June 30, 1959 L. C. NATOLI 2,892,437

MASKING RULER

Filed Feb. 25, 1958

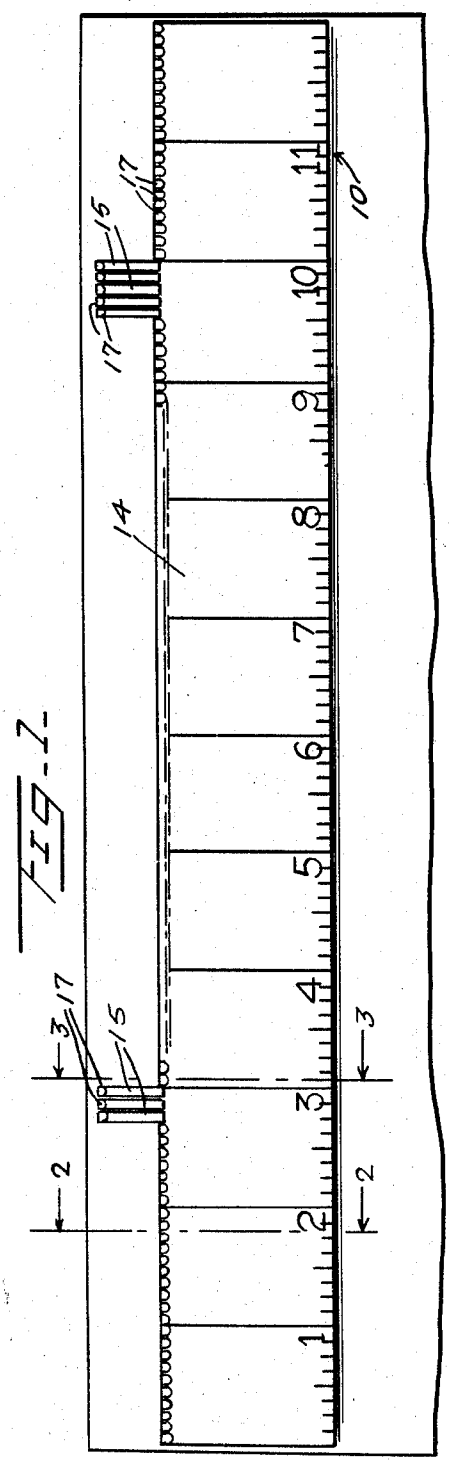


FIG. 1.

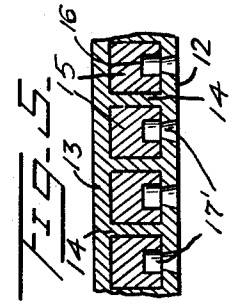


FIG. 5.

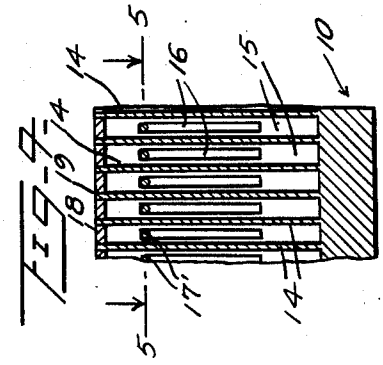


FIG. 6.

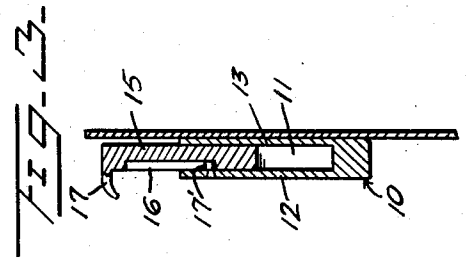


FIG. 3.

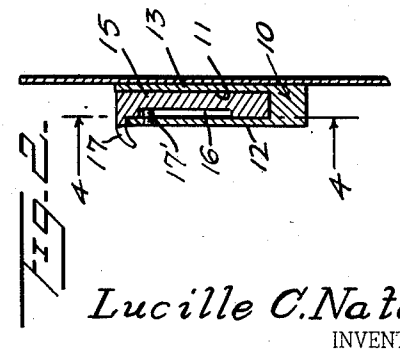


FIG. 2.

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MASKING RULER

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3 Claims. (Cl. 116—119)

This invention relates to a masking ruler, and has as its primary object the provision of an improved ruler adapted particularly for use in line by line copying of columns of figures or the like including a plurality of transversely movable slides or keys whereby certain of the indicia to be copied may be masked or blocked out when it is not desired to copy certain portions of the media.

An additional object of the invention is the provision of such a ruler having such slides or keys extending along the entire length thereof whereby any portion of material to be copied may be masked or blocked along the entire length of the ruler.

A further object of the invention is the provision of such a device wherein when the slides or keys are retracted into the body of the ruler, a substantially flat flush surface is provided along the length of the ruler.

A more specific object of the invention is the provision of such a ruler wherein the slides or keys are provided with conveniently accessible finger tabs whereby any selected individual slide or slides may be moved as desired.

An additional object of the invention is the provision of stop means associated with the slides or keys whereby complete extension of the keys from their associated slots is precluded.

Still other objects reside in the combinations of elements, arrangements of parts, and features of construction, all as will be more fully pointed out hereinafter and disclosed in the accompanying drawing wherein there is shown a preferred embodiment of this inventive concept.

In the drawing:

Figure 1 is a plan view of the masking ruler constructed in accordance with this invention, certain of the slides or keys being shown in extended position.

Figure 2 is an enlarged sectional view taken substantially along the line 2—2 of Figure 1 as viewed in the direction indicated by the arrows.

Figure 3 is an enlarged sectional view taken substantially along the line 3—3 of Figure 1 as viewed in the direction indicated by the arrows.

Figure 4 is a sectional view taken susbtantially along the line 4—4 of Figure 2 as viewed in the direction indicated by the arrows.

Figure 5 is an enlarged sectional view taken substantially along the line 5—5 of Figure 4 as viewed in the direction indicated by the arrows.

Similar reference characters refer to similar parts throughout the several views of the drawing.

Having reference now to the drawing there is generally indicated at 10 a ruler, of any desired length, illustratively twelve inches, which is marked in the conventional graduation of inches and fractions of inches. One longitudinal edge of the ruler is provided with a recess 11 extending between the front and back surfaces 12 and 13 of the ruler, the longitudinal recess being divided by transverse partitions 14 into a plurality of compartments. The number of compartments to the inch are, in the illustrative embodiment herein shown, ten, to correspond with the number of figures or symbols per inch in a conventional tabulating machine, such as the standard I.B.M. machine, although the number of partitions and their associated compartments may be varied in accordance with the particular type of machine with which the ruler is adapted to be used.

Each compartment between adjacent partitions 14 contains a key or slide 15, which is movable within its associated compartment, and each key 15 is provided in its upper surface with a longitudinally extending groove 16, throughout a part of its length, which is adapted to be engage by a pin 17 carried by the underside of the top surface 12 of the ruler. The pin 17 serves as a stop to prevent the complete withdrawal of the key from its associated compartment. An upwardly extending finger engaging lug 17 is also carried by each slide or key, so that the keys may be extended individually as desired, as shown in Figure 1. When the keys are retracted within their appropriate compartments or recesses, their outer surfaces, as shown in Figure 4 at 18 are substantially flush with the ends 19 of the partition 14, so that the ruler may be utilized in the conventional manner as for example in drawing a straight line.

In the use and operation of the device, when it is desired to copy selected columns from a group of columns of figures for example, the ruler is aligned beneath the horizontally disposed figures in each selected column, and a selected number of keys 15 are extended by means of their finger tabs 17 to cover the figure or figures of the column or columns which are not to be copied. Obviously any desired arrangement of extension of keys may be achieved in accordance with the particular nature of the work, and equally obviously the task of copying a selected number of columns is simplified by the complete blocking out or masking of those figures or columns of figures which are not to be copied in the transcription.

From the foregoing it will now be seen that there is herein provided an improved masking ruler which accomplishes all of the objects of this invention, and others, including many advantages of great practical utility and commercial importance.

As many embodiments may be made of this inventive concept, and as many modifications may be made in the embodiment hereinbefore shown and described, it is to be understood that all matter herein is to be interpreted merely as illustrative and not in a limiting sense.

What is claimed is:

1. In a device of the character described the combination of a ruler having a recess extending substantially the full length thereof and opening along one edge, a plurality of equidistantly spaced transverse partitions in said recess dividing said recess into a plurality of compartments and a masking slide extensible and retractable in each compartment each masking element being of a width substantially in excess of the thickness of the partitions whereby upon extension of adjacent masking elements a substantially continuous mask is provided.

2. In a device of the character described the combination of a ruler having a recess extending substantially the full length thereof and opening along one edge, a plurality of equidistantly spaced transverse partitions in said recess dividing said recess into a plurality of compartments, a masking slide extensible and retractable in each compartment each masking element being of a width substantially in excess of the thickness of the partitions whereby upon extension of adjacent masking ele-

ments a substantially continuous mask is provided, and stop means precluding complete withdrawal of each slide from its associated compartment.

3. In a device of the character described the combination of a ruler having a recess extending substantially the full length thereof and opening along one edge, a plurality of equidistantly spaced transverse partitions in said recess dividing said recess into a plurality of compartments, a masking slide extensible and retractable in each compartment each masking element being of a width substantially in excess of the thickness of the partitions whereby upon extension of adjacent masking elements a substantially continuous mask is provided, stop means precluding complete withdrawal of each slide from its associated compartment and finger engaging means on each slide facilitating the extension thereof.

References Cited in the file of this patent

UNITED STATES PATENTS

955,114	Brooks	Apr. 12, 1910
1,029,702	Maddock	June 18, 1912
1,579,438	Cortelyou	Apr. 6, 1926
1,882,282	Haight	Oct. 11, 1932