



# UNITED STATES PATENT OFFICE.

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## PHOTOGRAPHER'S TRIMMING-WHEEL.

No. 862,028.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, LEVI FRANKLIN SMITH, a citizen of the United States, and a resident of El Paso, in the county of Woodford and State of Illinois, have invented  
5 an Improved Photographer's Trimming-Wheel, of which the following is a specification.

This invention relates to trimming wheels, that is, a device having rotary cutter, as employed by photog-  
10 raphers for cutting photograph prints, and similar ma-  
terial, into circular, oval or other shape, and at the same time when desired, leave a marginal border around the picture or print, of contrasting color or tint.

The object had in view is the provision of a new and improved device of the character stated.

15 The invention consists of novel construction and combination of parts, shown by the accompanying drawing, and hereinafter described in detail, the features of novelty being pointed out in the claims.

In the drawing, Figure 1 is a perspective view of my  
20 improved trimming wheel. Fig. 2 is an enlarged sectional view of the head portion of the device, with its handle portion shown broken away. Fig. 3 is a transverse sectional view, taken on line 3—3 of Fig. 2. Fig. 4 is a similar view, taken on line 4—4 of Fig. 2. Fig. 5  
25 is a detail view of the rotatable cutter and its supporting shaft. Fig. 6 is a side view of the cutter wheel with same shown keyed on its supporting shaft; and Fig. 7 is a sectional perspective view of a tool, designed for holding the cutting wheel shaft when sharpening same,  
30 the tool being constructed with a head for use as a screw driver, thereby affording ready means for loosening or tightening screws employed in my completed invention.

In the drawing, A indicates any suitable form of  
35 handle, having one end B constructed with a screw threaded socket C. The socket C is designed to receive the upper or screw threaded end of a stem D.

E indicates the head portion of my device, the same being constructed at one end with a socket F, adapted  
40 to receive the stem D. The stem is constructed with a substantially flat portion G, Figs. 2 and 3, adapted for holding engagement with the inner end of a set screw H carried by the head portion E, as shown by Figs. 1 and 3.

It is apparent that when the screw H is adjusted with  
45 its inner end bearing against the flat portion G of the stem D, the head E is thereby held against rotation on the stem, and it is further apparent that the head E may be permitted free rotation on the stem D, upon adjusting the screw H out of engagement with the stem D.  
50 The lower or inner end of the stem D is made conical or pointed, corresponding to a similar shaped seat I at the bottom of the socket F in the head, see Fig. 1.

The stem D is provided with an annular groove J, the same being located thereon suitably between its

lower or conical end, and the substantially flattened 55  
portion G thereon, as shown by Fig. 2.

A set screw K is provided on the head portion E, with its inner end adapted to enter the groove J, around the stem, thereby securing the head on the stem, but  
60 permitting free rotation of the head, as will be understood. The lower end of the head E is constructed with forks, or extensions L, M. It is designed that the extension M be constructed integral with the head portion, and that the extension L be made detachable.

In practice the detachable fork or extension L, may  
65 be secured by a set screw N, shown by Figs. 1 and 2.

Transverse openings or bearings O are provided in the forks or extensions L, M, for the purpose appearing further on.

In Fig. 7 I illustrate a key-shaped device P, con-  
70 structed with a screw threaded socket Q, and screw driving edges R.

In the further construction of my invention, I employ a shaft S, having a circular cutter T, which may be integral therewith, see Fig. 2, or secured thereon  
75 by means of a suitable key U, as shown by Fig. 6. The shaft S at one side of the cutter T, is made adapted to fit into the opening O in the detachable fork, or extension L, and its other end is reduced and provided with screw thread V, substantially as shown by Figs. 2 and  
80 5. On the screw threaded end V of the shaft S, I arrange an internally screw threaded sleeve W, having at one end a circular transversely projecting flange or wheel A'. A screw threaded nut B' is arranged on the outer end of the screw threaded portion of the shaft  
85 S, and its object is for use in holding the wheel A' to gaged adjustment. The screw threaded end of the shaft S is arranged in the opening O in the fork or extension M of the head E, and is provided with proper support therein, by the sleeve W arranged thereon.  
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When resharpener of the cutter T is made necessary, the same is facilitated and effected to an improved degree, through use of the device shown by Fig. 7.

In the sharpening operation, the socket end of the key P is screwed on the projecting screw-threaded end  
95 V of the shaft S. Through use of the key P it is apparent that the cutter T may be held in contact with a sharpening stone, and be turned against it, without detaching the cutter from head portion E.

It will be understood that my improved device for  
100 trimming or cutting slits in fabric, more especially photographers' prints, is designed for use with a pattern, or guide device, commonly employed by photographers, and not necessary to illustrate.

The gage wheel A' is designed to be adjusted on the  
105 shaft S, according to the width of margin desired to be left on the print.

In the use of my improved device, the gage wheel is



placed against the guiding edge of the pattern, and the device shoved along with the cutter T rolling in contact with the paper or other material, and effectively slitting it at the desired distance from the  
5 guiding pattern.

The head E being free to turn on the stem D, as the trimming device is shoved along, simple pressure on the handle is all that is required of the operator, when cutting oval, circular, or other margins.

10 When making straight cuts, without the use of a guiding edge, the screw H is adjusted to position with its inner end bearing against the flat surface G on the stem D, thereby locking the head E against turning action on the stem.

15 I claim:

1. A trimming device, comprising a handle, a rotatable head, and means on the head consisting of a rotatable

shaft, a circular cutter on the shaft, and a gage wheel having adjustable support.

2. A trimming device, comprising a depending stem, a 20 rotatable head detachably secured on the stem, means adapted to secure the head against rotation, a rotatable cutter and a gage wheel, at the lower portion of the head, a shaft and bearing, providing support for said cutter and gage wheel. 25

3. A trimming device, comprising a handle, a depending stem on the handle, a head having depending rotatable support on the stem, a transversely supported shaft on the lower portion of the head, a circular cutter and a gage wheel on the shaft, the gage wheel being provided with 30 adjustment, and one end of the shaft made projecting adapted for attachment of a device whereby the shaft may be held and turned.

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Witnesses:

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