

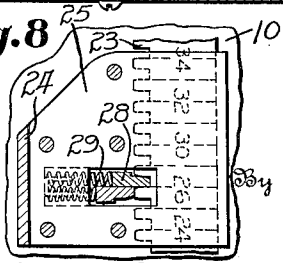
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LEAD AND SLUG CUTTER

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UNITED STATES PATENT OFFICE

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LEAD AND SLUG CUTTER

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This invention relates to a lead and slug cutter adapted to be used in printing establishments. The general object of the invention is to provide a cutter for the purpose stated which is of simple and inexpensive construction so that each workman in the composing room or press room may be provided with a cutter for his individual use. Preferably, the cutter is provided with two gages which may be selectively used, one for gaging the length of the strip which rests upon the bed at the left of the cutting edge and the other for measuring the length which projects from the bed beyond the cutting edge.

The preferred construction of my improved cutter will be more particularly described with reference to the accompanying drawing, in which—

Figure 1 is a plan view of the cutter;

Figure 2 is an end view;

Figure 3 is a longitudinal section taken on the line 3—3 of Fig. 2;

Figure 4 is a section taken on the line 4—4 of Fig. 3;

Figure 5 is a section taken on the line 5—5 of Fig. 3;

Figure 6 is a section taken on the line 6—6 of Fig. 3;

Figure 7 is an enlarged sectional view taken on the line 7—7 of Fig. 1; and

Figure 8 is a section taken on the line 8—8 of Fig. 7.

The cutter to which the invention relates comprises a bed 10 with downturned edges 11 secured to end brackets 12 and 13 by which it is supported and to an intermediate transverse bar 14. A cutter arm 15 is pivoted at 16 to the bracket 13 and is normally held in raised position by a spring 17. A cutting blade 18 is secured to the arm 15 and is adapted to engage in shearing relation to a ledger blade 19 secured to the bracket 13, when the arm 15 is forced downwardly about its pivot 16. The arm 15 is formed with a downwardly projecting lug 20 which is guided in a channel or groove 21 in the bracket 13 as the arm 15 is moved downwardly to perform the cutting operation.

A graduated bar 22 is secured to the bed

10 and has a series of teeth 23 projecting forwardly from its upper edge. The strip to be cut is placed with its edge against the bar 22 beneath the teeth 23 and held there during the cutting operation.

A gage 24 is slidably mounted on the bar 22 and has a flat base 25 which rests upon the bed 10. Two latches 26 are slidably mounted in a guideway 27 on the gage 24 and each is formed with a depending lug 28 selectively engageable with the notches between the teeth 23. Springs 29 serve to advance the respective latches. The width of each tooth 23 and the width of each of the notches between the teeth is equal to one-half pica. The graduations on the bar 22 are numbered to indicate the distance in picas from the cutting edge. Thus the latches 26 may be selectively engaged in the notches between the teeth 23 to measure by half picas the length of any strip between the edge of the gage 24 and the cutting edge up to a length of sixty picas.

For gaging the length of a lead or slug to be cut from the right hand end of the strip, a rod 30 is adjustably mounted in the cross bar 14 and end bracket 13 and has a return bend 31 which may be turned back out of the way when the gage 24 is used, as shown in full lines in Fig. 1, or may be turned to operative position as shown by broken lines. A graduated measuring strip 32 is secured to the rod 30 between a head 33 and a detent 34 secured to the rod. The graduations on the scale 32, in connection with an opening 35 in the bed 10 indicate the distance between the cutting edge and the end 31 of the rod. A plate 36 secured to the rear downturned edge 11 of the bed is provided with teeth 37, similar to the teeth 23, with which the detent 34 is selectively engageable when the gage rod 30 is in operative position. Thus the rod 30 may be adjusted to measure any length by picas up to twenty-four picas, which is the width of a double newspaper column. The end 31 of the gage rod is provided with a pointed micrometer head 38, a half turn of which advances it a distance of one point.

In the operation of the cutter, in order to

use the left hand gage, the end 31 of the gage rod is thrown back out of the way and the gage 24 is adjusted to the required length up to sixty picas. The required length is then cut from the left hand end of the strip. In order to use the right hand gage, the end 31 is swung forwardly and adjusted to the required length up to twenty-four picas and the micrometer head 38 is turned to measure the required number of points. The gage 24 is moved toward the left hand end of the bar 22 and if necessary may be entirely removed from the bar to provide room for the strip to be laid upon the bed 10 so that the required length may be cut therefrom as measured between the head 38 and the cutting edge.

A lead and slug cutter constructed according to my invention may be used for almost any cutting which is done in a printing establishment and yet its construction is so simple and inexpensive that it is expedient to provide an individual cutter for each compositor to be kept on his rack, thereby saving a great deal of time ordinarily consumed by compositors in making frequent trips to a centrally located shop cutter. Either gage may be instantly moved out of the way and the other gage easily and accurately set with one hand to plainly marked graduations.

While I have shown and described in detail the preferred form of the invention, it is obvious that the same may be considerably modified without departing materially from the scope of the appended claims.

What is claimed is:

1. In a cutter of the character described, a bed for receiving the strip to be cut, a graduated bar secured to the bed and having teeth projecting from its front edge and spaced from the bed and with a straight edge beneath the teeth to receive the edge of the strip, a gage member selectively engageable with said teeth, a fixed cutting member, a cooperating movable cutting member having a depending lug, and means engageable with said lug to guide the movable cutting member as the cutting members engage each other.

2. In a cutter of the character described, a bed for receiving the strip to be cut and having a cutting edge at one end, a graduated bar secured to the bed and having teeth projecting therefrom with notches therebetween, a gage member provided with a plurality of contiguous latches, any one of said latches being selectively engageable with any one of said notches, each latch having the same width as any one of the notches, the total width of all the latches being equal to the combined width of one notch and one tooth, whereby to sub-divide the scale by which the lengths to be cut are measured.

3. In a cutter of the character described, the combination of a bed having a cutting edge at one end, a gage member adjustable

longitudinally of the bed and having a head beyond the end of the bed, a scale secured to said gage member and graduated to picas, and a fixed indicator cooperating with said scale to determine the length to be cut between said head and said cutting edge, said head having a micrometer adjustment for making corrections for a number of points less than a pica.

4. In a cutter of the character described, a graduated bar provided with a series of teeth of equal width, separated by recesses, the width of each recess being equal to the width of a tooth, a gage member adjustable longitudinally of said bar and provided with two contiguous spring held latches, each latch being of the same width as one of the recesses, either one of said teeth being selectively engageable with any one of the recesses while the other latch abuts the end of an adjacent tooth, whereby the gage member may be set in twice as many different positions as there are recesses.

In testimony whereof I have hereunto signed my name to this specification.

JOHN W. FLATT.