(No Model.) A. & W. NIMMO. LINE FINDER FOR STENOGRAPHERS' USE. Patented Dec. 15, 1885. No. 332,410.



Ε

N



Fig. 2

WITNESSES:

Dougla Muros. Henry Charbourn.

N. PETERS, Photo-Lithographer, Washington, D. C.

INVENTORS: Andrew and William himmo.

By their Attorney Alban Andren.

UNITED STATES PATENT OFFICE.

ANDREW NIMMO AND WILLIAM NIMMO, OF BOSTON, MASSACHUSETTS.

LINE-FINDER FOR STENOGRAPHERS' USE.

DECIFICATION forming part of Letters Patent No. 332,410, dated December 15, 1885.

Application filed July 24, 1885. Serial No. 172.531. (No model.)

To all whom it may concern: the adjustable stop K coming in contact with Be it known that we, ANDREW NIMMO and the lower guide, O'', as shown in Fig. 1. Said WILLIAM NIMMO, citizens of Great Britain, stop K is made adjustable on the ratchet-bar 55 residing at Boston, in the county of Suffolk E, according to the horizontal distance be-5 and State of Massachusetts, have invented a tween each line on the copy, and when so ad-Line-Finder, of which the following is a specijusted it is firmly secured in place on the fication. ratchet-bar E by means of the set-screw L, as This invention relates to improvements in | shown in Fig. 1. To the lower end of the 60 line-finders for stenographers, and it is carratchet-bar E is attached a cord or strap, N, 10 ried out as follows, reference being had to the running over a pulley, M, that is journaled in accompanying drawings, where--a bearing, M', secured to the under side of Figure 1 represents a side elevation, and plate A at or near its lower end, as shown in Fig. 2 represents a front elevation, of the ap-Figs. 1 and 2. The lower end of the strap or 65 paratus. Fig. 3 represents a detail view of cord N is attached to a pedal, P, the lower end 15 the pedal by which the indicator is worked. of which is hinged at Q to the floor or other Similar letters refer to similar parts wherconvenient place, as shown in Fig. 3. ever they occur on the different parts of the For the purpose of disengaging the pawl I drawings. from the ratchet bar E, to permit the block B 70 In making a long-hand copy from short hand, and the indicator C to be adjusted up or down 20 or vice versa, or for making any other kind of on plate A relative to the lines on the copy copying, it is desirable to use a line-finder resting on the latter, either in commencing adapted to be adjusted line for line as the work on a new page or during any portion of copying proceeds, and thus serve to find the the work, as the case may be, we employ a 75 line copied from with the greatest ease and thumb piece or button, D, passing through 25 without loss of time. For this purpose we block B, and having its lower end attached to have constructed our invention, as follows: the pawl-piece I, as shown in Fig. 1, and thus R G S is a standard or support, of any desirby simply pressing on button D the lower end able form, to the upper end of which is secured of pawl I is raised out of the teeth on ratchet- 80 the inclined plate or book-rest A, having atbar E, when the block B and line finder or in-30 tached to its upper end a suitable bar or clip, dicator C may be moved up or down on table F, for holding the leaves of the book or manuor plate A to any desired position, as may be script to be copied from in position. Through desired. the book-rest A is made a slot, B', in which The operation is as follows: After the book 85 the block B is guided and permitted to travel or manuscript has been secured to the plate ${f A}$ 35 up and down. To the block B is attached, by means of clip F or other suitable fastening above the plate A, the horizontal indicator or device, we press the button D downward, by line-finder C, as shown, and this is made to which the pawl I is disengaged from ratchetmove with the block B. To that portion of bar E and move the block B upward, so that 90 block B which projects below the plate A is the indicator C shall come to the desired line 40 hinged the pawl I, the lower end of which enfor commencing the work. The stop K is then gages in the teeth of the ratchet-bar E, and is secured by means of set-screw L to the ratchetnormally held in contact therewith by means bar E at the desired distance from guide O", of a small spring, J. (Shown in Fig. 1.) The equal to the distance between the successive 95 ratchet-bar E is supported and made to slide lines on the copy. After one line has been 45 in the guides O" and O", secured to the under copied the operator depresses treadle P, causside of plate A, and is normally drawn uping the ratchet-bar E to be drawn downward ward to its highest position by the influence against the influence of spring H until the stop of a spring, H, secured to the upper end of | K comes in contact with guide O", and during 105 ratchet-bar E, and to a projection, O', attached such motion of ratchet-bar E, by means of the 50 to the under side of the upper end of plate A, pawl I, the block B is carried downward suffias shown in Fig. 1. The downward motion of ciently to bring the line-finder C to the next ratchet-bar E is limited each time by means of | line on the copy, after which the operator re-

leases his foot-pressure on the treadle P, when | indicator C, said block having hinged to it the the spring H will draw the ratchet-bar E up to its normal position, and during such upward motion of ratchet - bar E the pawl I 5 will pass freely by the teeth of said ratchetbar, causing the block B and line-finder C to remain in the position left by the previous downward motion of the ratchet bar E, and so on. When the indicator C has traveled to the 10 lowest line on the book or manuscript copied from, a new leaf is turned, the button D depressed, and the block B and indicator C moved upward to the desired position for commencing work, and the successive operations for 15 feeding the line-finder C downward continued, as above described.

What we wish to secure by Letters Patent

pawl I, with spring J, and adapted to engage in the toothed ratchet bar E, the latter being guided in the parts O" O", and operated by 25 means of treadle P and strap N against the influence of spring H, and provided with the adjustable stop K, as and for the purpose set forth.

2. In a line finder, the stationary plate A, 3c the block B, movable thereon, with indicator C attached to it, and having pawl I, spring J, and press-button D, as described, combined with the reciprocatory ratchet bar E, for operating the block B and its indicator C, sub- 35 stantially as and for the purpose set forth.

> ANDREW NIMMO. WILLIAM NIMMO.

and claim is-

1. The herein described line-finder, consist-20 ing of the stationary rest A, having slot B' for the movable block B, to which is attached the

Witnesses: SAMUEL A. BROWN, D. I. MCINTIRE.

332,410

• • •

· · · · ·

• • •