

1,041,558.

Patented Oct. 15, 1912.
2 SHEETS-SHEET 1.

Fig- 1-

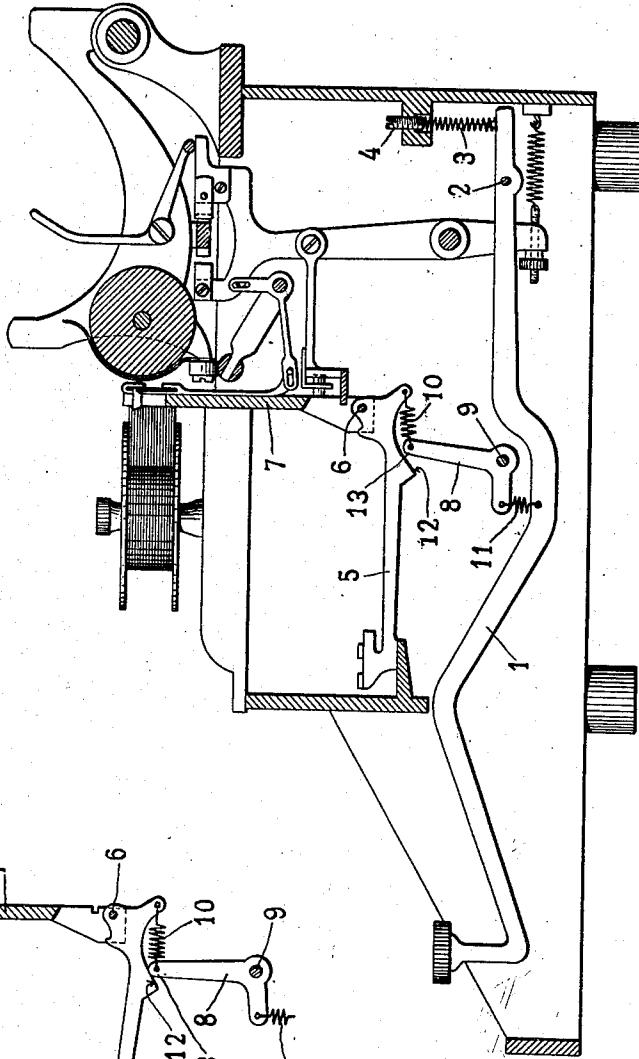
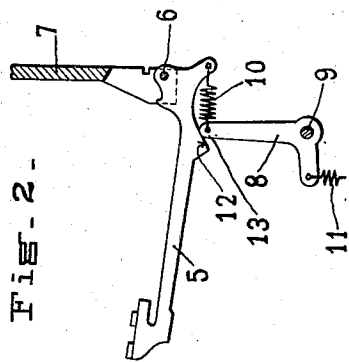


Fig- 2 -



WITNESSES

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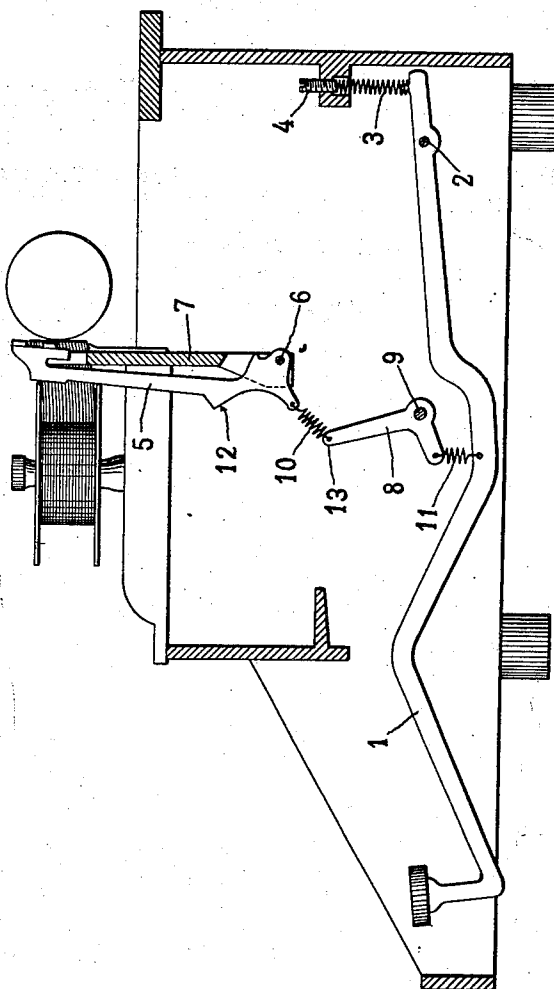
J. ALEXANDER.
TYPE WRITER ACTION.
APPLICATION FILED MAR. 30, 1912.

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2 SHEETS-SHEET 2.

Fig- 3-



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UNITED STATES PATENT OFFICE.

JESSE ALEXANDER, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO STEPHEN C. HALSTEAD, OF BROOKLYN, NEW YORK

TYPE-WRITER ACTION.

1,041,558.

Specification of Letters Patent.

Patented Oct. 15, 1912.

Application filed March 30, 1912. Serial No. 687,354.

To all whom it may concern:

Be it known that I, JESSE ALEXANDER, a citizen of the United States, and resident of New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Type-Writer Actions, of which the following is a specification.

My invention relates to improvements particularly in front stroke or visible writing machines.

The main object is to provide a light and yielding touch which is capable of developing a powerful printing stroke and which is susceptible of operation at a high speed.

The invention in its preferred form is illustrated in the accompanying two sheets of drawings. It should be understood, however, that modifications can be made within the scope of my invention in details of construction and arrangement of the parts. It is my intention to limit the scope of my claims only so far as required by the prior art and the terms of the description and of the claims are therefore to be considered as terms of description and not terms of limitation.

The rear of the key lever is under pressure of a compression spring. The intermediate lever is connected to the key lever and to the type bar by helical springs. The intermediate lever also has a sliding engagement with the type bar at the beginning of the stroke.

Figure 1 is a vertical longitudinal view of the machine showing the key and type bar action in its normal position of rest. Fig. 2, illustrates the starting of the type bar toward the printing position. Fig. 3, shows the type bar in the printing position.

The key lever 1 is pivoted at 2 and has its rear end under compression of the spring 3. The amount of compression can be adjusted by a screw 4. The type bar 5 is pivoted at 6 to the plate 7. The intermediate lever 8 is pivoted at 9 and connected by a helical spring 10 to a downward and rearward extension of the type bar and is connected by a helical spring 11 to the key lever. The type bar has an inclined shoulder 12 in front of and below the pivot 6 adapted to be engaged by the upper end 13 of the intermediate lever at the beginning of the printing stroke as shown in Fig. 2. As the type

bar starts on its printing stroke the spring connection 10 is brought into play and the type bar is thrown yieldingly to the printing point. In a similar way the yielding connection 11 affords a yielding touch to the key lever. As the tension of the springs 10 and 11 increases as the key lever is depressed, greater resistance is afforded gradually to the touch and owing to the momentum of the parts the movement is continued even after the key lever is released. Thus an easy touch is afforded and yet the action is capable of exerting sufficient force even for manifolded. When the key lever is released the tension of the springs 10 and 11 tends to pull the parts back to their normal position so that the recovery is rapid.

What I claim is:—

1. In a key and type bar mechanism, a pivoted type bar having a shoulder, a lever having one end adapted to engage said shoulder for starting said type bar and a spring connecting said lever and said type bar.

2. In a key and type bar mechanism, a vertical type bar plate, a type bar pivoted therein and having an extension in rear and below its pivot and a shoulder in front of and below its pivot, a lever adapted to engage said shoulder and a spring connecting said lever and said extension.

3. In a key and type bar mechanism, a vertical type bar plate, a type bar pivoted therein and having an extension in rear and below its pivot and a shoulder in front of and below its pivot, a lever adapted to engage said shoulder, a spring connecting said lever and said extension, a key lever and a spring connecting said key lever and said first mentioned lever.

4. In a key and type bar mechanism, a type bar, a pivoted intermediate lever, a spring connecting said intermediate lever and said type bar, a pivoted key lever, a spring connecting said key lever and said intermediate lever and a compression spring engaging said key lever.

5. In a key and type bar mechanism, a pivoted type bar having a downward and rearward extension, an operating lever and a spiral spring connecting said operating lever and said extension.

6. In a key and type bar mechanism, a pivoted type bar having an inclined shoulder

der, an operating lever adapted to engage said shoulder and a spring connecting said operating lever and said type bar.

7. In a key and type bar mechanism, a
5 pivoted key lever, a pivoted type bar having an arm extending downwardly and rearwardly of its pivot, a pivoted intermediate lever having a horizontal arm and a vertical arm, a helical spring connecting the hori-

zontal arm of said intermediate lever to said 10 key lever and a helical spring connecting the vertical arm of said intermediate lever and the downwardly and rearwardly extending arm of said type bar.

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Witnesses:

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