

No. 616,041.

Patented Dec. 13, 1898.

C. VOLLMER.  
ROUNDAABOUT.

(Application filed Apr. 8, 1898.)

(No Model.)

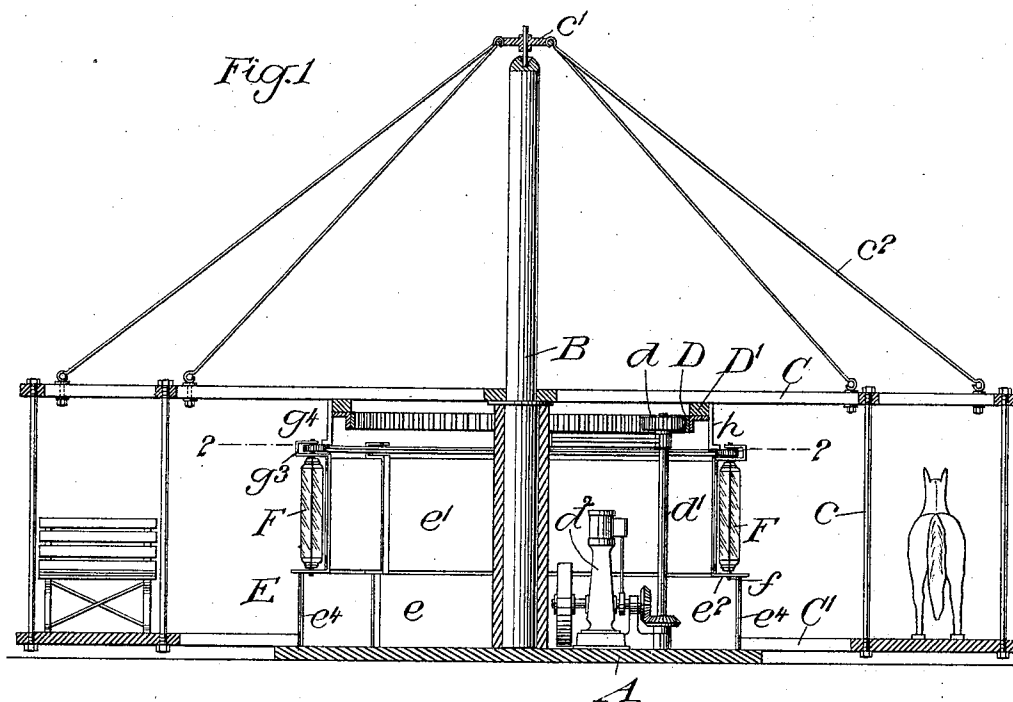


Fig. 3.

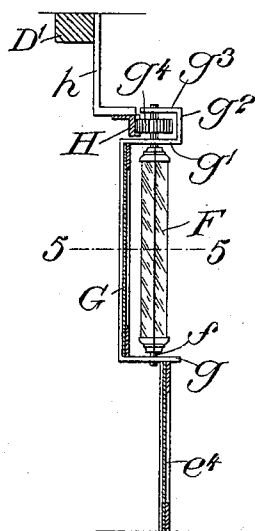


Fig. 4.

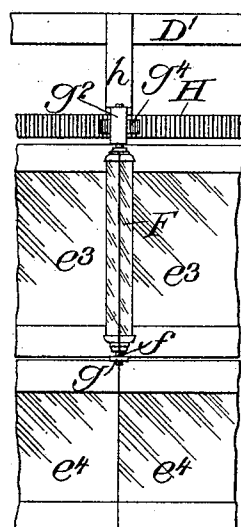


Fig. 2.

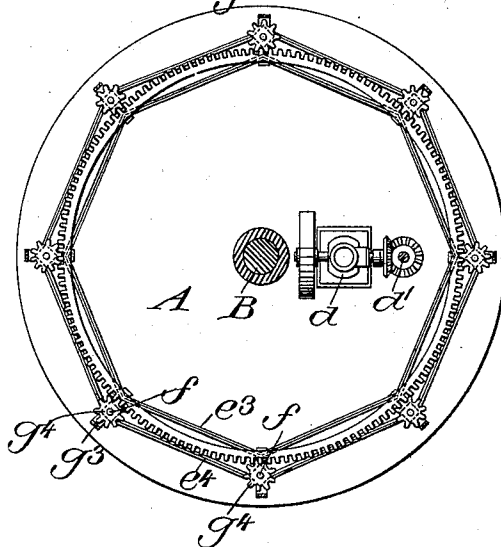
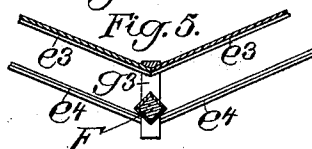


Fig. 5.



Witnesses:  
M. E. Fletcher.  
Edward Wieser.

Inventor:  
Charles Vollmer  
by attorneys.  
Muntz & Co.

# UNITED STATES PATENT OFFICE.

CHARLES VOLLMER, OF NEW YORK, N. Y.

## ROUNDABOUT.

SPECIFICATION forming part of Letters Patent No. 616,041, dated December 13, 1898.

Application filed April 8, 1898. Serial No. 676,855. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES VOLLMER, a citizen of the United States, and a resident of New York, (Rockaway Beach,) in the county of Queens and State of New York, have invented a new and useful Improvement in Roundabouts, of which the following is a specification.

My invention relates to an improvement in roundabouts, the object being to provide mechanism for producing a kaleidoscopic effect around the central casing which incloses the driving mechanism of the roundabout.

A further object is to provide a very simple and strong mechanism for producing this effect.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents a vertical central section through a roundabout, showing my invention applied thereto. Fig. 2 is a horizontal section in the plane of the line 2 2 of Fig. 1, showing the central portion of the roundabout. Fig. 3 is an enlarged detail view of one of the rotary angular mirrors and its adjacent parts. Fig. 4 is a view of the same at right angles to Fig. 3, and Fig. 5 is a section taken on line 5 5 of Fig. 3.

The central platform or supporting-base is denoted by A. It is provided with the usual central swing-supporting post B uprising therefrom. The rotary swing herein represented comprises an upper frame C, supporting an annular platform C' adjacent to the ground by means of rods  $c$ , the said upper frame being mounted centrally upon the supporting pole or post B, so as to rotate thereon, by providing a central bearing-plate  $c'$ , engaging the top of the pole, connected with the platform by rods  $c^2$ . This swing may be provided with suitable seats, as usual. The swing is rotated by providing the upper frame C with a concentric interior gear-wheel D, surrounding the post B and secured to a concentric annular beam D', carried by the said upper frame C, which gear-wheel is driven by a pinion  $d$ , carried by a shaft  $d'$ , which in turn is driven by a suitable engine or motor  $d^2$ .

A central casing E is provided around the post B, which casing is angular in horizontal

section and is composed of a lower larger section  $e$  and an upper smaller section  $e'$ , whereby a step  $e^2$  is formed. In the present instance the casing E is represented as having eight sides, the exteriors of which are provided with upper and lower sets of mirrors  $e^3$   $e^4$ .

In front of the angle formed by the meeting of the mirror-plates  $e^3$  I mount rotary angular mirrors F and the vertical central axles  $f$  of which are mounted at their lower ends at the step  $e^2$  in the outwardly-projecting arms  $g$  of the corner-bars G. The upper ends of these bars G project outwardly above the top of the casing E, as shown at  $g'$ , then upwardly a short distance, as shown at  $g^2$ , and then rearwardly, as shown at  $g^3$ , thereby forming a loop through which the upper ends of the axles  $f$  pass. On the axles  $f$  within this loop I provide pinions  $g^4$ , which intermesh with an exterior gear-wheel H, carried by the frame C of the swing, in the present instance by securing the said gear-wheel to hangers  $h$ , depending from the beam D'.

The rotary mirrors F are represented herein as square in cross-section, but they may be made triangular or of other angular shape, as may be desired.

As the swing is rotated, the gear H will engage the pinions  $g^4$  and cause the angular mirrors F to rotate very rapidly, this movement causing the mirrors to throw reflections onto the mirrors  $e$ , thereby producing a kaleidoscopic effect.

The structure hereinabove described is a very simple and effective one, the bars G, which serve to support the rotary mirrors, also serving as a portion of the frame for the casing E.

It is evident that the number of sides of the casing E, and therefore the number of rotary angular mirrors F, may be increased or diminished as desired, and it is also evident that other slight changes might be resorted to in the form and arrangement of the several parts without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the structure herein shown and described; but

What I claim is—

1. In a roundabout, the combination with a stationary central casing, angular in hori-

zontal section and provided with mirrored sides, of rotary mirrors, angular in cross-section, mounted in stationary bearings in front of the angles formed by the meeting of the  
5 said mirrored sides of the casing, substantially as set forth.

2. In a roundabout, a central casing having mirrored sides, a swing and means for rotating it, a gear-wheel carried by the swing,  
10 a plurality of angular mirrors mounted to rotate adjacent to said mirrored sides of the casing and pinions carried by the rotary mirrors engaged with the said gear-wheels, substantially as set forth.

15 3. In a roundabout, a rotary swing, a gear-wheel carried thereby, a central casing having mirrored sides, a bar located at the angle

formed by two of the sides, the said bar having its lower end extended forwardly and its upper end extended into looped form and an  
20 angular mirror mounted in said bar and having a pinion on its axle within the said loop the pinion being engaged by the gear-wheel carried by the swing, substantially as set forth.

25 In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 2d day of April, 1898.

CHARLES VOLLMER.

Witnesses:

FREDK. HAYNES,  
C. S. SUNDGREN.