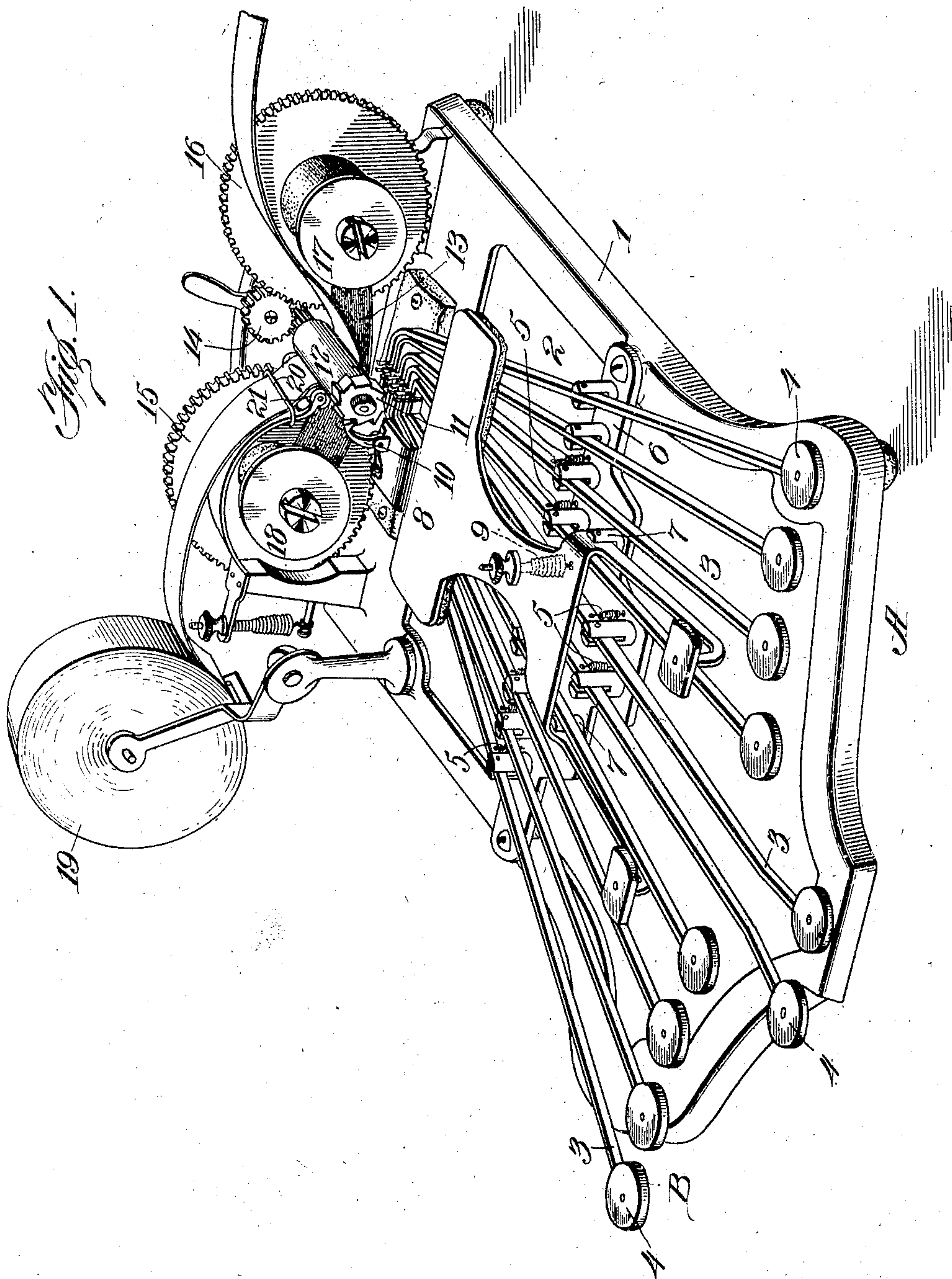


No. 865,910.

PATENTED SEPT. 10, 1907.

W. J. KEHOE.  
STENOGRAPHIC MACHINE.  
APPLICATION FILED JUNE 19, 1907.

2 SHEETS—SHEET 1.



Witnesses:  
Paul J. Gathmann  
Clara B. Kehoe.

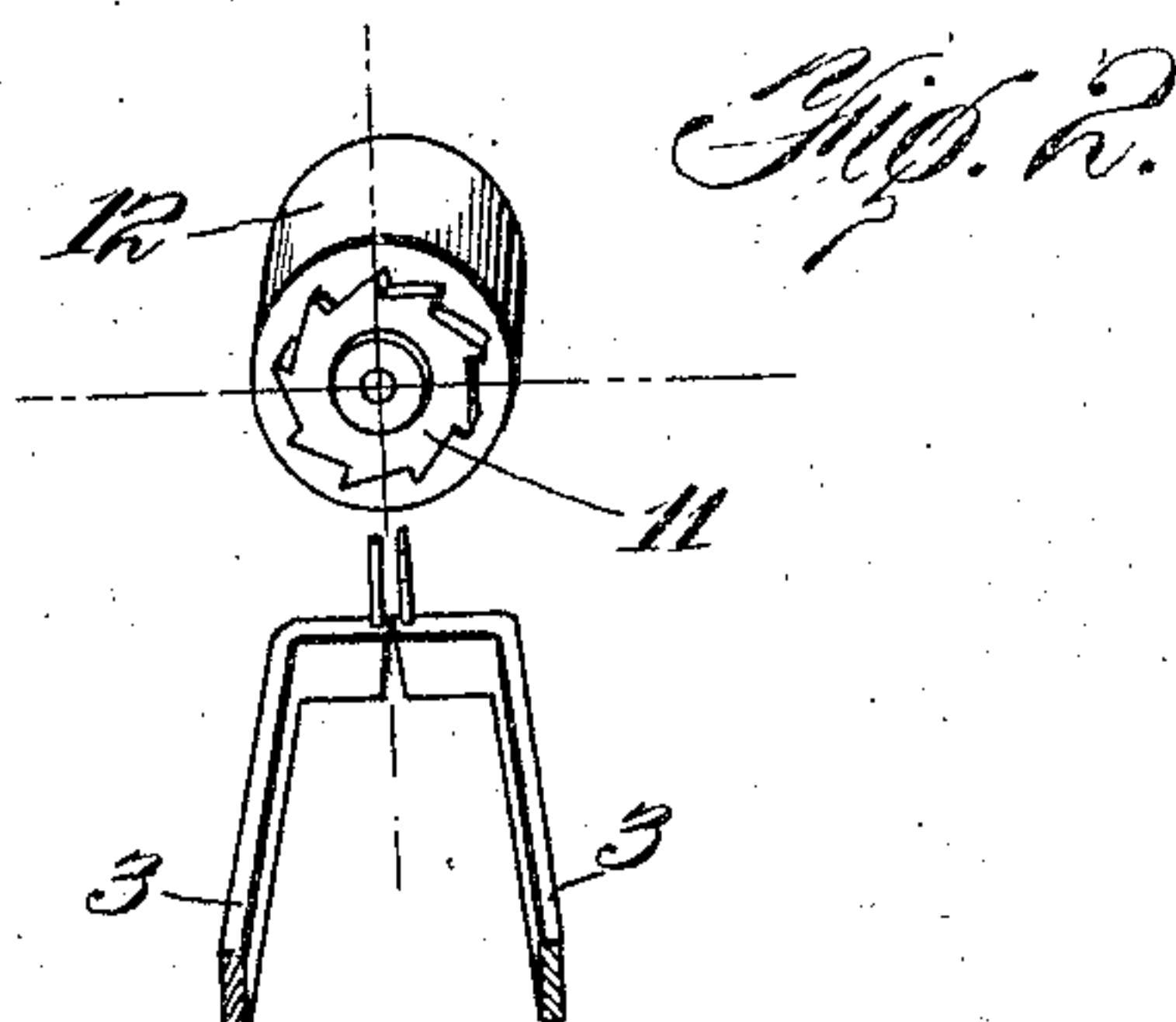
Inventor:  
William J. Kehoe

No. 865,910.

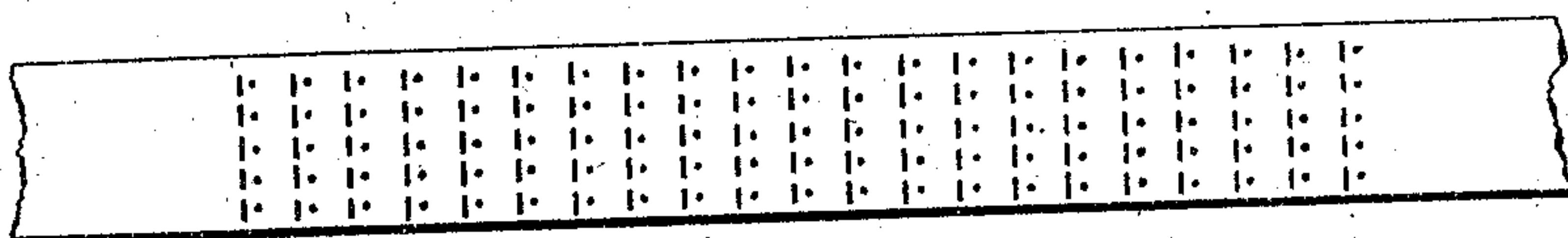
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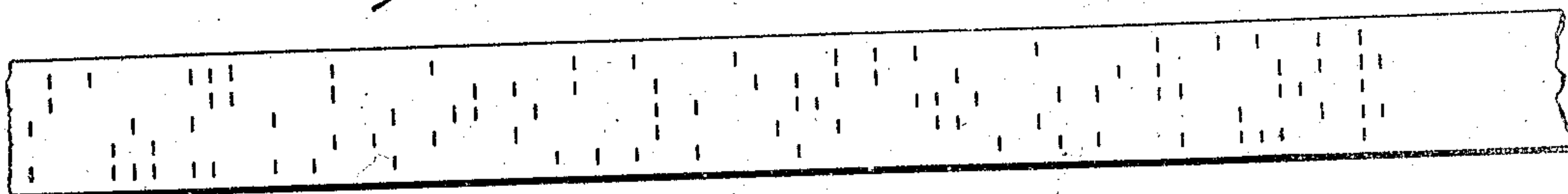
SHEETS—SHEET 2.



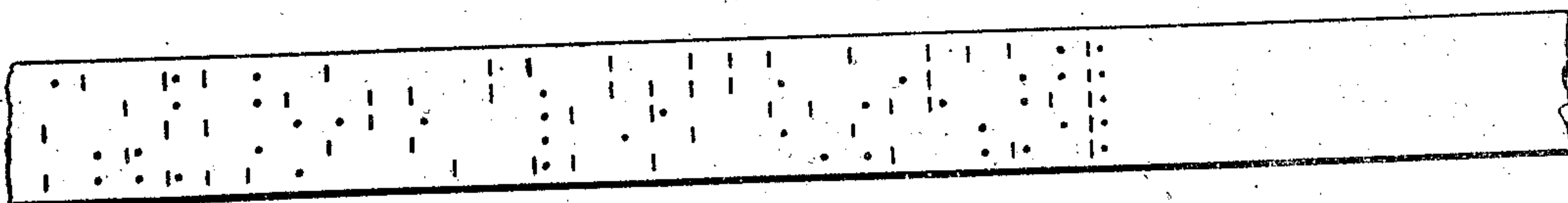
*Fig. 2.*



*Fig. 3.*



*Fig. 5.*



Witnesses:

Paul J. Gathmann.  
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Inventor:

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# UNITED STATES PATENT OFFICE

WILLIAM J. KEHOE, OF WASHINGTON, DISTRICT OF COLUMBIA.

## STENOGRAPHIC MACHINE.

No. 865,910.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed June 19, 1907. Serial No. 379,784.

*To all whom it may concern:*

Be it known that I, WILLIAM J. KEHOE, a citizen of the United States, residing at Washington, District of Columbia, have invented new and useful Improvements in Stenographic Machines, of which the following is a clear and exact specification.

My improvements consist in a stenographic machine, of two distinct sets of keys and markers, five in each set, and the machine is so designed as to make impressions across a paper ribbon in parallel groups and syllables; and the object of my improvements are, first, to be able to write complete sentences without the aid of a spacer; second, to afford facilities for depressing the two distinct sets of markers simultaneously or alternately. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the machine, Fig. 2 is a view illustrating principally the comparative distances between the teeth on the ratchet-wheel and the distance between the two sets of markers. Fig. 3 shows a result obtained by this machine. Fig. 4 shows another result. Fig. 5 shows the result obtained by the present method of stenographic machine in which there are sixty-seven depressions as compared to twenty-six depressions of Fig. 4, my machine.

Similar reference characters denote the same parts throughout the several drawings.

1, designates the base of the machine to which many details may be fastened; bifurcated posts or standards, 2, form fulcrums for the finger keys. The keys consist of flattened rods, 3, with finger-pieces, 4. It will be noticed by referring to the drawings that there are two independent sets of keys and markers, A, and B, respectively, five in each set. The keys, A, possess dashes for their marking characters and the keys, B, possess dots; so if the ten keys be depressed the result produced would be read across the paper ribbon, five dashes and five dots, the dashes appearing first and then the dots, but parallel and close to each other, and by repeating this operation several times I accomplish the result as shown in Fig. 3.

Springs, 5, serve to keep the rear end of the marking keys in a lowermost position; they are fastened through holes in the flat plate, 6. This plate supports two bifurcated posts, 7, to which is pivoted a space-actuating device, 8. Said device is drawn down by an adjustable spring, 9, whose lower end is attached to the base of the machine at any desired point. This spacing device over-lies the marking keys near the inner end, so that it is lifted by any of the said keys as they are operated upon. The inner end of the spacing device carries a pivoted pawl, 10, which engages a ratchet-wheel, 11, and turns the rubber impression-roller, 12, at each

depression of the marking keys. At each stroke of any one or more of the marking keys, the spacing device is raised such a distance as to move the pawl, 10, one tooth upon the ratchet-wheel, 11, so that as the marker descends and the spacing device with it, the rubber roller, 12, turns and pulls the paper ribbon such a distance as to print impressions on said paper ribbon as illustrated in Fig. 4.

It will be observed that by the use of this instrument the spacing device, 8, causes no marking effect upon the paper ribbon and is only for the purpose of distinguishing entirely new paragraphs, punctuation, etc. Further, it must be understood that it is not essential to make use of the spacing device between words as is now practiced.

Referring to the drawings it will be noticed that an inked ribbon, 13, at each movement of either the spacing device or marking keys moves slowly along underneath the rubber impression-roller, 12. This rubber roller has secured to its rear end an intermediate spur-gear, 14, which meshes either one of the larger spur-gears, 15, and 16, respectively. When the inked ribbon is wound all on one reel, 17, its direction is reversed, which is accomplished by throwing the intermediate gear, 14, to the right; (or left, as the case may be) to the reel, 18. The paper ribbon is supplied from a paper roll, 19.

On one side of the machine is a guide, 20, which leads the paper ribbon between a friction-roller, 21, and the impression-roller, 12. The guide and friction-roller may be supported from the base of the machine as shown in Fig. 1.

The chief advantage of my improvements is, that by means of them the speed of the stenographic machine is increased considerably over one hundred per cent.

I am aware that prior to my invention stenographic machines have been made with two sets of markers. I therefore do not claim such a combination broadly; but,

What I do claim as my invention, and desire to cover by Letters Patent, is—

In a stenographic machine, the combination with the marking keys, the spacing device, carrying a spring and pawl, a ratchet-wheel engaging with said pawl, the adjacent teeth of said ratchet-wheel being set apart at a greater angular distance, than the distance of the adjacent marking characters, whereby a single pawl and ratchet-wheel turns the impression or feed roller, the paper tape with it, the distance equal to one tooth of said ratchet-wheel, after depressing any of said marking keys, substantially as shown and described.

WILLIAM J. KEHOE.

Witnesses:

MAY E. KEHOE.

ANNE JOSEPHINE CLEMENTS.