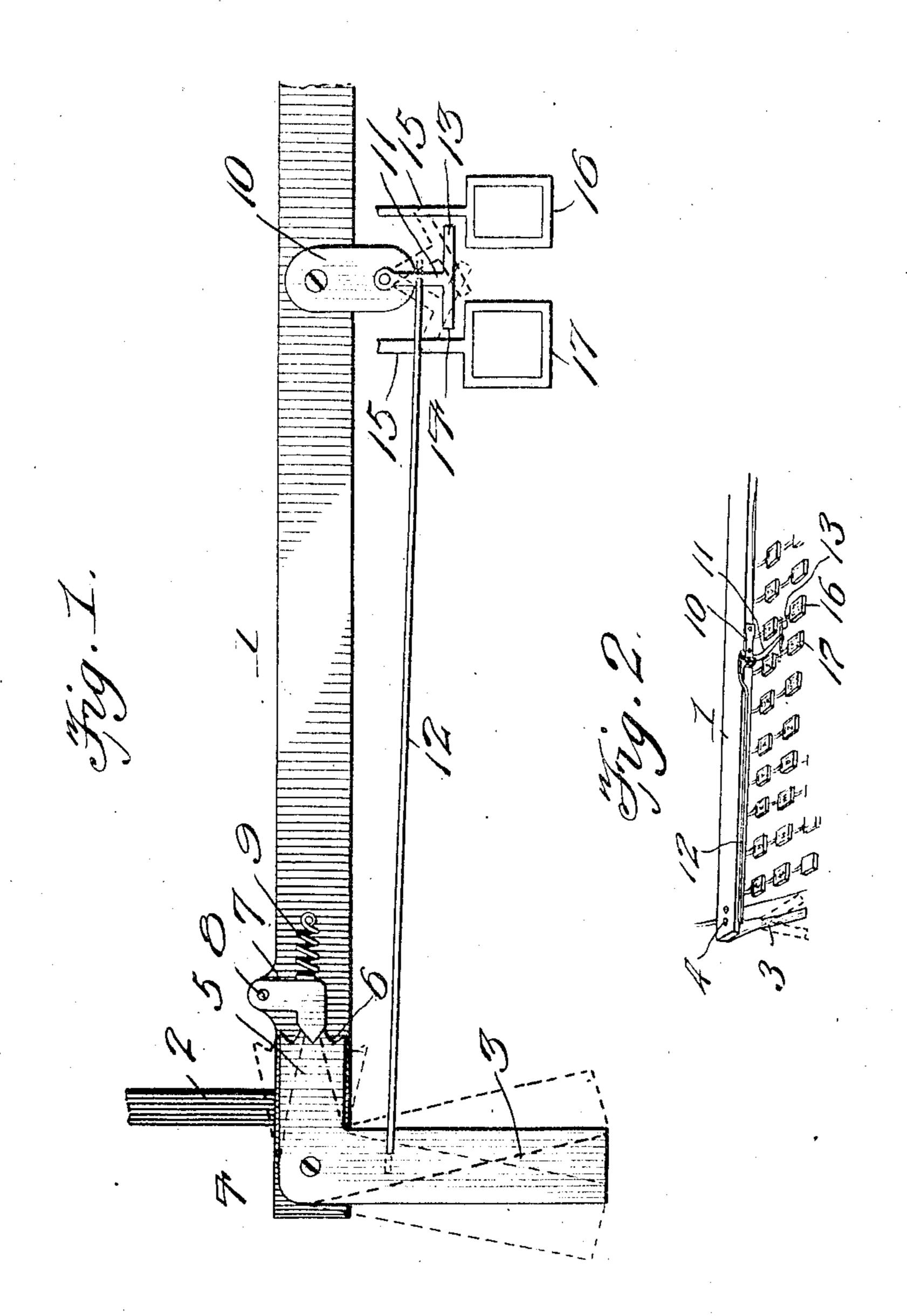
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G. E. WALLIN.

WIDE SPACING ATTACHMENT FOR LINOTYPE MACHINES.

APPLICATION FILED JULY 20, 1907.



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## UNITED STATES PATENT OFFICE.

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## WIDE-SPACING ATTACHMENT FOR LINOTYPE-MACHINES.

No. 887,678.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed July 20, 1907. Serial No. 384,718.

To all whom it may concern:

Be it known that I, Gustaf E. Wallin, a citizen of the United States, residing at Kansas City, in the county of Jackson and State 5 of Missouri, have invented new and useful Improvements in Wide-Spacing Attachments for Linotype-Machines, of which the following is a specification.

This invention relates to a device designed 10 for permitting the operator of a linetype machine to obtain wide spacing of the type or words in evening the lines or where large type is used, necessitating a space wider than the ordinary wedges of the machine will produce, 15 and it relates more particularly to an attachment adapted to be applied to the space bar at the head of the keyboard of a linotype machine for enabling the above results to be readily accomplished.

The invention has for one of its objects to provide a device of the character referred to to manufacture, readily applied to machines without requiring any changes or alterations, 25 and which possesses the advantage of eliminating a large amount of hand spacing.

A further object of the invention is the provision of an attachment for the space bar of the keyboard whereby either the N quad 30 key or thin space key can be simultaneously depressed with the space bar for the purpose of causing an N quad or thin space quad to be deposited simultaneously with the dropping of a wedge spacer into the assembler.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described 40 hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawing, which illustrates one of the embodiments of the inven-45 tion of the space bar showing the invention applied thereto in coöperative relation with the "N quad and thin space" keys. Fig. 2 is a perspective view of a key-board of a linotype machine showing my improved attach-50 ment applied thereto.

Referring to the drawing, 1 designates the at the head or top of the keyboard of the I the method of operation will be readily

linotype machine and mounted on swinging arms, one of which is indicated at 2. The 55 usual presser arm at the left hand end of the bar 1 is dispensed with and a swinging arm 3 used in its stead, the said arm being pivoted at 4 and provided with a short arm 5 that has teeth or notches 6 in its end edge. 60 Coöperating with the notched member of the arm 3 is a pawl 7 pivoted on the space bar at 8 and held yieldingly into engagement with the teeth 6 by a spring 9 fixed on the space bar to engage behind the pawl. 65 At a point directly above the "N quad and thin space" keys is secured to the space bar 1, a plate 10 that supports a pivoted Tshaped member 11 that is adapted to be actuated by the arm 3 through a connecting 70 rod 12. The oppositely extending arms 13 and 14 of the member 11 are adapted to engage respectively over the thin space key and N quad key so as to engage the bars which is comparatively easy and inexpensive | thereof when the arm 3 is turned to the 75 right or left, portions of the bars being indicated at 15. The arm 3 is adapted to have three different positions, as shown, and the spring-pressed pawl locks the arm in any one position, and in order to shift the arm, 80 it is merely necessary to apply pressure thereto in the proper direction and the pawl will yield to permit the teeth to pass thereunder and then automatically lock the arm in fixed position. When the arm is in cen- 85 tral position, the T-shaped member 11 lies between the key bars 15 so that the space bar 1 can be depressed without depressing either of the keys 16 or 17. When the arm 3 is thrown to the right or left, as shown by 90 dotted lines, the member 11 will be shifted to lie over one or the other of the key bars so that the space bar can be depressed, together with either of the keys 16 or 17, since the member 11 moves with the space 95 bar. It will thus be seen that by throwing tion, Figure 1 represents a plan view of a por- | the arms 3 to one side or the other, an N quad or thin space piece can be deposited in the assembler of the linotype machine at the same time with the dropping of the 100 wedge space, as the operator depresses the space bar in the usual manner.

From the foregoing description, taken in connection with the accompanying drawing, space bar of usual construction and located | the advantages of the construction and of 105

apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the apparatus 5 which I now consider to be the best embodiment thereof, I desire to have it understood that such changes may be made when desired; as are within the scope of the claims.

Having thus described the invention, what

10 I claim is:—

1. An attachment for linotype machines comprising an adjustable member attached to the space bar of the keyboard, and a device on the keyboard controlled by the mem-15 ber for engaging one or more quad controlling keys to operate the same simultaneously with the actuation of the space bar.

2. An attachment for linotype machines carried entirely by the space bar of the key-20 board, said attachment comprising a device adapted to be brought into coöperative relation with one or more quad controlling keys, a member mounted on the bar at one side of the keyboard for depressing the bar, a con-25 nection between the member and device for setting the latter, and a locking means for holding the device in set position.

3. An attachment for linotype machines mounted on the space bar thereof, said at-30 tachment comprising a swinging arm pivoted on the space bar and provided with notches, a spring-pressed pawl yieldingly engaging in the notches, a device on the space

bar adapted to be thrown into coöperative relation with one or more of the quad con- 35 trolling keys, and a connecting rod between the member and device.

4. In a linotype machine, the combination of a space bar for the keyboard, an adjustable member thereon for depressing the 40 space bar, and means carried by and movable with the space bar and controlled by the member for depressing a quad controlling key simultaneously with the pressing of the space bar.

5. The combination of a space bar of a linotype machine, & winging arm mounted thereon, a locking device for yieldingly holding the arm in different positions, a swinging T-shaped member carried by the space bar 50 and arranged to move into and out of engagement with one or more of the quad controlling keys, and a connecting means between the arm and member.

6. The combination of a keyboard and a 55 space bar of a linotype machine, with means associated with the bar for actuating a quadcontrolling key simultaneously with the op-

eration of the space bar.

In testimony whereof, I affix my signature 60 in presence of two witnesses.

GUSTAF E. WALLIN.

Witnesses:

I. S. WEAVER, F. Burleigh Johnson.