J. G. VINCENT.

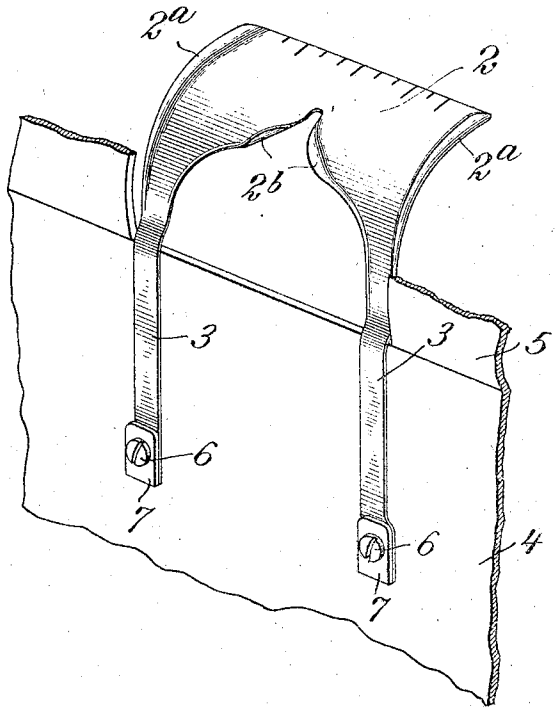
LINE AND COLUMN GAGE FOR ADDING MACHINES.

APPLICATION FILED JAN. 20, 1908.

922,547. Patented May 25, 1909.

2 SHEETS—SHEET 1.

Fig 1.



Witnesses:
E. R. Barrett
Louis B. Erwin

Inventor
Jesse G. Vincent
Church & Church
his Att'ys.

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2 SHEETS—SHEET 2.

Fig. 2.

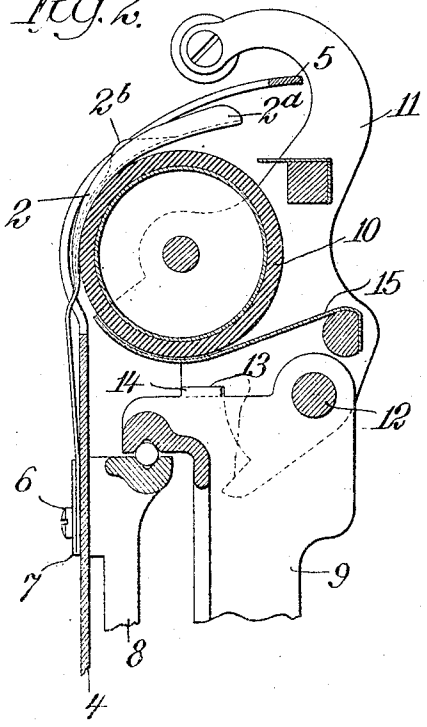


Fig. 3.

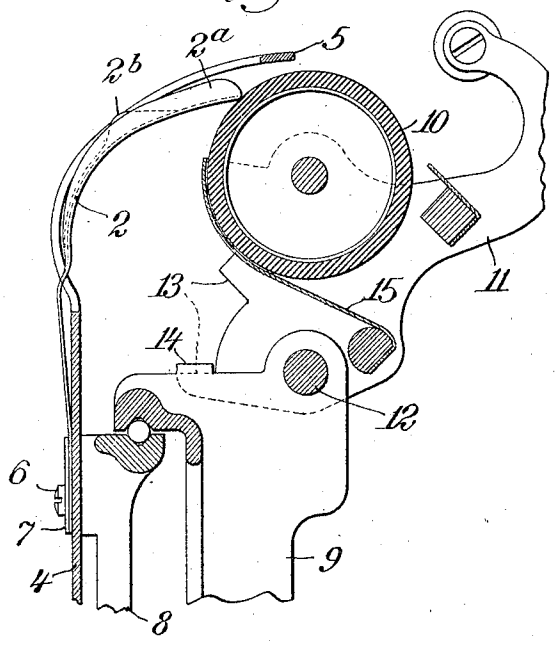
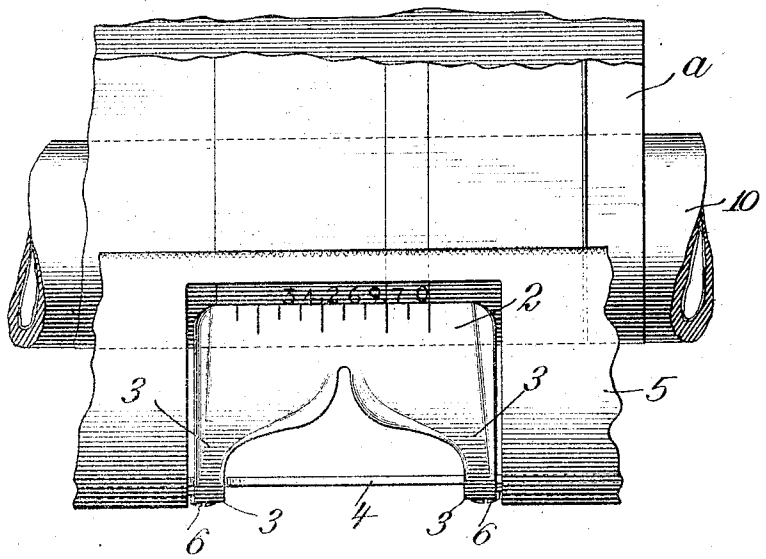


Fig. 4.



Witnesses:
Edw. R. Barrett
Louis B. Erwin

Inventor
Jesse G. Vincent
by Hector Hobson Davis
his Attys

UNITED STATES PATENT OFFICE.

JESSE G. VINCENT, OF DETROIT, MICHIGAN, ASSIGNOR TO BURROUGHS ADDING MACHINE COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

LINE AND COLUMN GAGE FOR ADDING-MACHINES.

No. 922,547. Specification of Letters Patent. Patented May 25, 1909.

Application filed January 20, 1908. Serial No. 411,747.

To all whom it may concern:

Be it known that I, JESSE G. VINCENT, a citizen of the United States, residing at Detroit, Wayne county, Michigan, have invented certain new and useful Improvements in Line and Column Gages for Adding-Machines, of which the following is a specification.

The object of the present invention is to provide a gage of simple and effective construction adapted to serve the purpose in adding and listing machines or machines of like character of locating the horizontal line along which it is desired to print or the line along which printing has last been done, the gage also serving to locate any particular decimal or columnar space in such line.

The gage of the present invention requires very little space to accommodate it in the organized adding and listing machine and requires no adjustment or manipulation by the user of the machine. When the platen on which the printing is done is thrown back out of printing position into proper position for inspection of the work or adjustment of the paper overlying the platen, the gage automatically takes up the correct position for exactly locating the printing line on the paper and for guiding the operator in laterally positioning the platen where a laterally shiftable paper carriage is employed.

In the accompanying drawings, which form part of this specification, Figure 1 represents the gage in perspective as applied to the back panel of the casing of an adding and listing machine; Fig. 2 represents vertical cross section of a portion of an adding and listing machine having the gage applied thereto, the platen being represented in printing position; Fig. 3 is a view similar to Fig. 2 but representing the platen thrown back out of printing position; and Fig. 4 is a fragmental top plan view with the parts relatively positioned as in Fig. 3.

Referring first to Fig. 1, the gage comprises a metal plate 2 curved from front to rear and formed with a straight rear edge and graduations on its upper surface along such edge; also legs 3 formed integrally with the plate and attaining, through their attenuation, sufficient resiliency for the purposes of the automatic operation of the gage hereinafter described and already alluded to.

The above described character of the gage gives it a bifurcated form providing a wide opening between the upper portions of the legs, and through this opening the type plates of the adding and listing machine are projected in the printing. The back panel of the casing of the adding machine is designated by the numeral 4 in Fig. 1 and it has an upper extension 5 curved in the same general direction as the gage plate. This panel extension is, as usual, formed with a rectangular opening and the gage projects from the interior of the machine through that opening for coöperation with the platen. The gage is fastened to the machine by screws 6 and clamp plates 7 overlying the lower ends of the gage legs 3 as shown in Fig. 1, and clamping the same against the inner side of the panel 4. These screws preferably enter portions of the usual bracket 8, (Figs. 2 and 3) which is fastened against the outer side of the panel 4 and constitutes a support for the laterally movable paper carriage. The base portion of the latter which embraces said bracket with interposed ball bearings, is designated by the numeral 9 and the roller platen which it carries is designated by the numeral 10. This platen is, as usual, mounted in a rocking frame 11 secured to a rock rod or shaft 12 journaled in the base 9. The two positions of the platen are determined by the abutment of shoulders 13 of one of the side plates of the frame 11, against a lug 14 on the base 9. The paper is inserted below the platen at the rear guided by a suitable plate 15 and passes over the front of the platen and out under the gage plate and the panel extension 5.

When the platen is in its forward or printing position as illustrated in Fig. 2, it bears against the upper portions of the legs 3 of the gage and presents the paper to be printed upon in the opening of the gage. The resiliency of the gage legs keeps the same and the gage plate constantly in contact with the platen and when the latter is swung back to the position illustrated in Fig. 3, the straight edge of the gage plate will be pressing against the platen or the paper overlying the same. The gage is so proportioned and arranged with relation to the platen that when the latter has assumed its rearmost position, as illustrated in Fig. 3, the straight edge of the gage will mark or denote the horizontal line along which the printing will be done if the platen is rocked forward without being turned in its own bearings. This is illus-

trated in Fig. 4, where *a* designates a sheet of paper overlying the platen and having had printed upon it an amount, viz., 34269.70. It will be obvious that the graduation marks upon the gage plate constitute a guide by which to properly locate the paper laterally, either by adjustment of the paper itself or laterally shifting the platen.

The gage plate is preferably made with rounded and upturned side portions 2^a to avoid catching the paper, and the edges on opposite sides of the opening of the gage are similarly turned up and mounted as shown at 2^b for the same reason.

While the construction shown and described is believed to be the simplest and most satisfactory form of embodiment of the invention, it is yet to be understood that the invention may be carried out differently and the claims which follow are phrased accordingly.

What is claimed is:

1. The combination with the machine frame or case and the platen movable toward and from the same; of a gage mounted on the frame or case and spring-pressed into engagement with the platen, said gage consisting of a plate and resilient legs which supply the spring pressure.

2. The combination with the machine frame or case having an opening, and a platen movable toward and from said opening; of a gage at the opening comprising a plate and resilient legs fastened to the case, the legs being spaced apart to provide an opening on the gage to register with that on the case and the gage being spring pressed against the platen through the resiliency of its legs.

3. The combination with a machine case having an opening, a laterally shiftable carriage mounted on said case, a frame mounted to rock on said carriage, and a roller platen on said frame opposite the opening in the case; of a line and column gage at the said opening comprising a graduated plate and supporting legs attached to the machine case, said gage being spring-pressed into engagement with the platen through the resiliency of said legs.

4. The combination with a machine case having an opening, a laterally shiftable carriage mounted on said case, a frame mounted to rock on said carriage, and a roller platen on said frame opposite the opening in the case; of a line and column gage at the said opening comprising a graduated plate and supporting legs attached to the machine case, the legs being resilient and serving to yieldingly engage the gage with the platen.

5. The combination of an upright frame-piece or support, a laterally sliding carriage mounted on the rear thereof, a rocking frame mounted upon said carriage with provisions for limiting its range of movement to approximately forty-five degrees, a roller platen journaled in said rocking frame and normally occupying a forward position adjacent the upright frame-piece and adapted when rocked back to have its journal brought into the vertical plane of the rocking-frame journal, and a gage mounted upon the upright frame-piece or support and projecting upwardly therefrom in front of the platen and normally beyond the same, said gage being spring-pressed against the platen and of open-center formation normally uncovering the impression area of the platen and having an end edge normally out of contact with the platen but adapted when the latter is rocked back to come into close contact therewith under the spring pressure.

JESSE G. VINCENT.

Witnesses:
A. W. FRENZEL,
R. S. MIELERT.