

No. 747,712.

PATENTED DEC. 22, 1903.

C. F. HOPKINS.
TYPE WRITING MACHINE.
APPLICATION FILED MAY 15, 1902.

NO MODEL.

Fig. 1.

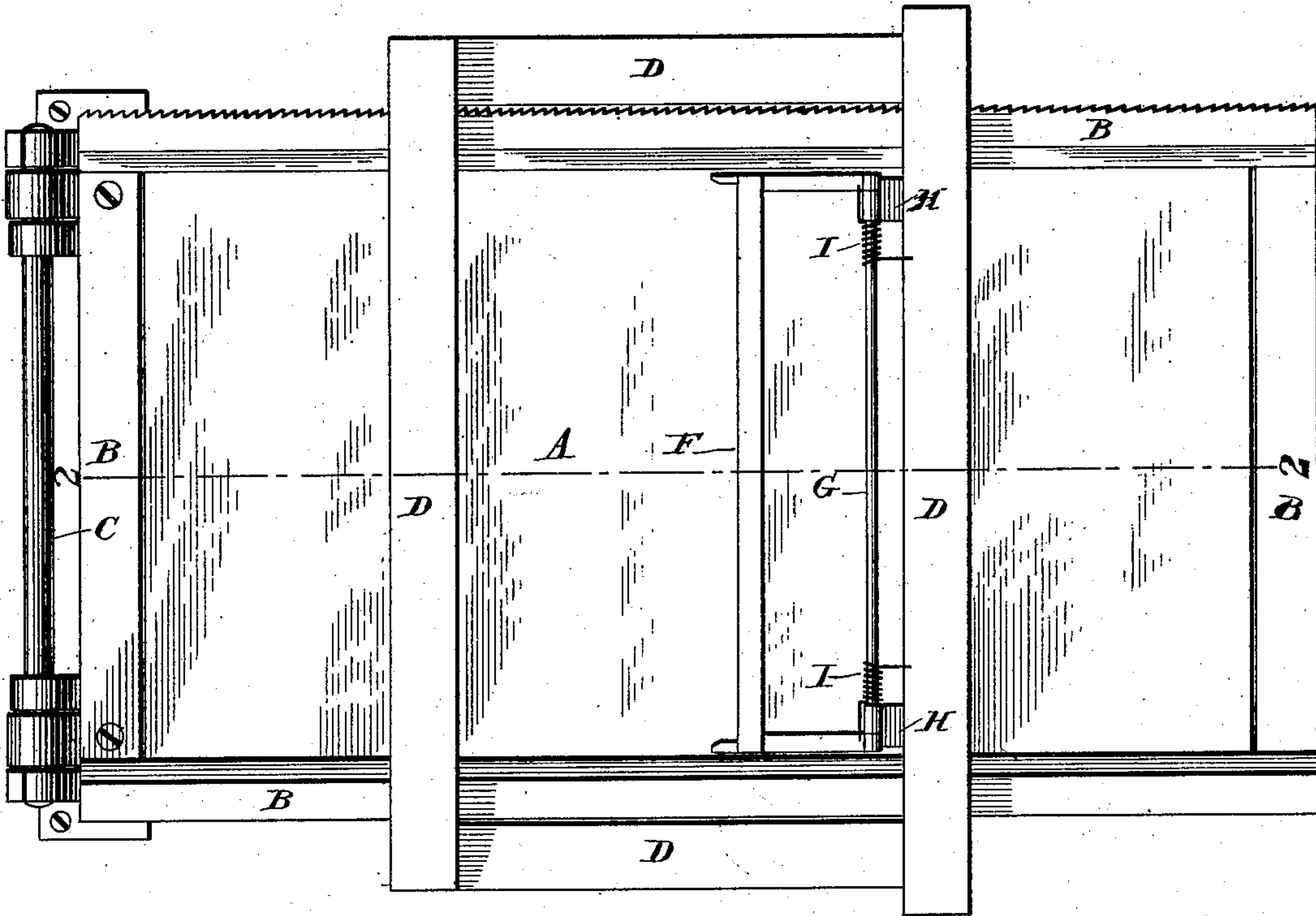
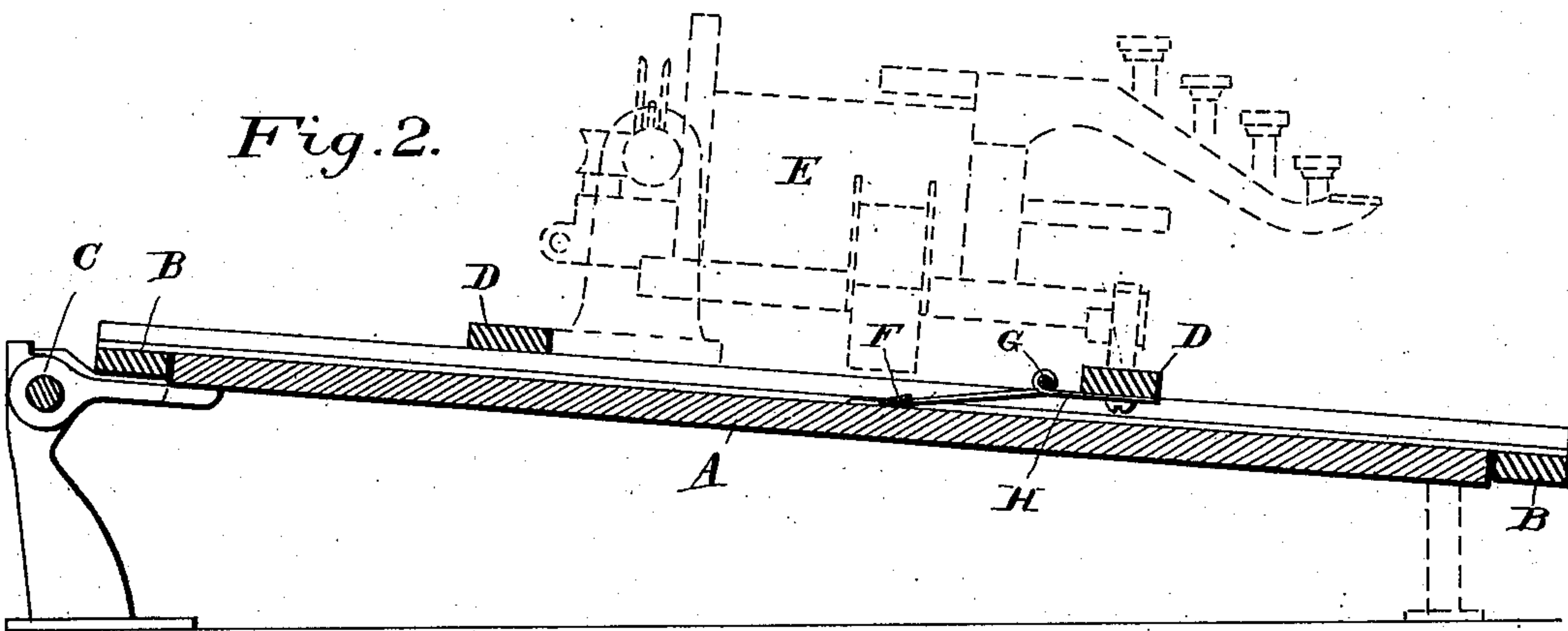


Fig. 2.



WITNESSES:

G. J. Elmore
N. R. Kennedy

INVENTOR

C. F. Hopkins

BY

P. T. Sledge
ATTORNEY.

UNITED STATES PATENT OFFICE.

CLARENCE F. HOPKINS, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO ELLIOTT-FISHER COMPANY, A CORPORATION OF DELAWARE.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 747,712, dated December 22, 1903.

Application filed May 15, 1902. Serial No. 107,405. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE F. HOPKINS, of New York city, county of New York, and State of New York, have invented a new and
5 useful Improvement in Type-Writing Machines, of which the following is a specification.

My invention relates to that class of type-writing machines wherein a flat platen is employed to sustain the paper beneath the writing mechanism movable horizontally there-
10 over for the purposes of letter and line spacing, as in the Elliott & Hatch machine of commerce represented as to its general organization in Letters Patent to Hatch and Hillard
15 No. 620,125. In this class of machines the writing mechanism is sustained by an open rectangular frame overlying the platen and adapted to be raised momentarily there-
20 over, so that the edges of the paper will be clamped between the platen and the side bars of the frame. In practice it is found desirable to provide additional means for confining or holding down the paper, particularly
25 when a number of copies are to be produced by the employment of a number of paper sheets and intermediate carbon-sheets.

My invention relates to a spring-actuated pressure device or clamp lying transversely
30 of the platen and movable along the same from one end toward the other in order that the pressure may be applied at different points and in the immediate vicinity of the writing or printing as the latter progresses. In its
35 preferred form this pressure device is attached to the movable frame, which carries the writing mechanism, so that as the latter is advanced line by line the pressure device will be moved to correspond.

Referring to the drawings, Figure 1 is a top plan view of the framework of the machine provided with my improvement, the writing mechanism being omitted to expose the parts
40 thereunder. Fig. 2 is a vertical section on the line 2 2 of the preceding figure with the writing mechanism indicated in dotted lines.

Referring to the accompanying drawings, A represents the flat bed or platen on which

the paper is sustained; B, the rectangular frame overlying the platen along its sides
50 and mounted at the rear end in a horizontal pivot-rod C, so that it may be lifted clear of the platen to permit the insertion of the sheets beneath it with their edges in position to be clamped upon the platen by the frame,
55 as usual.

D is a smaller rectangular frame mounted on the frame B to slide forward and backward and serving to sustain the writing-machine E, which is mounted thereon, to travel
60 laterally for letter and word spacing. The details of the writing mechanism and the devices for feeding the same on the frame D for letter and word spacing and for moving the frame D for line-spacing may all be of ordi-
65 nary construction.

F represents my pressure device, consisting in the present instance of a transverse bar lying within the frame D in position to bear upon the platen or the paper thereon.
70 This bar has its ends bent at right angles and mounted on a pivot-rod G, sustained in plates or ears H, secured to the frame D, this arrangement permitting the bar F to rise and fall, allowing it to travel endwise of the
75 platen with the frame D and the writing mechanism, so that it will at all times bear upon the paper near the line on which the printing is being effected. In order that the pressure device F may act the more effect-
80 ively and with the pressure requisite to hold down a number of sheets in compact form, a spring I, encircling the pivot-rod G, is arranged to bear at one end on the frame D and at the opposite end on the pressure device, so
85 that it exerts a sufficient pressure to keep the loose or fluffy masses of paper down in compact form, that the printing and manifolding operations may take place in a satisfactory
90 manner.

What I claim as my invention is—

1. In a type-writer, a flat platen to sustain the paper and an overlying writing mechanism, in combination with a spring-actuated pressure device to act upon the paper, mov-
95 able lengthwise of the platen.

2
2. In a type-writing machine, the combination of the platen, an overlying traveling frame D with the writing mechanism sustained thereon, and a spring-actuated pressure device attached to said frame and arranged to bear upon the paper beneath.

3. In a type-writing machine, the combination of the following elements: a flat platen, a type-writing mechanism movable thereover, means for confining the paper removably on the platen, and a transverse yielding pressure device, adjustable lengthwise of the platen, to aid in confining the paper thereon.

4. In a type-writing machine, the combination of the following elements: a flat platen, a type-writing mechanism movable thereover, means for confining the paper immovably on the platen, and a transverse yielding

pressure device carried by the writing mechanism and movable to and from the platen to aid in holding the paper in flat form.

5. In a paper-clamp for type-writing machines, the combination with an open base-frame, of a supporting member removably mounted in the base-frame and movable thereon in the direction of line-spacing, and a clamping member pivoted to the supporting member, substantially as described.

In testimony whereof I hereunto set my hand, this 11th day of April, 1902, in the presence of two attesting witnesses.

CLARENCE F. HOPKINS.

Witnesses:

WM. A. MURRAY,
C. J. S. ANDERSON.