

(No Model.)

H. G. WOOD.  
PANORAMIC CAMERA.

No. 559,246.

Patented Apr. 28, 1896.

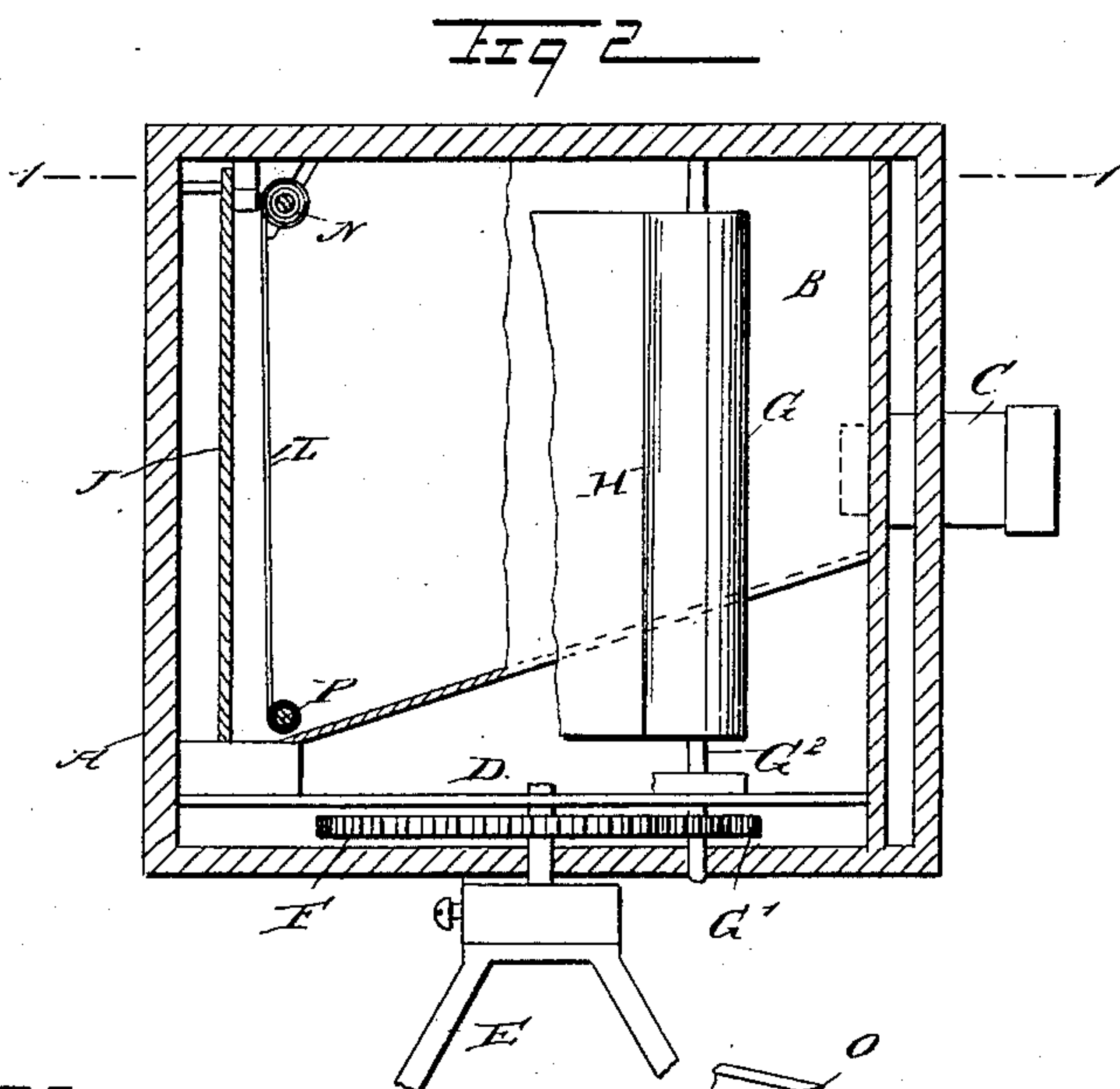
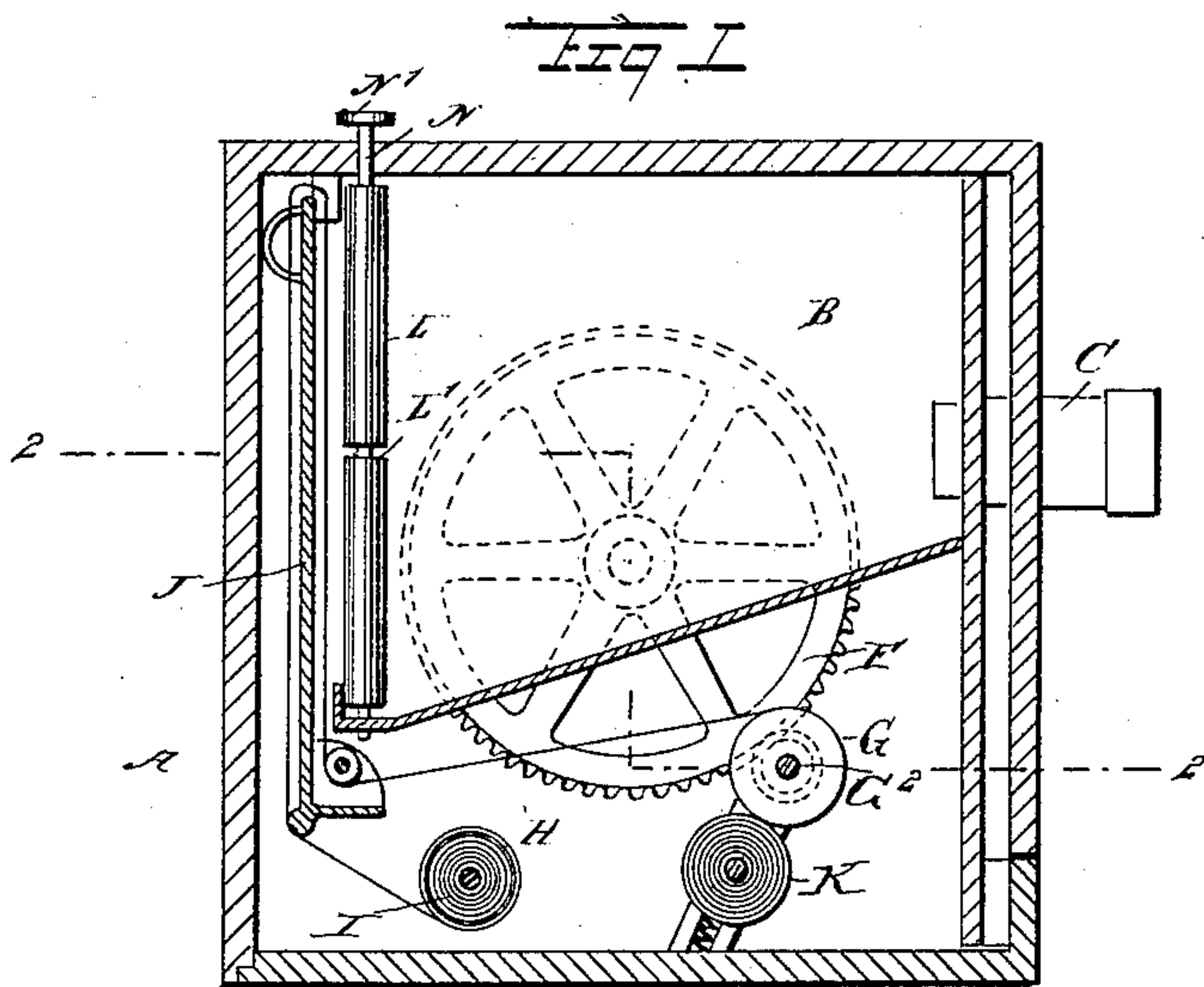
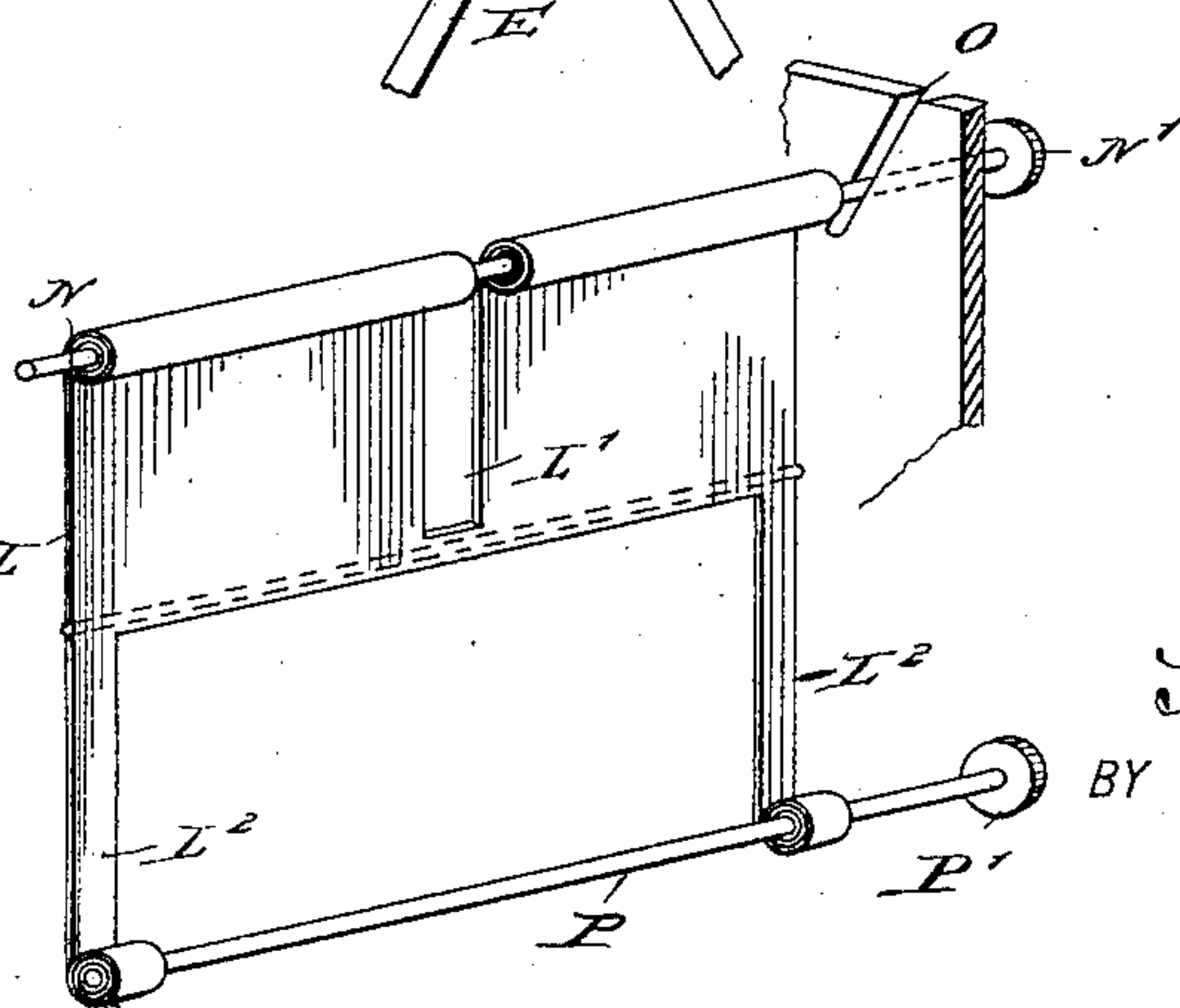


Fig 3



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HORATIO G. WOOD, OF NEWPORT, RHODE ISLAND.

## PANORAMIC CAMERA.

SPECIFICATION forming part of Letters Patent No. 559,246, dated April 28, 1896.

Application filed May 15, 1895. Serial No. 549,435. (No model.)

*To all whom it may concern:*

Be it known that I, HORATIO G. WOOD, of Newport, in the county of Newport and State of Rhode Island, have invented certain new and useful Improvements in Panoramic Cameras, of which the following is a full, clear, and exact description.

The invention relates to panoramic cameras such as shown and described in the application for Letters Patent of the United States, Serial No. 545,482, filed by me on April 12, 1895.

The object of the invention is to provide certain new and useful improvements in cameras; in which the driving mechanism is greatly simplified, and the camera can be used for making either panoramic views or ordinary views.

The invention consists principally of a stationary gear-wheel on the fixed pivot for the camera-casing, a pinion in mesh with the said gear-wheel, and a winding-roller carrying the said pinion and adapted to wind up the film after the exposure is made.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional plan view of the improvement on the line 1 1 of Fig. 2. Fig. 2 is a sectional side elevation of the same on the line 2 2 of Fig. 1, and Fig. 3 is a perspective view of the curtain for the dark chamber.

The improved camera is provided with a casing A, in which is formed a dark chamber B, connected with the lens C. The bottom of the casing A is mounted to turn loosely on a pivot D, secured or supported on a tripod E, as plainly shown in Fig. 2, and on said pivot D within the casing A is attached a large gear-wheel F, on which is adapted to roll a pinion G', secured on the lower end of the shaft G<sup>2</sup> of a roller G, disposed vertically in the camera-casing and journaled at its ends in the top and bottom of the casing. The film H is wound up by the roller G on a spring-pressed roller K after an exposure is made in case ordinary views are taken, or the said

roller G winds up the film continually during the operation when panoramic views are taken, and the camera is turned by the operator. It will be seen that when the camera-casing is turned on the fixed pivot D the pinion G' in mesh with the stationary gear-wheel F turns the roller G, so that the latter winds up the film during the time the view is taken. The film H unwinds from a roller I and passes around a slide J to finally pass around the roller G and onto the roller K.

In front of the slide J at the rear end of the dark chamber B is arranged a curtain L, wound upon a roller N, extending transversely and journaled in inclined guideways O in the sides of the casing A. (See Fig. 3.) On the outer end of the roller N is arranged a knob N' to enable the operator to conveniently turn the said roller to wind up or unwind the curtain L at the rear end of the dark chamber B. In this curtain L is arranged a vertically-disposed slot L', which permits the rays of light entering the dark chamber B at the lens C to pass upon the film in the rear of the curtain and in front of the slide J.

The lower end of the curtain L is provided with downwardly-extending tabs L<sup>2</sup>, winding on a roller P, likewise extending transversely, and journaled in the sides of the casing A, the outer end of the roller being provided with a knob P' to enable the operator to turn this roller and wind up the said device in order to draw the curtain L downward to bring the slot in position. When the curtain L is wound up, the entire portion of the film extending in front of the slide J is free for exposure to permit of taking ordinary views.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A camera, comprising the combination of a casing, a support on which the casing is rotatively mounted, a spur-wheel rigid with the support, a roller journaled within the casing, a pinion carried by the roller and meshing with the spur-gear of the support, a slide within the casing and extending parallel with one side thereof and around which the film is adapted to pass, a second roller, a dark chamber, and a lens, substantially as described.

2. A camera, provided with a curtain, the

same being formed with tabs or ribbons respectively at two corners, said tabs or ribbons being projected parallel with each other, and the curtain further having a slot extending  
5 longitudinally through its middle, substantially as described.

3. In a camera, the combination with a casing, of two rollers mounted therein and a curtain wound on said rollers, the said curtain  
10 having at each of two corners a parallel tab or ribbon and having also a slot, substantially as described.

4. In a camera, the combination with a cas-

ing, of two rollers mounted therein and having buttons projected beyond the casing, a curtain having at its lower side two tabs or ribbons, the same being wound over the lower roller, the upper edge of the curtain being connected to the upper roller, and the curtain having formed therein a slot extending per-  
pendicularly to the roller, substantially as described.

HORATIO G. WOOD.

Witnesses:

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