward the front of the machine to form arms 10, and each of these arms is made with an open slot 11, having one wall beveled to form a shoulder 12. The inking-ribbon is guided through the slots 11 and becoming disposed under the shoulders 12 will be prevented from upward displacement. By mounting the ribbon-carriers as above explained it will be seen that they can be readily removed, together with the platen-roller, by merely loosening the screws 5, and it will also be seen that by the connection of the plates 2 with the carriage by means of the screws 5 displacement of the platen-roller will be effectually prevented.

Inking-rollers 13 are mounted at respective sides of the space through which the type-wheel passes for the purpose of keeping the ribbon supplied with ink. These inking-rollers are important, because, as above stated, the ribbon moves with the carriage, and if some means for replenishing the ink to the ribbon were not provided the latter might become inefficient after a number of lines shall have been written. The ribbon will be made of a length several times that of the carriage, the surplus being wound on one or the other of the reels. When a section of the ribbon shall have become worn out, the operator will wind it on one of the reels and simultaneously unwind a fresh section of ribbon from the other reel. The ribbon will be maintained normally taut and away from the platen, so that the writing will be always visible, by means of a spring-actuated arm 14, carrying a roller 15, over which the ribbon passes, and by means of which the ribbon will be forced against the inking-rollers.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a type-writing machine, the combination of printing devices, a carriage, a platen-roller mounted in the carriage, plates mounted

on the journals of said roller, ribbon-reels mounted at one end of said plates and ribbon-guiding arms at the other ends of said plates.

2. In a type-writing machine, the combination with printing devices, a carriage, a platen-roller mounted therein, plates mounted between their ends on the journals of the platen-roller, a ribbon-reel mounted on one end of each plate, a guide-arm at the other end of each plate and means for removably connecting said plates with the carriage-frame.

3. In a type-writing machine, the combination of printing means, a carriage, a platen-roller on the carriage, plates mounted between their ends on the journals of said roller, each plate having an open slot, screws passing through said slots and entering the carriage-frame, a ribbon-reel mounted on each plate, and an outwardly-projecting arm on each plate, each arm having an open slot for the reception of the inking-ribbon.

4. In a type-writing machine, the combination of printing devices, a carriage, a platen-roller thereon, an inking-ribbon mounted on and moving with the carriage, and a tension device for the ribbon mounted on a part independent of the carriage, said tension device bearing against the inking-ribbon and main-

taining it normally away from the platen-roller.

5. In a type-writing machine, the combination with printing devices, a carriage, a platen-roller thereon, inking-ribbon mounted on and moving with the carriage, inking-rollers for the ribbon mounted on a part independent of the carriage and a tension device bearing against the inking-ribbon and maintaining it normally away from the platen-roller and against the inking-rollers.

6. In a type-writing machine, the combination of printing devices, a carriage, a platen on the carriage, an inking-ribbon mounted on and moving with the carriage, inking-rollers for the ribbon mounted at a part independent of the carriage, and a spring-pressed arm bearing against the ribbon and maintaining it taut and pressing it against the inking-rollers and away from the platen.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN JAY GREEN.

Witnesses:

HENRY C. RUSSELL,
JAMES H. DE POE.