

(No Model.)

W. H. BRIGGS.
TYPE WRITING MACHINE.

No. 578,507.

Patented Mar. 9, 1897.

Fig: 1.

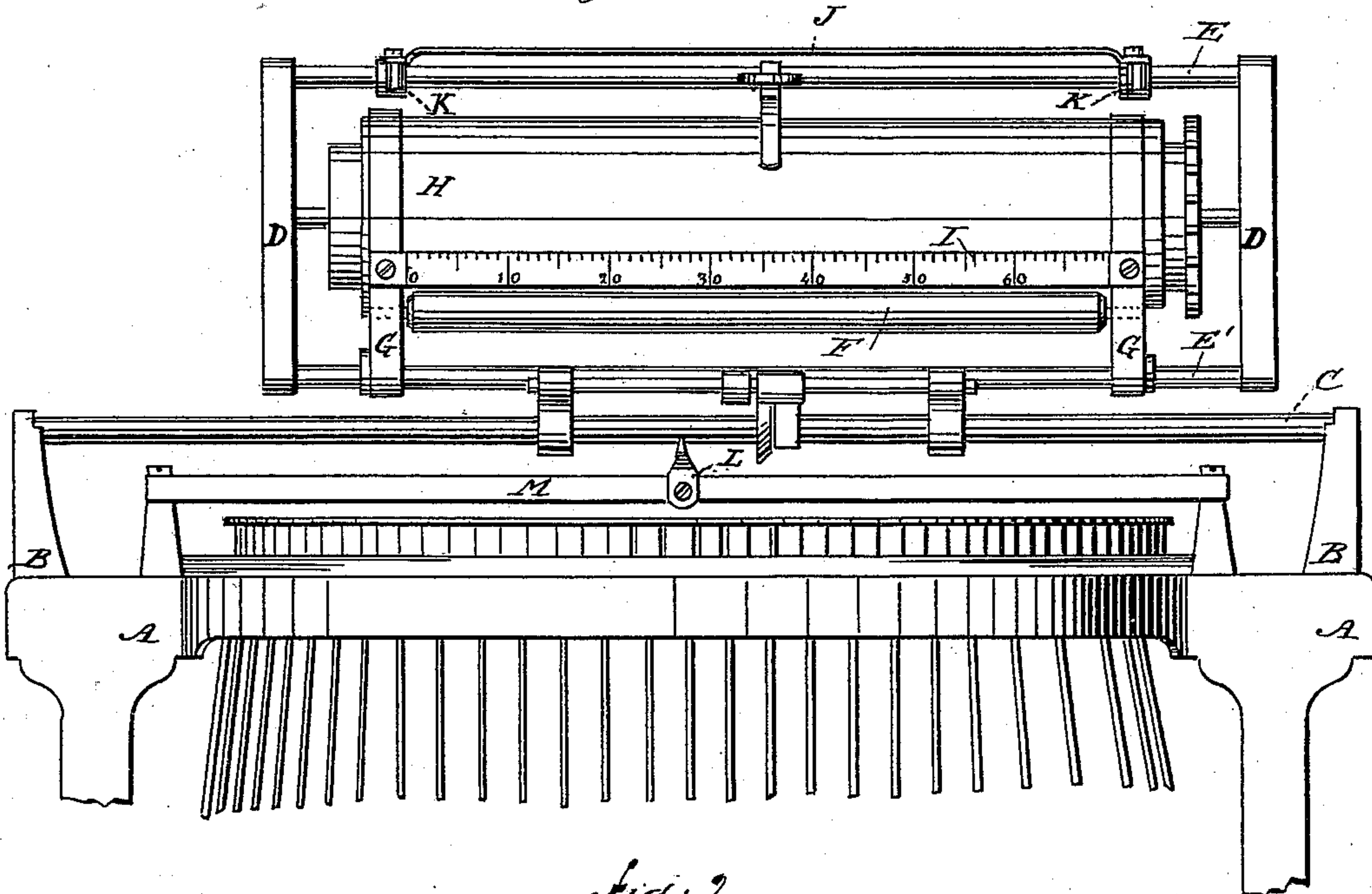


Fig: 2.

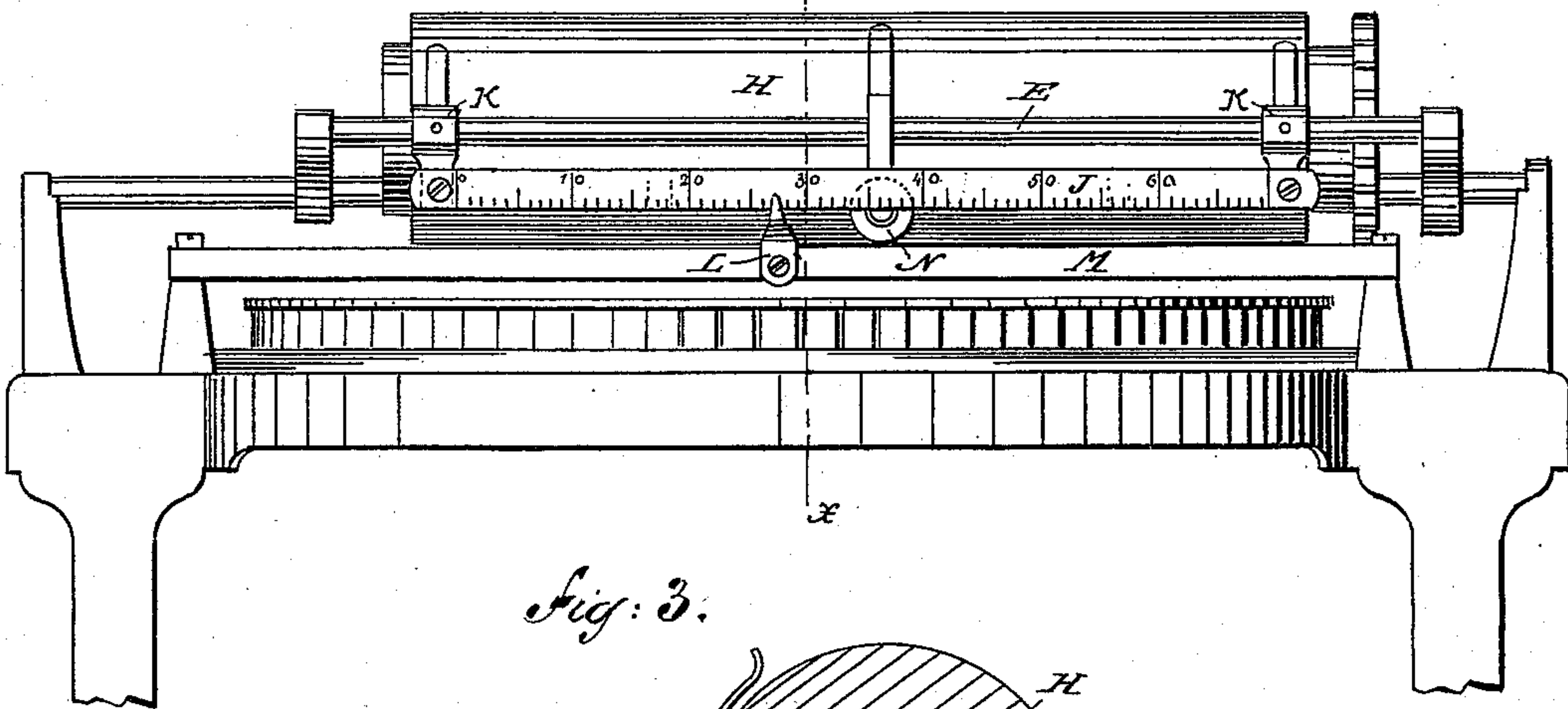
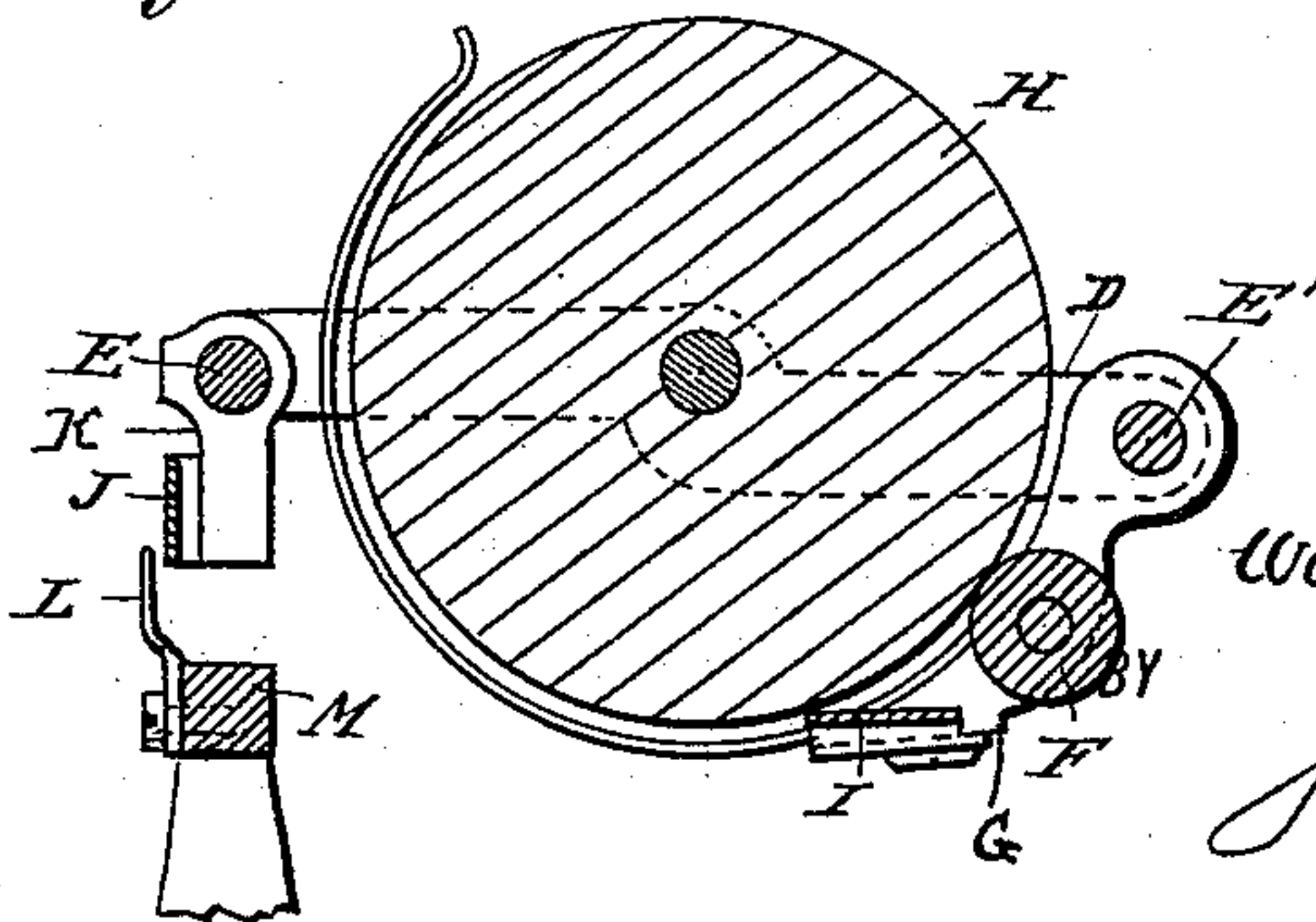


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM H. BRIGGS, OF BROOKLYN, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO CLARENCE W. SEAMANS AND ERNEST R. BARRON, OF SAME PLACE, AND DANIEL C. ROUNDY, OF CHICAGO, ILLINOIS, EXECUTORS OF JAMES DENSMORE, DECEASED.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 578,507, dated March 9, 1897.

Application filed March 22, 1890. Serial No. 344,866. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BRIGGS, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

My invention relates more particularly to that class of type-writing machines in which a paper-carriage moves over a series of types all adapted to strike at a common center.

Previous to my invention it has been usual to employ a scale-plate on the framework of the machine and a scale-plate and a pointer or index-finger on the traveling paper-carriage for the purposes of adjusting the paper and facilitating the writing and the making of corrections. In such machines the scale-plate on the framework of the machine, over which the pointer moves, is graduated and marked to read from right to left, while the scale-plate on the paper-carriage is reversely arranged or graduated and marked to read from left to right and is set or placed to travel on the under side of the paper-carriage in a plane just back of the printing-point or striking center of the types. The main objection to this previous construction is that the operator is obliged to read the two scales from opposite directions, which is extremely confusing to one engrossed in work, and hence frequently results in the committing of errors, and hence vexatious delays.

My invention has for its main objects to provide a construction and arrangement of scales and pointer capable of performing all of the functions of the previous arrangements, while at the same time avoiding the objections urged against the same.

To this main end and object, my invention consists, primarily, in the use of a fixed or stationary pointer or index in connection with two scales mounted upon the carriage and arranged both to read in the same direction; and my invention further consists in other features of construction and arrangement, all as will be hereinafter more fully described,

and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a front elevation of a machine embodying my improvements, the paper-carriage being turned up. Fig. 2 is a similar view with the paper-carriage turned down. Fig. 3 is a vertical section taken at the line $x x$, Fig. 2.

In the several views the same parts will be found designated by the same letters of reference.

A represents the main frame or top plate of a type-writing machine, and B standards projecting therefrom and supporting the ends of the paper-carriage guide and hinge-rail C.

The carriage end bars are lettered D and the front and back bars or rods E and E', respectively.

F is the pressure or feed roller, mounted to turn in brackets G, arranged upon the back carriage-rod.

H is the cylindrical platen, and I a scale-plate attached at its ends to the brackets G and graduated to read from left to right. J is a scale-plate on the front of the carriage, marked to read also from left to right and attached to the brackets K, secured to the front carriage-rod E.

L is a pointer or index fixed to a stationary part of the machine, preferably the carriage track or way M, upon which the wheel or roller N travels.

When the carriage is down and the machine being operated, the traveling scale J and the stationary pointer L indicate the advance or forward motion of the carriage as well as the position of any given portion of the line being written.

When the carriage is turned up, the scale I, which is close to the platen and directly under the line being written, shows also the extent of advancement of the writing and may be used as an aid in the making of corrections and the printing of characters at any desired localities. For instance, suppose a character has been omitted at a point opposite "20" on the scale I. This may be readily inserted by turning down the carriage and mov-

ing it in the proper direction (as illustrated, to the right) until the point marked "20" on the scale J registers with the stationary pointer L, which is fixed in line with or opposite to the printing-point or common center of the types. The finger-key is then struck and the type in connection therewith will be caused to leave its impression on the paper at the required locality opposite the numeral "20".

The scale I travels in substantially a horizontal plane, and the scale J travels in substantially a vertical plane. Both are of the same length, and being correspondingly divided and marked in the same direction the corresponding graduations and numerals always register or occupy the same vertical planes. It will be seen, therefore, that by my invention a construction is provided whereby the work may be done with greater facility and with less liability of error than heretofore.

The index may, of course, instead of being in the form of a finger consist of a mark or line, and hence I do not wish to be limited to any particular kind of fixed or permanent index or indicating means.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a type-writing machine, the combina-

tion with the paper-carriage, of a graduated scale thereon, an index on the main frame, and a scale on the under side of the platen-frame in close proximity to the platen and arranged to be brought into view when the platen-frame is turned back.

2. In a type-writing machine, the combination of a hinged and traveling paper-carriage, a scale arranged on the under side of the platen near where the line of writing occurs and in substantially a horizontal plane, and marked to read from left to right, another scale arranged upon and at the front of said paper-carriage in substantially a vertical plane and also marked to read from left to right and corresponding exactly with the first-mentioned scale, and a pointer or index fixed or stationary at the front of the paper-carriage in proximity to the front paper-carriage scale and in line with the impression-point; substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 21st day of March, A. D. 1890.

WILLIAM H. BRIGGS.

Witnesses:

JACOB FELBEL,
M. E. LEES.