

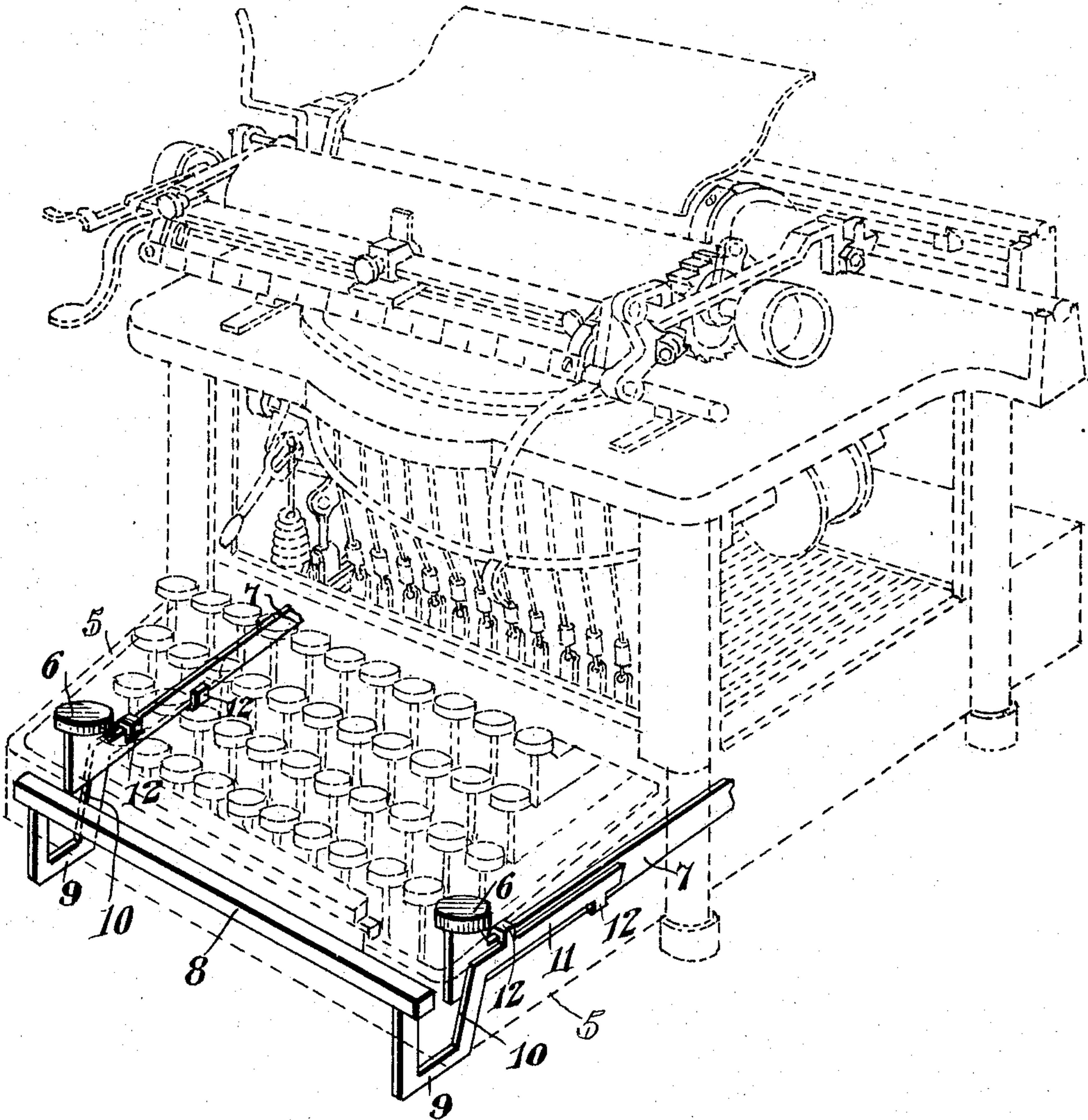
No. 843,032.

PATENTED FEB. 5, 1907.

J. D. POWELL.  
TYPE WRITING MACHINE.  
APPLICATION FILED OCT. 29, 1906.

2 SHEETS—SHEET 1.

*Fig. 1.*



*John D. Powell, Inventor*

By

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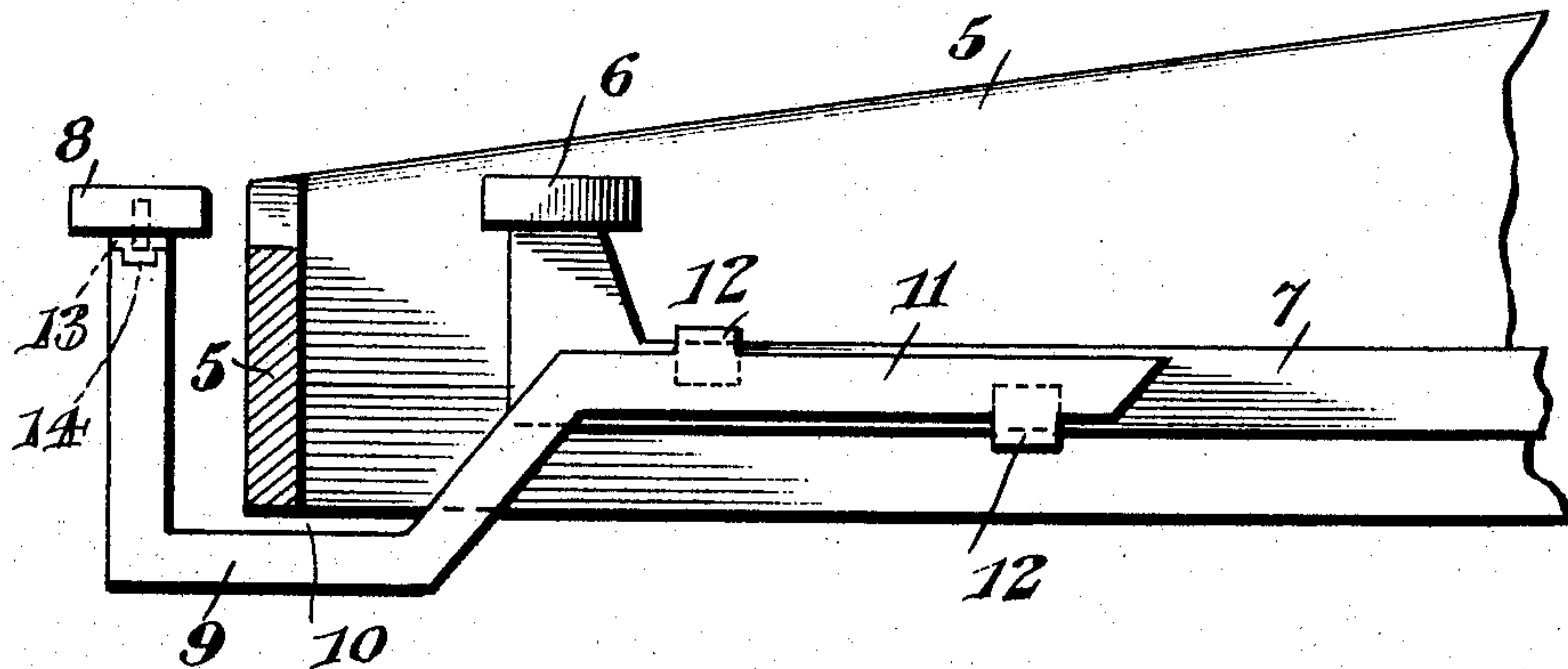
Attorney

Witnesses  
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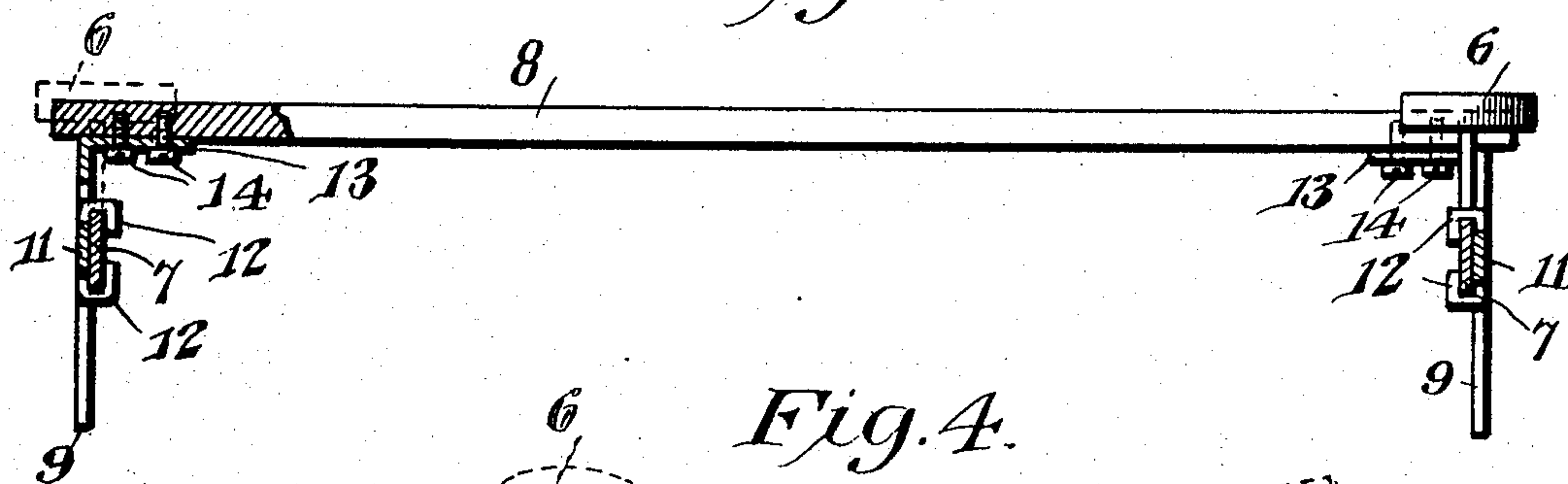
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2 SHEETS—SHEET 2.

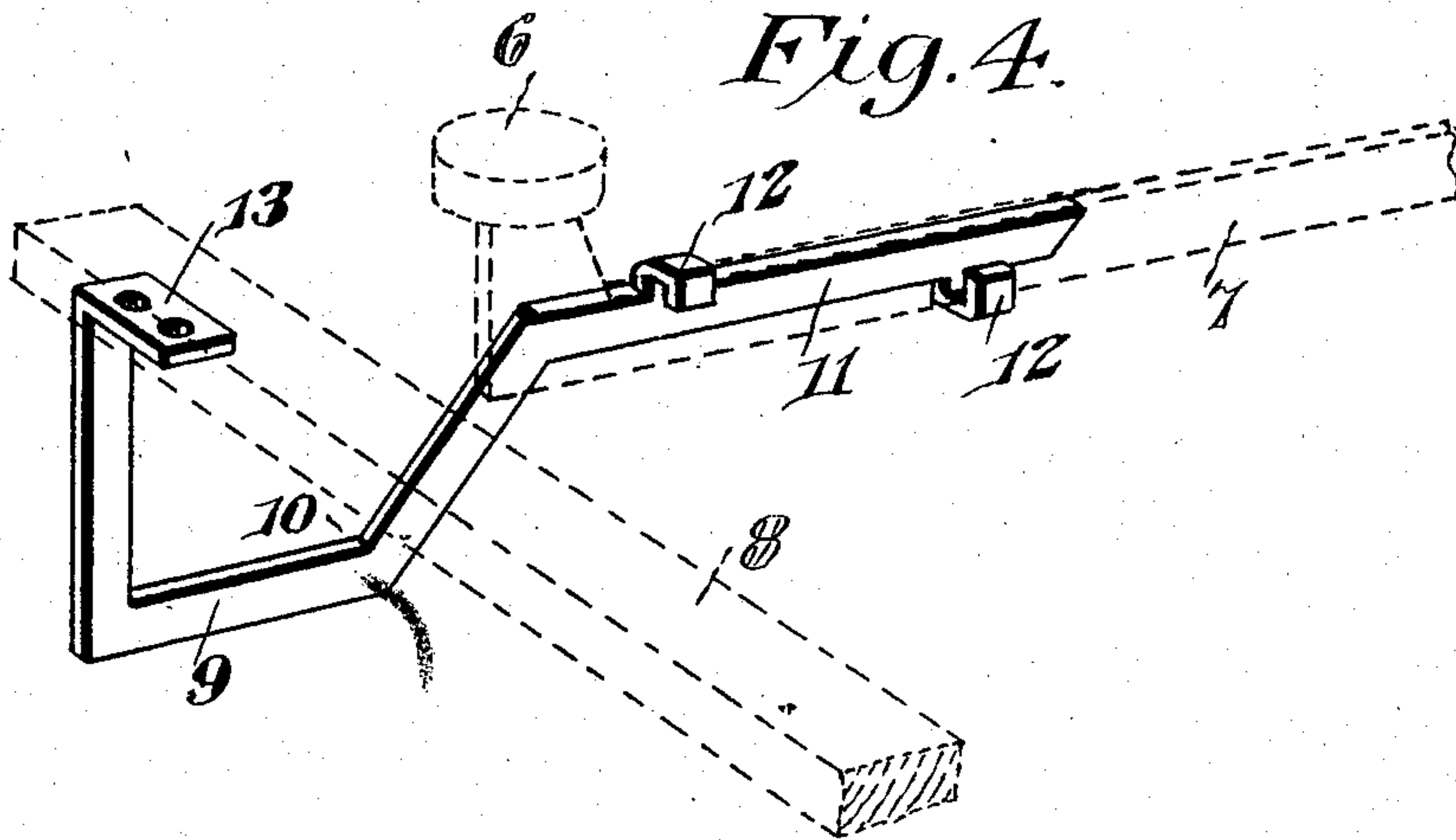
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

JOHN DODSON POWELL, OF CLEVELAND, TENNESSEE.

## TYPE-WRITING MACHINE.

No. 843,032.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed October 29, 1906. Serial No. 341,062.

*To all whom it may concern:*

Be it known that I, JOHN DODSON POWELL, a citizen of the United States, residing at Cleveland, in the county of Bradley and State of Tennessee, have invented a new and useful Type-Writing Machine, of which the following is a specification.

This invention relates to means for effecting a relative movement between the carriage and type action to print upper or lower case letters and symbols.

The principal object is to provide novel means of a simple nature for more conveniently operating the shift-keys ordinarily employed for such purpose in a type-writing machine, said means being so disposed that it may be actuated without removing the fingers from the keys of the keyboard and being, furthermore, so constructed that it may be readily attached to and detached from many well-known types of machines, though it is unquestionably adaptable for employment as a permanent fixture on a type-writing machine.

The preferred form of construction applied to a well-known make of type-writing machine is illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the improvement in place upon the shift-keys, the machine being indicated generally in dotted lines. Fig. 2 is a vertical sectional view through a portion of the machine, showing the attachment in elevation. Fig. 3 is a cross-sectional view, portions of the attachment being illustrated in section. Fig. 4 is a detail perspective view of one of the arms with the associated parts indicated in dotted lines.

Similar reference-numerals designate corresponding parts in all the figures of the drawings.

The type-writing machine may be of practically any well-known character, including a frame 5, that incloses a keyboard, said keyboard having shift-keys 6 at its outer corners, the keys including the usual operating-bars 7.

The improvement comprises an actuating-bar 8, that is disposed outside the frame and longitudinally of the front frame-bar of the machine. Secured to the ends of the actuating-bar 8 are arms having depending substantially U-shaped outer portions 9, forming seats 10, that receive the front frame-bar of the machine, said arms thus extending be-

neath the said frame-bar and having substantially horizontal inner end portions 11, that are arranged to be placed longitudinally alongside the bars 7 of the shift-keys. These end portions are provided with offset upwardly and downwardly extending clips or hooks 12, spaced apart, as shown, and projecting from the upper and lower edges of the arms. The hooks are arranged to engage over and beneath the bars 7. The preferred manner of securing the arms to the actuating-bar 8 will be clear from reference to Figs. 3 and 4. The outer ends of said arms are offset, as shown at 13, and are disposed beneath the ends of the bar. Holding-screws 14 are passed through the offset end portions 13 and into the under side of the bar, thus securely fastening the arms thereto.

In applying the invention to a type-writing machine it is only necessary to pass the arms beneath the front frame-bar and clip their inner ends to the shift-key bars, as shown. The actuating-bar 8 will thus be connected to and supported from the shift-key bars, and it will be evident that if the actuating-bar is moved downwardly the shift-keys will be actuated, thereby effecting a relative movement between the carriage and type action to change from lower to upper case-letters and symbols, or vice versa. Furthermore, inasmuch as the bar 8 extends the length of the keyboard it may be conveniently operated by the wrist, avoiding the necessity of removing the fingers from the keyboard, and thus not interfering with the operation of the keys.

The device is readily attachable to and detachable from machines already constructed; but it will be evident that it may be made as a permanent part of a type-writing machine and incorporated with said machine when the latter is first constructed.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. An attachment of the character de-



scribed, comprising an actuating-bar, and arms carried by the ends of the bar, each arm having a single upturned lip extending from the end portion of its under edge and  
5 having a single downturned lip projecting from an intermediate portion of its upper edge, said lips being arranged to engage respectively beneath and over the shift-keys of a type-writing machine to support the bar on  
10 said shift-keys and being detachable therefrom upon the upward-swinging movement of the bar.

2. An attachment of the character described, comprising arms having offset portions forming seats to receive the frame-bar of a type-writing machine, said arms having means at their inner ends for attachment to the shift-keys of said machine and having offset outer ends, and a bar mounted on and  
20 secured to the offset outer ends of the arms.

3. An attachment of the character described, comprising arms having depending substantially U-shaped intermediate portions forming seats to receive the frame-bar  
25 of a type-writing machine, each arm having a single upturned lip extending from the end portion of its under edge and having a single downturned lip projecting from an intermediate portion of its upper edge, said lips  
30 being arranged to engage respectively be-

neath and over the shift-keys of a type-writing machine to support the arms thereon and being detachable therefrom upon the upward-swinging movement of the arms, said arms having their outer ends oppositely offset, an  
35 actuating-bar having its end portions resting on the offset ends of the arms, and fasteners passing through said offset portions and into the under side of the bar.

4. An attachment of the character described, comprising arms having depending substantially U-shaped intermediate portions forming seats to receive the frame-bar of a type-writing machine, each arm having a  
45 single upturned lip extending from the end portion of its under edge and having a single downturned lip projecting from an intermediate portion of its upper edge, said lips being arranged to engage respectively beneath and over the shift-keys of a type-writing  
50 machine to support the arms thereon and being detachable therefrom upon the upward-swinging movement of the arms.

In testimony that I claim the foregoing as my own I have hereto affixed my signature  
55 in the presence of two witnesses.

JOHN DODSON POWELL.

Witnesses:

W. P. McKAMY, Jr.,  
SARAH McKAMY.