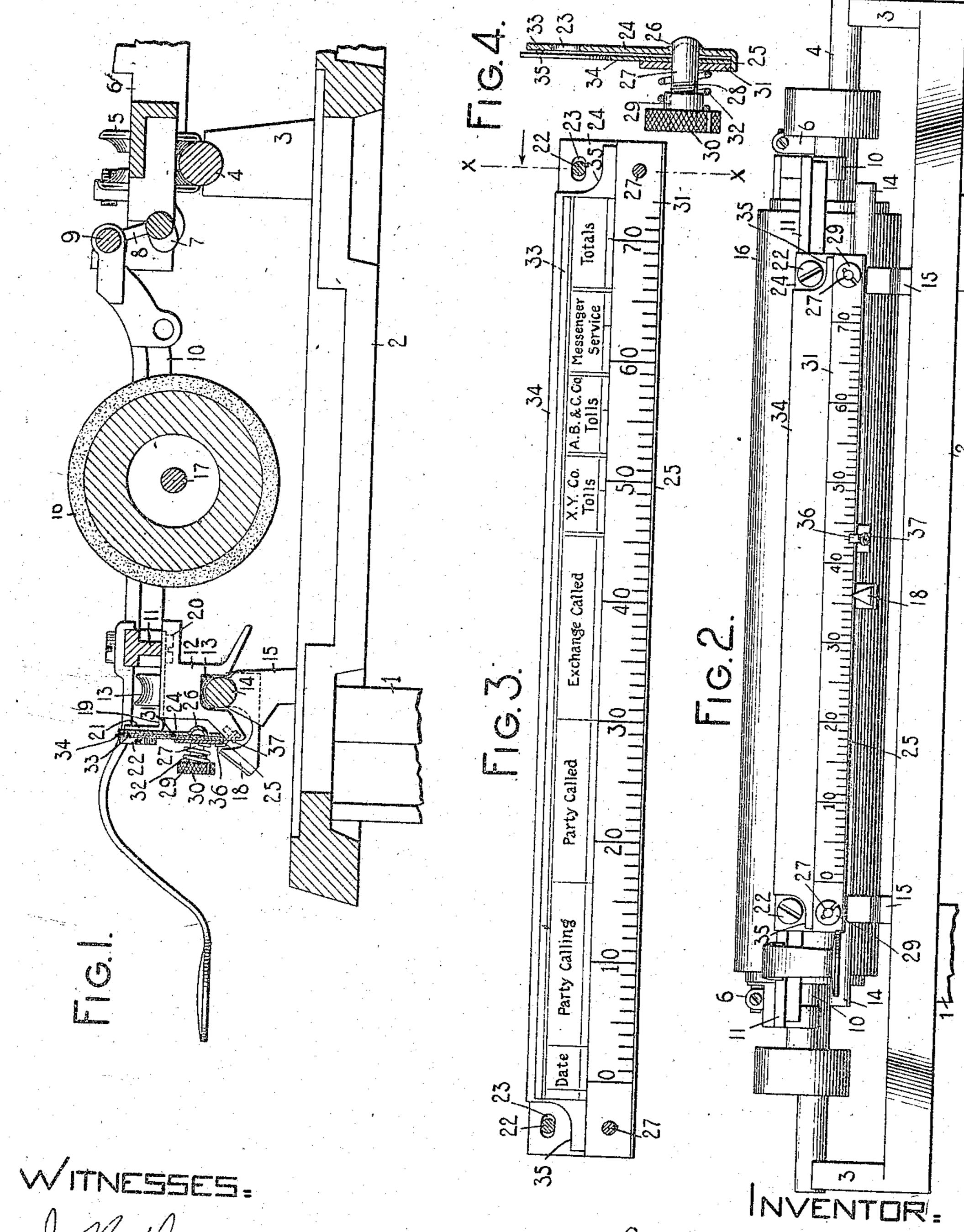
D. BRIGGS. TYPE WRITING MACHINE. APPLICATION FILED MAY 14, 1906.

930,642.

Patented Aug. 10, 1909.



## UNITED STATES PATENT OFFICE.

DANIEL BRIGGS, OF NEW YORK, N. Y., ASSIGNOR TO WYCKOFF, SEAMANS & BENEDICT, OF ILION, NEW YORK, A CORPORATION OF NEW YORK.

## TYPE-WRITING MACHINE.

No. 930,642.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed May 14, 1906. Serial No. 316,849.

To all whom it may concern:

Be it known that I, DANIEL BRIGGS, citizen of the United States, and resident of the borough of Brooklyn, city of New York, 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 to scales for type-10 writing machines, and has for one of its objects to provide an improved holder or clamp which may be applied to various typewriting machines and is adapted to receive and hold in a fixed position removable index members" 15 or heading strips of paper or other suitable material variously marked or graduated to correspond with the different kinds or classes of work to be done.

Another object of the invention is to com-20 bine with a scale marked with the usual or suitable graduations, a holder for index members or heading strips of the sort referred to above.

To the above and other ends the invention 25 consists in the features of construction, combinations of devices and arrangements of parts hereinafter fully described and particularly pointed out in the claims.

One form of the invention is shown in the

30 accompanying drawings, whèrein—

ligure 1 is a full-sized front to rear sectional view of the upper part of a typewriting machine embodying my invention, parts of the machine being omitted and parts being broken away. Fig. 2 is a front elevation of the parts shown in Fig. 1, but drawn to a smaller scale. Fig. 3 is a full-sized detached face view of the improved scale and heading holder, the securing scrows and guide pins be-40 ing shown in section. Fig. 4 is an enlarged sectional view taken on a plane represented by the line x-x in Fig. 3 and looking in the direction of the arrows at said line, the righthand guide pin and its associate spring being 45 shown in said Fig. 4.

The typewriting machine illustrated in the drawings is one style of the well-known Remington typewriter, but it is to be understood that the nature of my invention is such that 50 it may readily be applied to other forms of

typewriting machines.

In the drawings, the main frame of the machine comprises corner posts 1 which support

Coöperating with the track-way are rollers 5 mounted in a carriage truck 6, said carriage truck being pivotally connected by a rock shaft 7 and arms 8 with a rectangular platen frame comprising a rear bar 9, side bars 10 60 and a front bar 11. A yoke piece 12, suitably secured to the front bar, carries a wheel or roller 13 which cooperates with a shiftable front rail 14 secured to arms 15 pivoted on the machine frame. A rotary platen 16 has 65 an axle 17 journaled in the side bars 10 of the platen frame or carrier, said carrier with the carriage truck 6 constituting a platen carriage. A pointer 18 of suitable construction is secured to the front rail 14 and coöperates 70 with the scale presently to be described. The carriage feeding mechanism and printing device may be of the usual or suitable construction, but a description of them is not deemed necessary to a complete understand- 75 ing of the present invention.

Angled arms or brackets 19 extend horizontally forward from the front bar 11 of the platen carrier, said brackets being secured to the under side of said bar, one near either end 80 thereof, by headed screws 20. The forward ends of the brackets are bent upward at right angles to the horizontal body portions and form upright abutments 21, said abutments being provided with threaded openings which 85 receive headed securing screws 22, said screws passing through openings 23 (Fig. 4) in a support or backing 24 for the index member and for the scale, which index member and scale will be described later. The sup- 90 port or backing is preferably made of sheet metal in the form of a plate vertically arranged and extending longitudinally of the platen and carriage, the lower end of said plate being bent forward horizontally at 95 right angles to the body portion to form a ledge or shelf 25. Some distance above the shelf 25 the body of the support 24 is pressed rearwardly, thereby providing a longitudinal strengthening rib 26. Secured in the sup- 100 port or backing 24 are forwardly extending horizontal projections or pins 27, one of said pins being arranged near each end of the support 24 and preferably being secured to the latter at the part where the rib 26 is 105. formed, as best shown in Fig. 4. The pins 27 may be fixed in place on the support in any suitable manner as by soldering. The fora top plate 2 rising from which are standards | ward end portions of the pins 27 are threaded 3 to which is fixed a cylindrical track-way 4. | as indicated at 28 and receive nuts 29 pro- 110

vided with knurled heads 30 by which said nuts may be conveniently grasped by the operator and turned toward or away from the backing 24 on the pins 27. Before the 5 nuts 29 are arranged in place a scale plate 31 of metal or other suitable material and provided with suitable markings or graduations, is mounted on the pins 27, said scale being formed with guide openings through 10 which said pins pass and the lower edge of said scale preferably resting on the shelf 25 as shown in Fig. 4. A spring 32 is coiled around each of the projections or pins 27 and is confined between the head of the associate nut 15 29 and the front face of the scale plate 31. The springs 32 serve to press the scale plate toward the support or backing 24. This provides a convenient construction of detachable scale, it being only necessary to 20 unscrew the finger nuts 29 and remove them and the springs 32 to permit the scale plate to be readily removed and another scale plate having graduations differently spaced or being otherwise differently marked to be mount-25 ed in place of the one removed. When properly secured in place, as described, the scale plate 31 cooperates with the pointer 18 in the usual manner during the longitudinal movements of the carriage.

The scale plate and its support, constructed as above described, provide a convenient spring clamp or holder for index members or heading strips and I prefer to employ said scale and support in combination with such 35 heading strips in a manner now to be described. The heading strip or index member is preferably made of paper or like material and may be of the character shown in Figs. 1, 3 and 4 of the drawings and marked 40 33. Said index member is preferably somewhat shorter than the distance between the pins 27 as shown in Fig. 3, so that by merely pulling the scale plate 31 away from the face of the support or backing 24 and against the 45 pressure exerted by the springs 32, the index member 33 may be passed down between the backing and the scale plate until the lower edge of said index member rests on the shelf 25, whereupon the scale plate may be 50 released. When released the scale plate will press the index member tightly in place against the support or backing 24, so that said index member is tightly clamped in place longitudinally along one of its sides.

from being soiled or marred I prefer to associate with it a transparent covering or facing of some suitable material such as celluloid. The facing is represented in the drawing by derstood from an inspection of Figs. 3 and 4 is arranged between the index member 33 and 4 is arranged between the index member 33 and 4 is arranged between the index member 33 and 4 is arranged between the index member 33 and 4 is arranged between the index member 33 and 4 is arranged between the index member 33 and 4 is arranged between the index member 33 and 4 is arranged between the index member 33 and 4 is arranged between the index member 33 and 4 is arranged between the index member 33 and 4 is arranged between the index member 34 and the scale plate 31. As will be apparent from 120 an inspection of Fig. 3, the printed heading on the index member 33 is so placed that it is quite close to the top of the scale plate 31 so that the index member may be adjusted with respect to said scale without difficulty 125 while the transparent facing 34 is held pulled forward away from the backing 24 as above described. It is not thought necessary to describe in detail the manner of using the heading strip or index member in the opera-130

erably cut away at the top corners as indicated at 35 so as not to interfere with the securing screws 22. The lower edge of the facing preferably rests on the edge of the shelf 25 and its upper edge extends somewhat above the upper edge of the support 24, so that said upper edge may be readily grasped and pulled away from the backing and from the index member which it protects. The facing is preferably flexible and 75 its flexibility facilitates this operation.

From what has been said it will be apparent that parts of my invention may be employed without other parts, but I prefer to employ them in combination as shown in the 80 drawings. When arranged as shown, it will be seen that a spring clamp comprising the support or backing 24 and the scale plate 31 is provided for the index member and that the pressure of the springs 32 is transmitted 85 from the scale plate 31 to the facing 34 so that said facing presses the index member against the backing 24 with a pressure which may be regulated by turning the finger nuts 29, the scale plate 31 serving in effect as a 90 guard plate for the facing 34. The index member is tightly clamped in place normally but may be readily freed for adjustment or removal by pulling the upper end of the facing 34 away from the backing 24 and against 95 the pressure of the springs 32. A clip 36 may be secured to the bearing block 12 by a screw 37, said clip coöperating with the lower edge of the scale plate 31 near the middle of the latter, as shown in Fig. 2, and serving to 100

prevent accidental bowing or buckling of said scale plate and to maintain it in proper

position on its support. The index member 33 which I have shown has printed on it a heading such as is com- 105 monly employed by telephone companies in making out monthly statements, said index member 33 being divided into a number of columns, each appropriately marked. The work sheet or sheets to be written upon are 110 each marked at the top or tops with corresponding printed matter. It will be understood that the heading on the work sheet as it is entered in the machine bears a certain relation with the usual platen scale (not 115 shown), and it is further to be understood that the index member 33 before being clamped in place is arranged so that it bears a corresponding relation with the scale on the scale plate 31. As will be apparent from 120 an inspection of Fig. 3, the printed heading on the index member 33 is so placed that it is quite close to the top of the scale plate 31 so that the index member may be adjusted with respect to said scale without difficulty 125 while the transparent facing 34 is held pulled forward away from the backing 24 as above described. It is not thought necessary to describe in detail the manner of using the

tion of the machine. Such heading strips as the one I have shown, and others of similar character, are employed for tabular work, and as is well understood tabulating devices are usually employed to facilitate the execution of such work. When such tabulating devices are used and when my invention is employed in connection therewith, said invention greatly facilitates the execution of the work as the operator is enabled without lifting the carriage to see in just what place or columnar field the types will strike when actuated.

The construction shown herein is greatly 15 superior to devices which have been employed prior to my present invention for holding the index members or heading strips in place, as the index members are held with a continuous even pressure throughout their 20 lengths while in some prior devices the index members have not been securely held in position, with the result that as the machine is used the jarring is likely to displace the index member; or in some cases where said in-25 dex member may be securely held in place, the operation of properly arranging it is complex and consumes considerable time. As has been said, the printed heading is close to the carriage scale 31 so that the two may be 30 read together, which is another advantage. Furthermore the device is light and compact, and the view of the pointer 18 which coöperates with the scale 31 is not interfered with as it is in some prior constructions and said 35 pointer not only cooperates with the scale plate 31 but also with the printed matter on [ the index member 33, so that an auxiliary pointer for the index member is unnecessary. The printed matter on the index member 40 sonetimes comprises a number of lines, as many as three or four being not infrequently employed, and with this form of heading my improved heading holder or clamp may be conveniently used, as there is nothing to re-45 strict the width of the index member and the latter may be extended as far above the upper edge of the scale plate as may be desired or as may be necessary to receive all of the lines of the printed matter of the heading.

As has been stated, parts of my invention may be employed without other parts; and it is furthermore to be understood that changes of construction and arrangement may be made without departing from the spirit and substance of my invention.

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

1. In a typewriting machine, the combination of a support, a removable index member

and a yieldingly mounted clamp extending longitudinally of said index member and co-operative with said support to releasably clamp said member.

2. In a typewriting machine, the combination of a support, an index member, and a

separate spring pressed part for clamping the index member longitudinally along one of its sides to said support, said part being movable relatively to said support to permit of the removal or insertion of the index 70 member.

3. In a typewriting machine, the combination of a platen, a support extending longitudinally thereof, a removable index member, and a part extending longitudinally of said 75 support and operative to clamp the index member lengthwise to said support, said part being movable independently of said support and of said member.

4. In a typewriting machine, the combina- 80 tion of a support or backing having a shelf, an index member adapted to rest on said shelf, and a part operative to clamp said index member longitudinally along one of its sides to said support, said part being movable in- 85 dependently of said support and of said member.

5. In a typewriting machine, the combination of a support or backing having a shelf, an index member extending along said back- 90 ing and adapted to rest on said shelf, and a spring pressed part extending longitudinally of said backing and operative to clamp said index member thereagainst.

6. In a typewriting machine, the combina- 95 tion of a support or backing having projecting portions, a plate having guide openings coöperative with the projecting portions of said backing, means for pressing said plate toward said backing, and an index member 100 clamped between said backing and said plate.

7. In a typewriting machine, the combination of a support or backing having threaded pins projecting from its face, a plate of metal or other suitable material having 105 guide openings coöperative with the pins, nuts on the free ends of said pins, coiled springs confined between said nuts and said plate, and a removable index member clamped between said plate and said back- 110 ing.

8. In a typewriting machine, the combination of a support, a spring pressed scale thereon, and a removable index member clamped between said scale and said sup- 115 port.

9. In a typewriting machine, the com! ination of a support, a detachable spring pressed scale plate thereon, and an index member clamped between said scale plate 120 and said support, said plate and said support being separable to permit of the removal or insertion of said index member.

10. In a typewriting machine, the combination of a support or backing having, jecting portions, a removable scale plate having guide openings coöperative with the projecting portions of said support, and spring means for pressing said scale plate toward said support.

11. In a typewriting machine, the combination of a support having pins projecting from its face, the free ends of said pins being threaded, a removable scale plate of metal 5 or other suitable material having guide openings coöperative with said pins nuts coöperative with the threaded ends of said pins, and coiled springs confined between said nuts and said scale plate.

12. In a typewriting machine, the combination of a support or backing, an index member, a transparent facing or cover, and means for maintaining said index member clamped in a fixed position between said 15 backing and said facing, said means comprising a releasable clamp separate from said

support.

13. In a typewriting machine, the combination of a support or backing, an index member, and a transparent spring pressed facing which covers the index member and and is operative to hold it clamped against

the backing.

14. In a typewriting machine, the combi-25 nation of a support or backing, an index member, a transparent facing which covers the index member, and means normally holding said facing yieldingly against said backing but permitting said facing to be 30 pulled away from the index member independently of said support so that the index member may be removed and the same or another index member inserted in its place.

15. In a typewriting machine, the combi-35 nation of an index member, and a spring clamp therefor comprising a transparent facing or covering of celluloid or other suit-

able material.

16. In a typewriting machine, the combi-40 nation of an index member and a spring clamp therefor comprising a backing, a transparent facing and a guard plate for said facing, the index member being confined between the backing and the facing.

17. In a typewriting machine, the combination with a carriage and a pointer, of an index member and a clamp operative to hold said index member in a fixed relation with the carriage, said clamp comprising a spring-50 pressed scale plate coöperative with said

pointer.

18. In a typewriting machine, the combination with a carriage and a pointer, of an index member and a spring clamp therefor, 55 said clamp comprising a backing, a transparent facing and a guard plate for said facing, said guard plate being provided with a

scale cooperative with said pointer and said index member being confined between the

backing and the facing.

19. In a typewriting machine, the combination of a carriage, brackets thereon, a support removably secured to said brackets and having projecting portions, a removable scale plate having guide openings coöperative 65 with the projecting portions of said support, means for pressing said scale plate toward said support, an index member clamped between said scale plate and said support, and a pointer coöperative with said scale plate. 70

20. In a typewriting machine, the combination of a carriage, brackets thereon, a backing or support adjustably secured to said brackets and having pins projecting from its face, the free ends of said pins being 75 threaded, a removable scale plate of metal or other suitable material having guide openings coöperative with said pins, nuts engaging the threaded ends of said pins, a coiled spring confined between said nuts and said 80 scale plate, an index member clamped between said scale plate and said backing, a transparent covering for said index member, and a pointer coöperative with said scale plate.

21. In a typewriting machine, the combination of a carriage, a carriage scale, a support back of said carriage scale and extending above it, and a strip of transparent material clamped between said scale and said sup- 90 port and extending above said scale, the construction being such that an index member may be inserted from above between said

transparent strip and said support.

22. In a typewriting machine, the combi- 95 nation of a carriage, a carriage scale, a support back of said carriage scale and extending above it, and a strip of transparent material clamped between said scale and said support and extending above said scale, said 100 scale being spring pressed toward said support, the construction being such that an index member may be inserted from above between said transparent strip and said support.

Signed at the borough of Manhattan, city of New York, in the county of New York, and State of New York, this 11th day of May A.

D. 1906.

DANIEL BRIGGS.

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Witnesses: E. M. WELLS J. B. DEEVES