

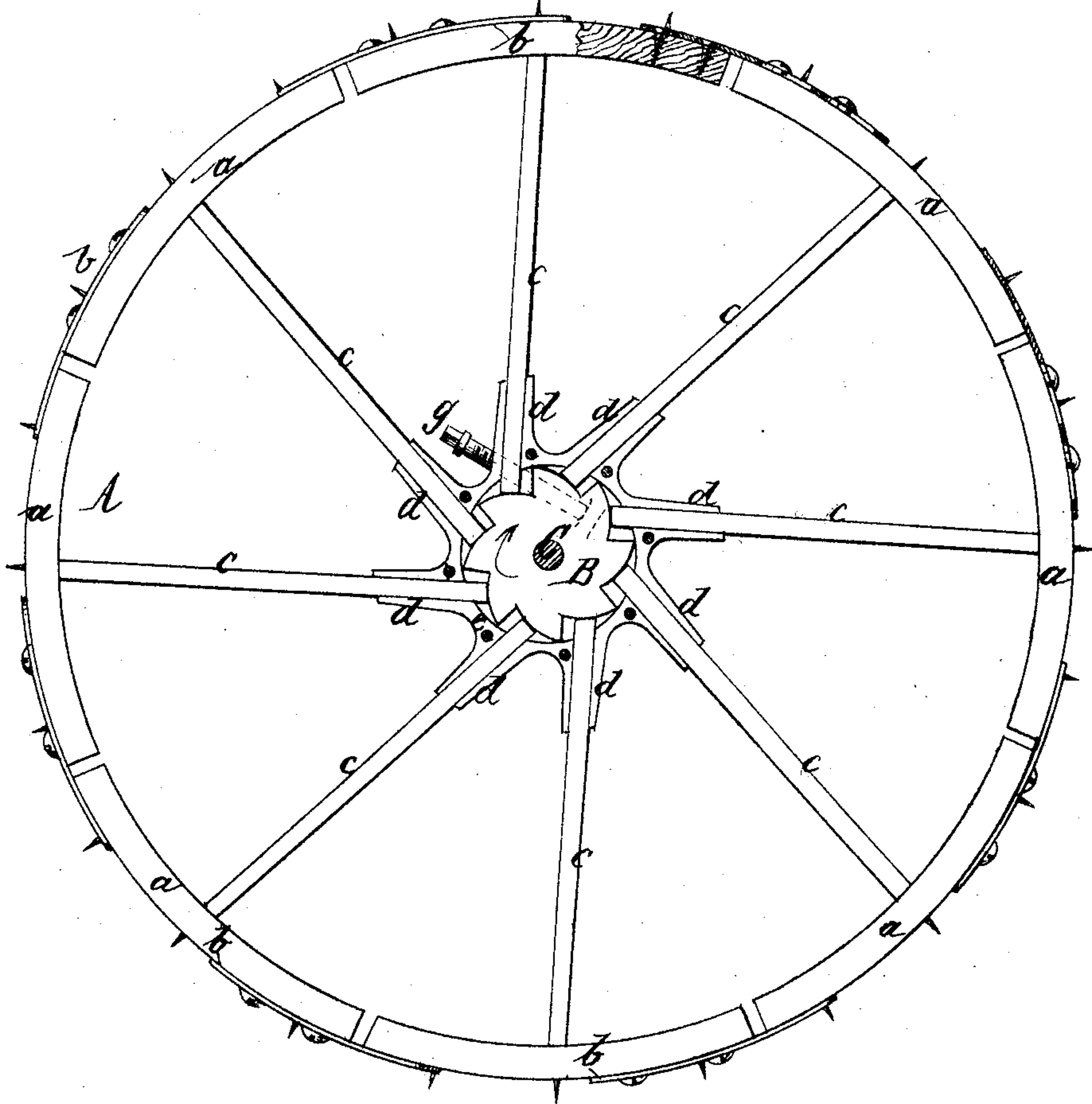
F. C. LUSSENHOP.

Circular Frames for Photographic Back-Grounds.

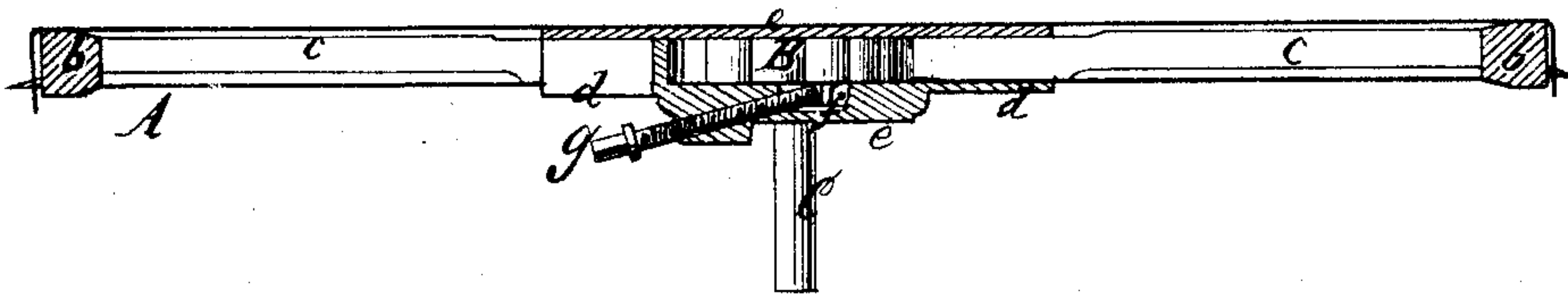
No. 148,723.

Patented March 17, 1874.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*

*Ernst Billmeyer.*  
*Henry Bentner.*

*Inventor.*

*Ferdinand C. Lussenhop*  
*Van Santvoord & Hauff*  
*att*

# UNITED STATES PATENT OFFICE.

FERDINAND C. LUSSENHOP, OF HOBOKEN, NEW JERSEY.

## IMPROVEMENT IN CIRCULAR FRAMES FOR PHOTOGRAPHIC BACKGROUNDS.

Specification forming part of Letters Patent No. **148,723**, dated March 17, 1874; application filed October 10, 1873.

*To all whom it may concern:*

Be it known that I, FERDINAND C. LUSSENHOP, of Hoboken, in the county of Hudson and State of New Jersey, have invented a new and Improved Frame for the Background of Photographs; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which drawing—

Figure 1 represents a sectional front view of this invention. Fig. 2 is a horizontal section of the same.

Similar letters indicate corresponding parts.

This invention relates to a circular frame which is made in sections, connected together by slides and provided with spokes which slide in sockets in the hub, and bear upon an expander in such a manner that, by moving said expander in the proper direction, the spokes are forced outward and the diameter of the frame is increased, and by these means the canvas which is fastened to the circumference of said frame can be readily kept tight.

In the drawing, the letter A designates a circular frame, which is made in eight (more or less) sections, *a*. These sections are connected together by slides *b* made of thin strips of sheet metal or of any other material, and applied so that the sections can be moved apart or brought close together, and by moving them apart the diameter of the frame is increased, and vice versa. Each of the sections *a* is provided with a spoke, *c*, and the inner ends of these spokes fit each into a socket, *d*, formed on the hub *e* of the frame A. In this hub is contained the expander B, which, in the example shown, consists of a disk provided with a series of cams, one cam for each spoke. This

disk is firmly mounted on the spindle C, which supports the frame A, and from one of its sides projects a lug, *f*, (see Fig. 2,) against which acts a screw, *g*, that extends through a socket in the side of the hub *e*. By turning the screw in the proper direction the disk B is caused to revolve in the direction of the arrow, marked on it in Fig. 1, and by the action of the cams the spokes *c* are forced outward in their sockets and the frame A is expanded.

By referring to Fig. 1, it will be seen that the spokes are set in tangential positions, so as to increase the leverage of the cam-disk. If they were placed in radial positions very great power would be required to expand the frame A by means of the cam-disk. The form and construction of the expander B may, however, be changed—for instance, the hub may be bored out, and by inserting a tapering plug, which acts on the inner ends of the spokes, the frame A can be expanded.

I do not wish to confine myself, therefore, to the precise form and construction of the expander shown in the drawing.

From the periphery of the frame A project pins, to which the canvas is attached, as shown in Fig. 2. Instead of these pins any other suitable fastening may be employed.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of an expander, B, with the spokes *c* of a sectional frame, A, substantially as and for the purpose shown and described.

This specification signed by me this 20th day of September, 1873.

F. C. LUSSENHOP.

Witnesses:

E. F. KASTENBUBER,  
CHAS. WAHLERS.