

H. L. WAGNER.
TYPE WRITING MACHINE.
APPLICATION FILED APR. 23, 1908.

906,589.

Patented Dec. 15, 1908.

Fig. 1.

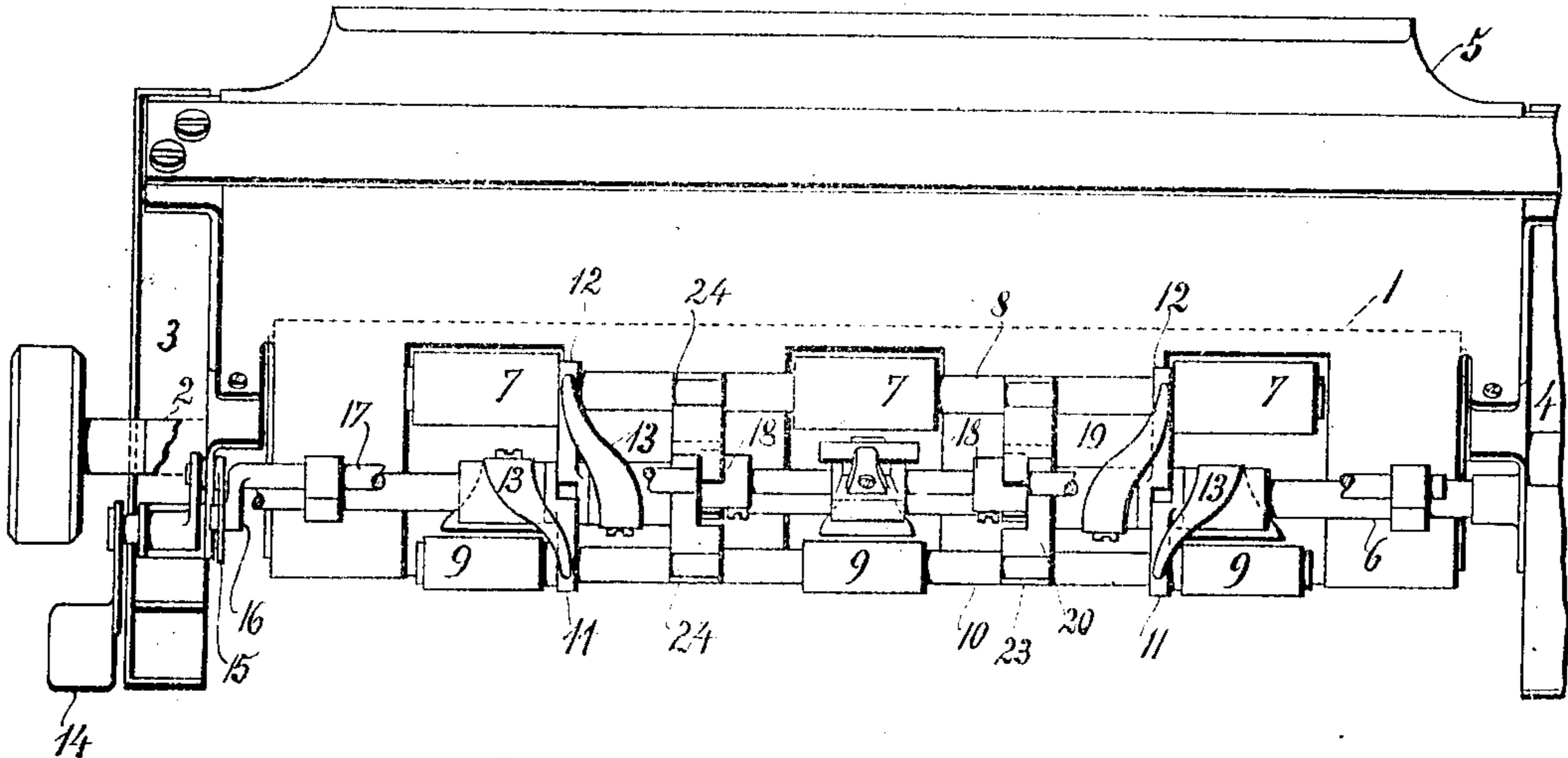


Fig. 2.

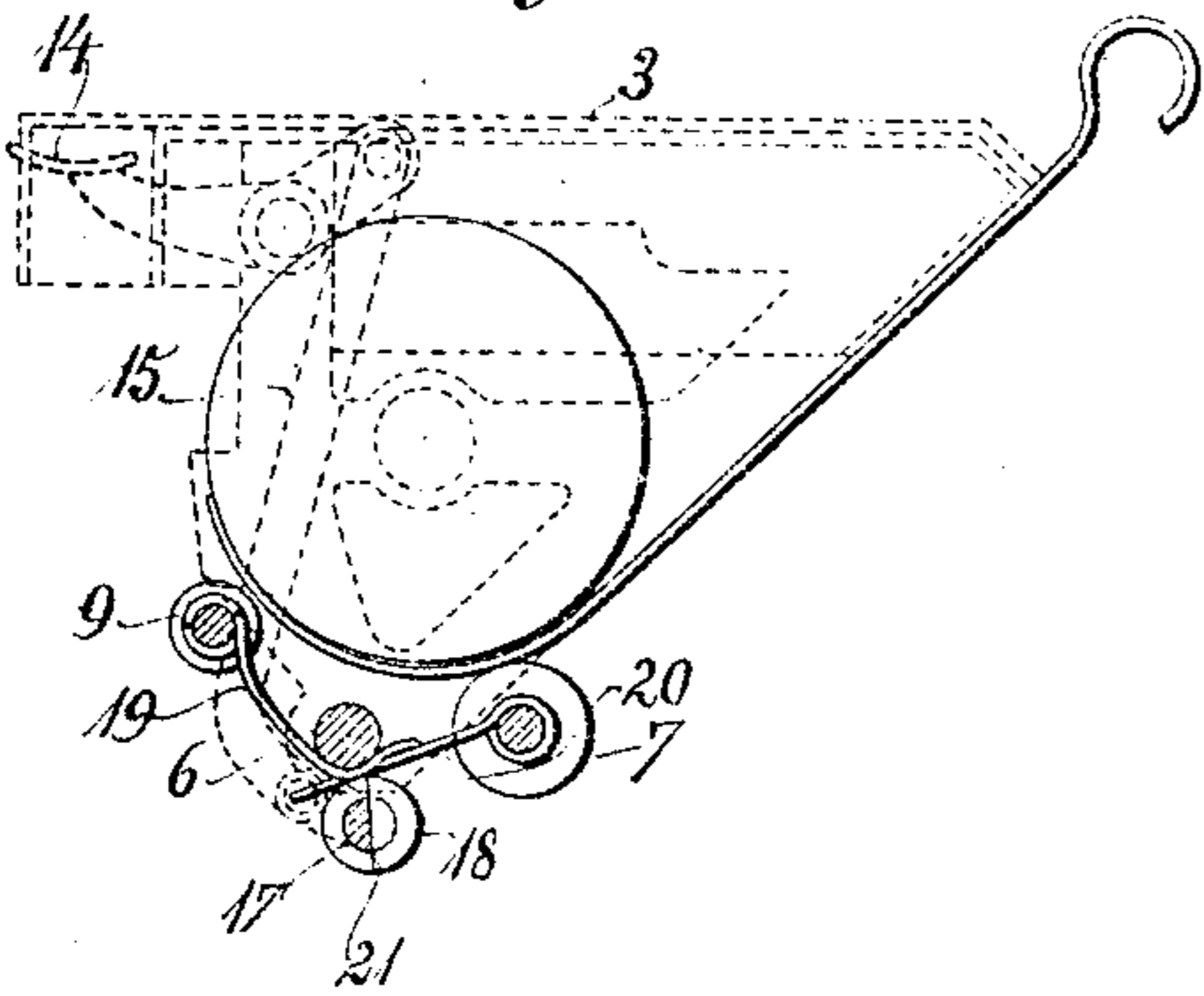


Fig. 3.

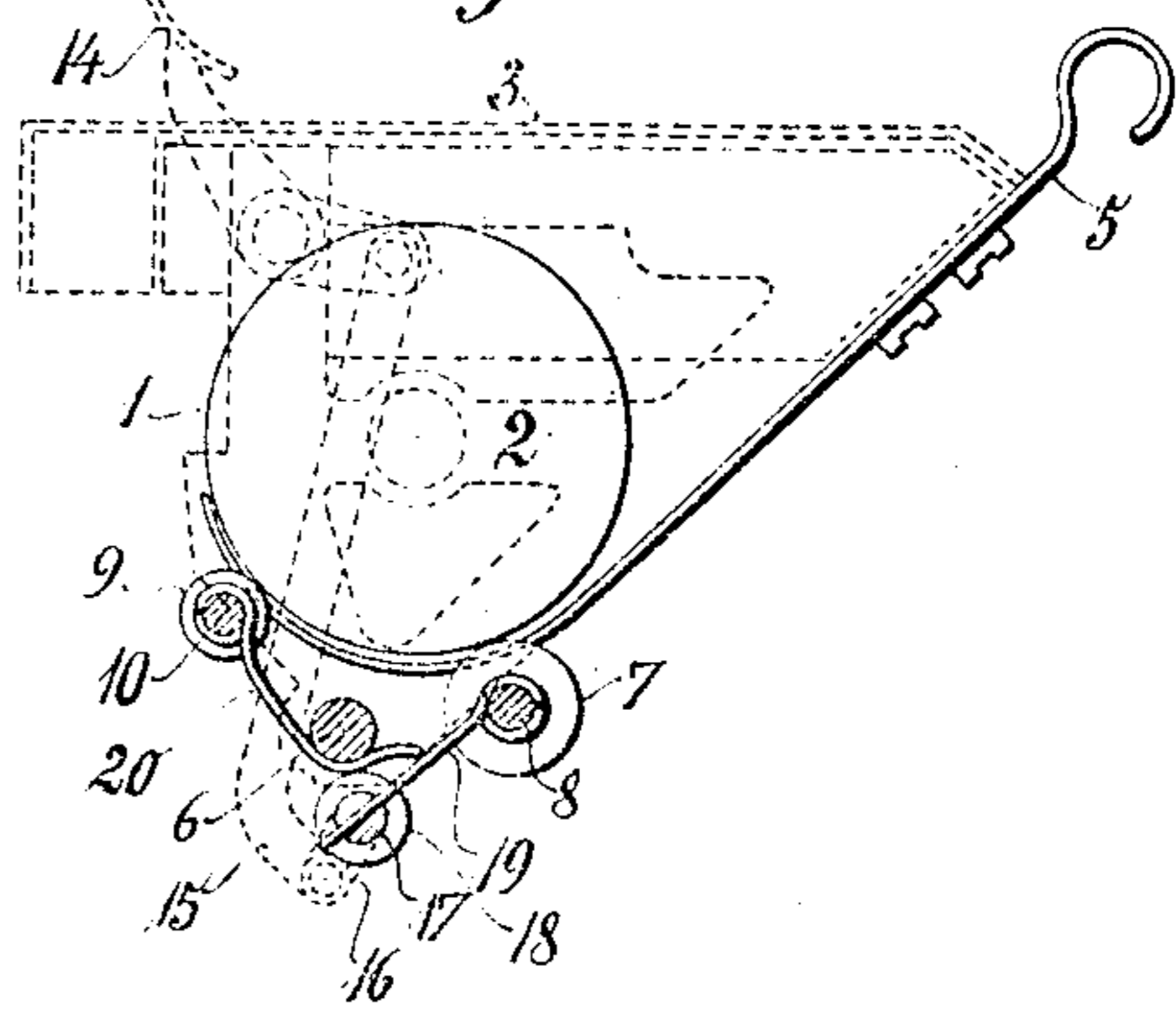


Fig. 4.

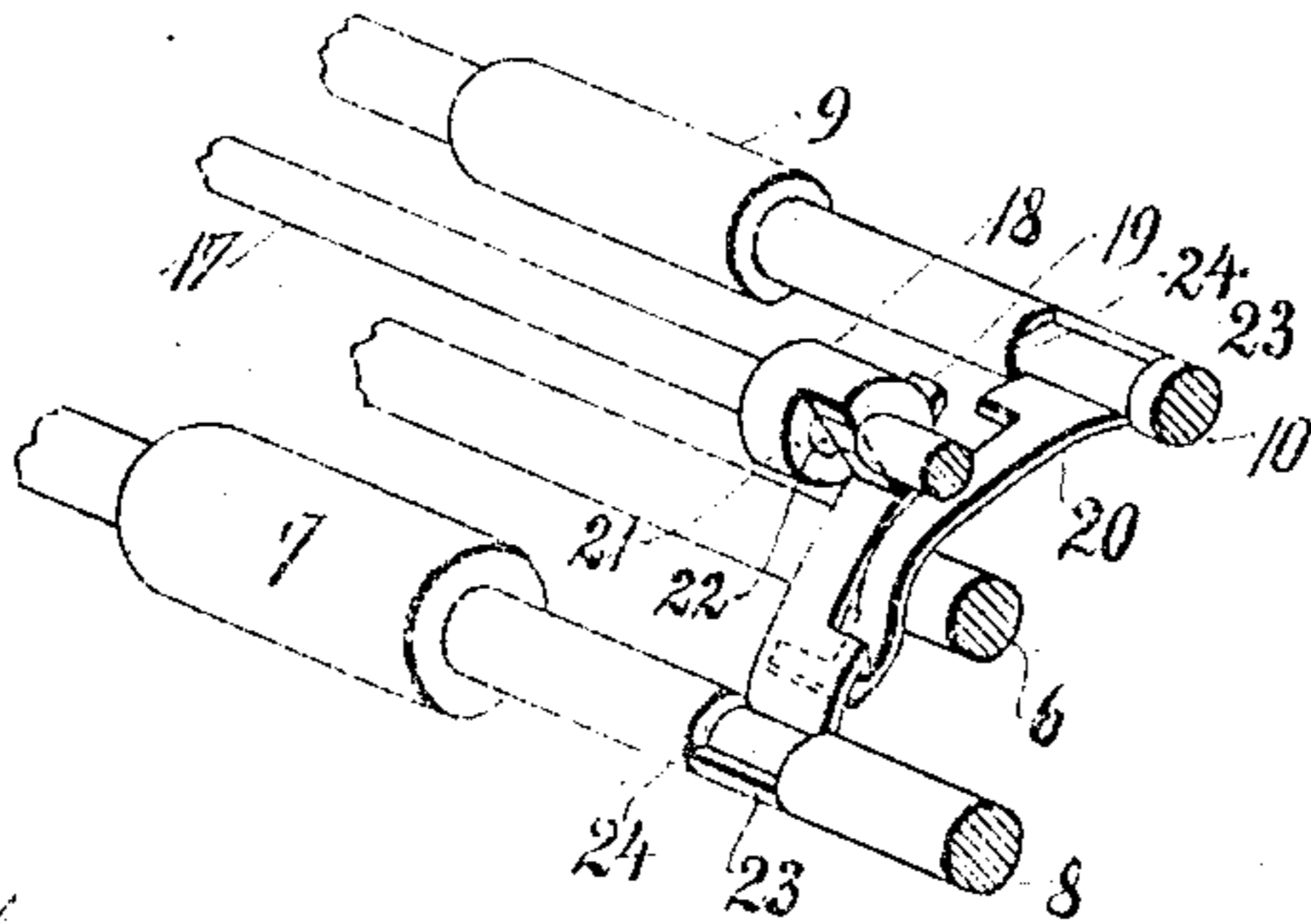
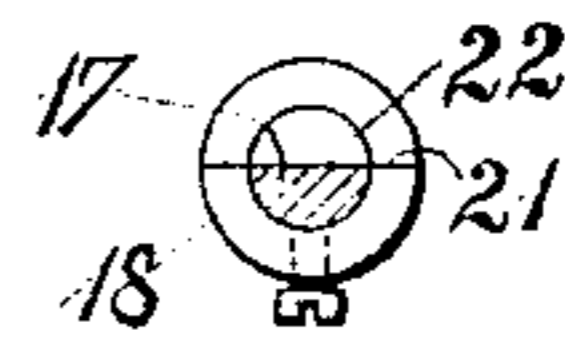


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

HERMAN L. WAGNER, OF MOUNT VERNON, NEW YORK, ASSIGNOR TO UNDERWOOD TYPE-WRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

TYPE-WRITING MACHINE.

No. 906,589.

Specification of Letters Patent.

Patented Dec. 15, 1908.

Application filed April 23, 1908. Serial No. 428,712.

To all whom it may concern:

Be it known that I, HERMAN L. WAGNER, a citizen of the United States, residing in Mount Vernon, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

This invention relates to the paper-feeding rolls of typewriting machines, and its object is to provide simplified and improved means for releasing from the platen the usual spring-pressed rolls which run thereon.

According to my present improvements, a releasing lever, having a bearing on a rod that forms part of the platen frame, extends to one of the roll-carrying shafts, and a second releasing lever, which extends to the other roll-carrying shaft, has a bearing upon the first releasing lever; while a key-operated cam moves the second lever to carry its roll shaft away from the platen, and simultaneously forces the first lever to vibrate to carry its roll shaft away from the platen, whereby all the rolls are released. Key-operated cams are carried upon a rock shaft which extends along the platen, and two or more sets of releasing levers may be simultaneously operated by said cam shaft, according to the length of the roll-carrying shafts.

In the accompanying drawings; Figure 1 is a plan of the bottom of the platen frame of an Underwood front strike writing machine, provided with my improvements. Fig. 2 is a sectional elevation showing the release-key depressed, and the rolls cast off from the platen. Fig. 3 is a view similar to Fig. 2, but showing the parts in normal positions. Fig. 4 is a perspective view to illustrate the releasing levers. Fig. 5 is a transverse section of the releasing-cam shaft, showing the cam collar thereon.

A platen 1 is mounted by an axle 2 in the ends 3, 4, of a platen frame, said ends joined by a paper shelf 5, and also by a fixed rod 6, which extends horizontally beneath the platen.

Rear pressure rolls 7 are mounted at intervals upon a shaft 8, and front pressure rolls 9 are mounted upon a shaft 10. The shafts are mounted respectively in arms 11, 12, all hinged upon the rod 6, which is intermediate of the roll shafts 8, 10; and springs

13 bear upon the arms to press the rolls against the platen. Upon the end of the platen frame is pivoted a release key 14, which is connected by a link 15 to a crank 16, formed upon a rock-shaft 17, which extends along the platen below the rod 6.

One or more cam collars 18 may be provided upon the rock-shaft 17 at suitable intervals. Each of said cam collars 18 bears upon the end of a releasing lever 19, which extends to the shaft 8. A second releasing lever 20 has a bearing at its front end upon the shaft 10, and between its end upon the rod 6. The rear end of the lever 20 serves as a bearing or fulcrum for the lever 19, so that the latter may simultaneously release its own rolls 7, and rock the lever 20 to release the rolls 9.

The collars 18 are cut away as at 21, and the shaft 17 may be also cut away as at 22, to form a recess normally receiving the end of the lever 19, Fig. 3; but when the key 14 is depressed, Fig. 2, the end of the lever 19 is cammed upwardly and the outer ends of both levers swung downwardly to release the rolls. At this time the lever 19 engages the cylindrical periphery of the collar 18, and is thereby mechanically locked in Fig. 2 position, by holding the pressure rolls away from the platen without attention from the operator, who may therefore use both hands in manipulating the sheets of paper. Upon lifting the key 14, the springs 13 restore the parts to normal positions.

The levers are formed with hooks 23 to engage the roll shafts, and said hooks may fit in recesses 24 formed in the shafts, thus preventing lateral displacement of the levers and rendering them readily attachable to and detachable from the shafts. It is immaterial whether the recesses be formed by cutting grooves in shafts of large diameter, or by placing sleeves of suitable lengths upon shafts of small diameter.

Having thus described my invention, I claim:

1. In a typewriting machine, the combination with a platen and two spring-pressed shafts carrying rolls to run upon the platen, means to guide said shafts, a release lever connected to one of said shafts, a release-lever connected to the other shaft and having a bearing on the first lever, and a key-operated cam to engage the second lever, to rock both

levers to release the rolls from the platen; said cam formed with a dwell portion to lock the rolls away from the platen.

5 2. In a typewriting machine, the combination with a platen and two spring-pressed shafts carrying rolls to run upon the platen, of an intermediate rod upon which are hinged arms to carry said shafts, a releasing lever of the first order having a bearing on said rod
10 and extending to one of said shafts, a releasing lever of the first order extending to the other shaft and having a bearing on the end of the first lever; and a key-operated rock shaft having a cam to engage the end of the
15 second lever, to rock both levers to release the rolls from the platen.

3. In a typewriting machine, the combination with a platen and two spring-pressed shafts carrying rolls to run upon the platen,
20 of an intermediate rod upon which are hinged arms to carry said shafts, a releasing lever of the first order having a bearing on said rod and extending to one of said shafts, a releasing lever of the first order extending to the
25 other shaft and having a bearing on the end

of the first lever, and a key-operated rock shaft having a cam to engage the end of the second lever, to rock both levers to release the rolls from the platen; said levers having open hooks for attachment to or detachment from said shafts. 30

4. In a typewriting machine, the combination with a platen and two spring-pressed shafts carrying rolls to run upon the platen, of an intermediate rod upon which are
35 hinged arms to carry said shafts, a key-operated rock-shaft extending along said rod, cams provided at intervals upon said rock-shaft, releasing levers engaged by said
40 cams, said levers extending to one of said roll shafts, and releasing levers extending from the other of said roll shafts and having bearings upon said rod and engaged by the first-mentioned releasing levers, to enable
45 the depression of said key to cast off all the rolls from the platen.

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