

No. 662,744.

Patented Nov. 27, 1900.

J. J. SHIPLEY.

HEADLIGHT.

(Application filed Apr. 13, 1899.)

(No Model.)

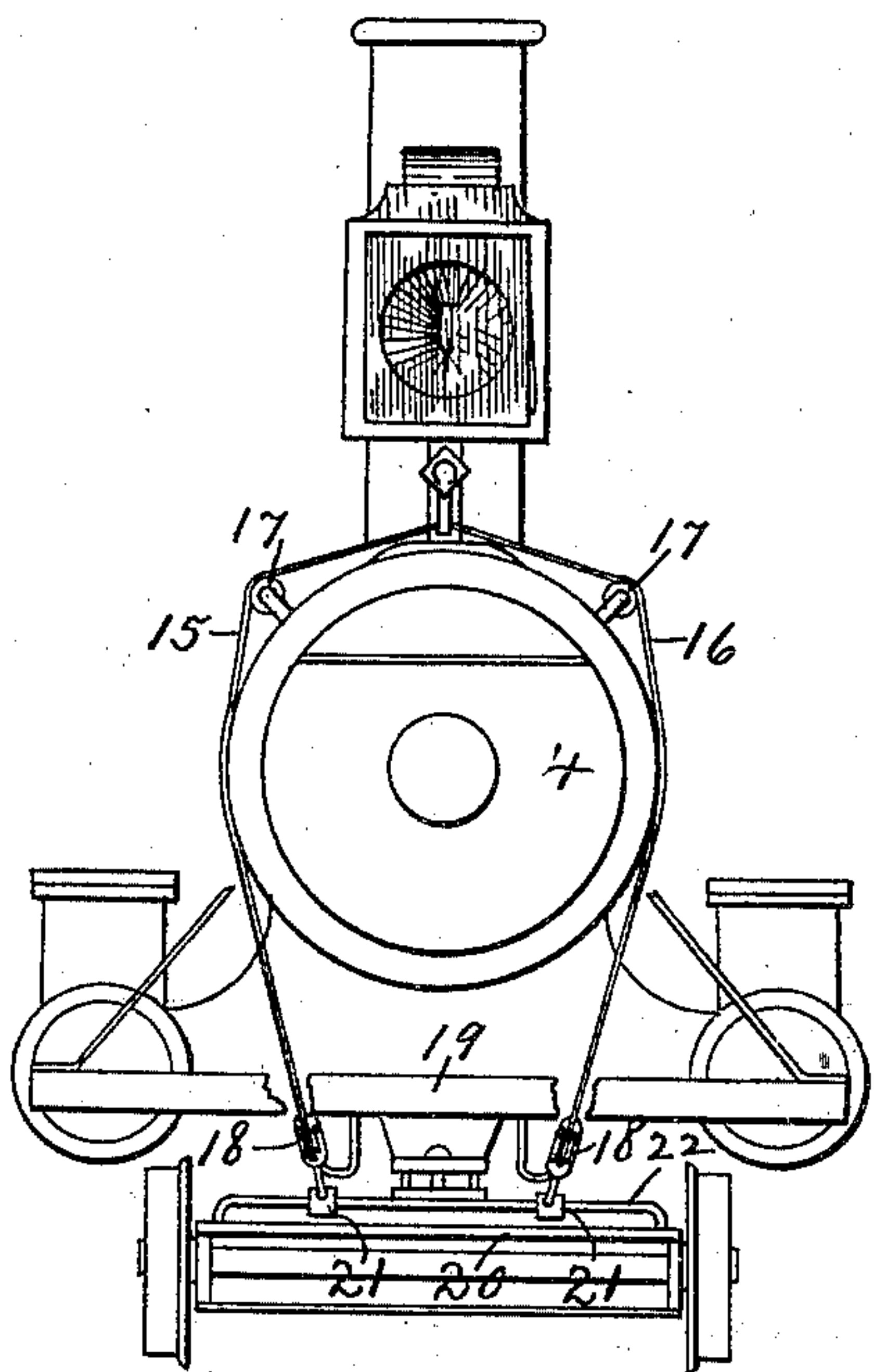


Fig. 1.

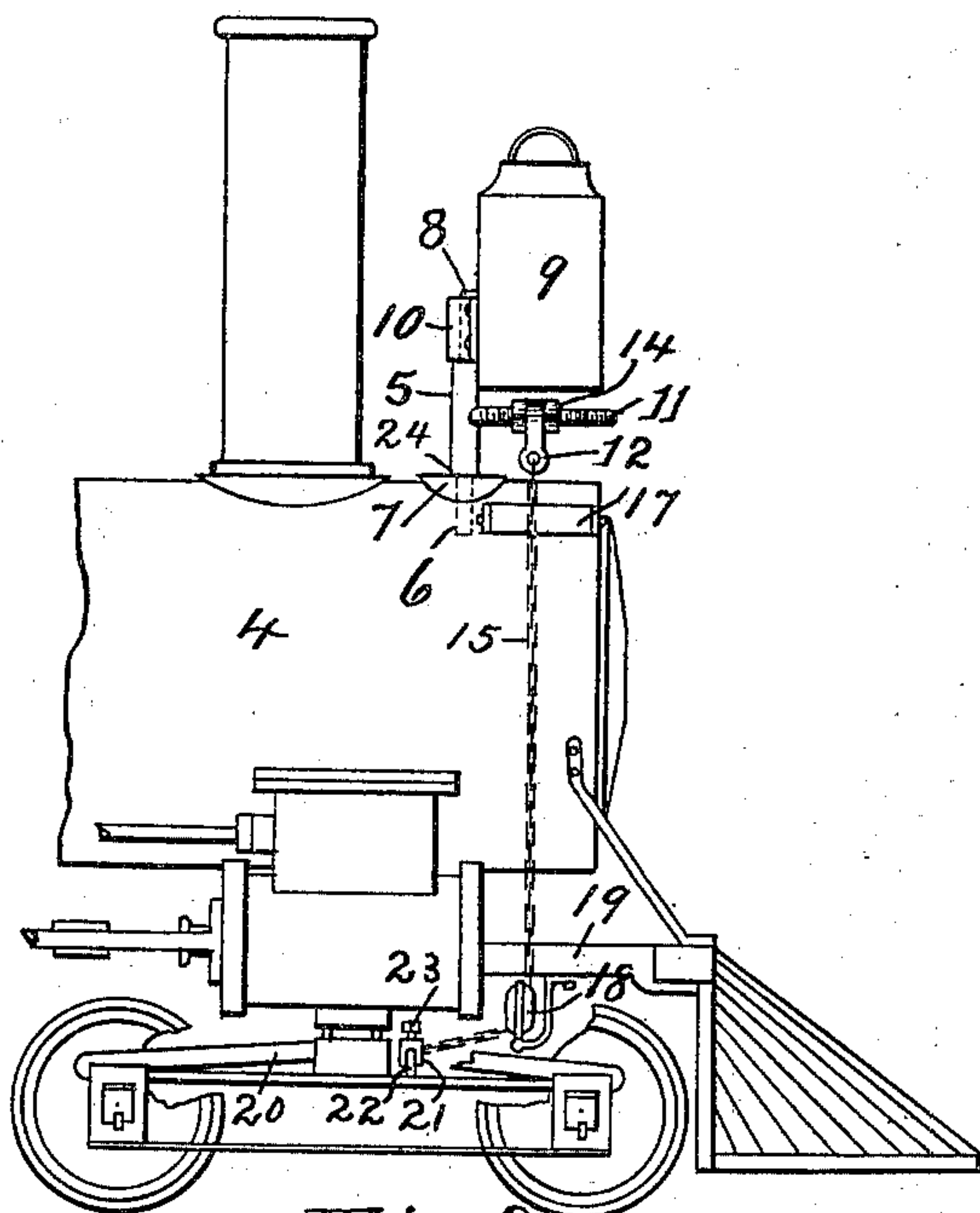


Fig. 2.

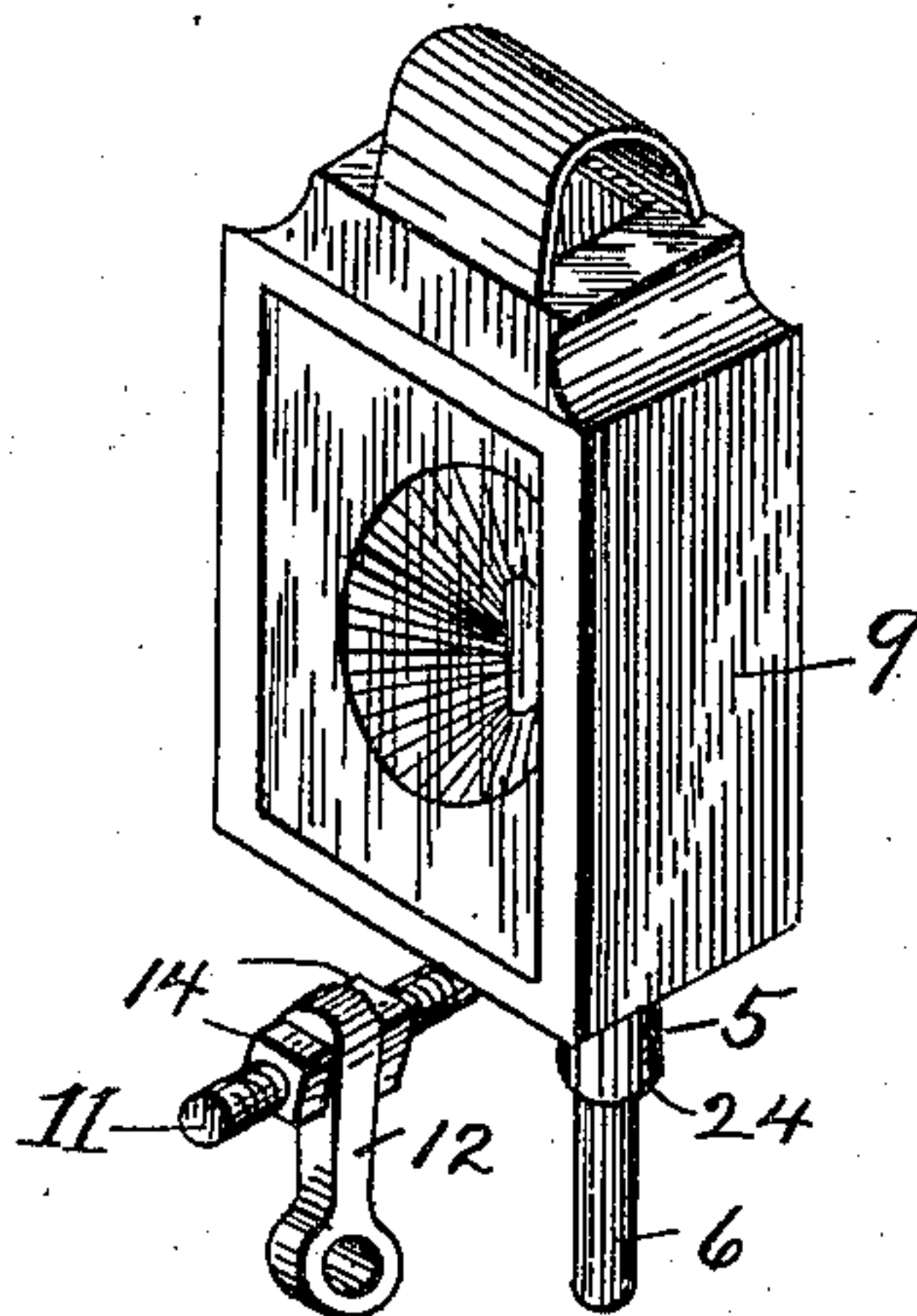


Fig. 3.

Witnesses.

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# UNITED STATES PATENT OFFICE.

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## HEADLIGHT.

SPECIFICATION forming part of Letters Patent No. 662,744, dated November 27, 1900.

Application filed April 13, 1899. Serial No. 712,886. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH J. SHIPLEY, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Headlights; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has reference to improvements in devices for operating headlights for street-cars, automobiles, locomotives, and for other like purposes; and it consists of certain novel features of construction, which will be hereinafter fully presented in the specification, elucidated in the drawing, and clearly pointed out in the claims.

The object of the present invention is to provide a headlight that can be automatically operated by the car or vehicle upon which it is secured when turning a curve or a departure from a right line on a railway or a common roadway. There are several ways to accomplish the desired result; but that which I consider preferable is a flexible connection, which is more yielding and not liable to a jerking and spasmodic action, but will transfer the least movement of a truck or axle in an even and steady pull when operating a headlight. This flexible connection can be made of any kind of material for accomplishing the desired result.

The present invention is shown upon a locomotive, in which the boiler is indicated by the numeral 4 and to which is pivotally secured a vertical standard 5. Said standard is provided with a reduced extension 6, which extends through a plate 7 and also through the boiler-shell into the cinder-chamber. A shoulder 24 is formed on said standard, which rests upon the aforesaid plate 7. The upper portion 8 of said standard 5 is rectangular in cross-section, so as to operate the headlight 9, said headlight being removably secured thereon. A staple 10 is secured to the headlight for the reception of said standard 5. Extending at right angles from said standard 5 is a screw-threaded arm 11, which is provided with an adjustable depending link 12 and also nuts 14 for securing said link in its adjusted position.

Secured to the lowermost part of link 12 are flexible connections 15 and 16, respectively. Said connections extend over rollers 17, which are secured to opposite sides of the boiler 4 and extend downward through sheaves 18, secured to the engine-bed 19, and from thence to the truck 20, where they are attached to adjustable lugs 21 on opposite sides of the truck, which are mounted upon a rod 22, the latter being attached to said truck. Said lugs are provided with set-screws 23 for securing the lugs to said rod when adjusted. The object of adjusting the lugs 21 is to increase or decrease the arc of swing of the headlight, which must be coincident with the curve of the road or railway-track.

For slight changes in the arc of rotation of said headlight when the engine or vehicle is in motion the link 12 is adjusted on the arm 11. By this means the headlight can be changed to the exact degree required.

As the method of operation is so obvious, it is not necessary to describe the same.

Having described my invention, that which I consider as new, and desire to secure by Letters Patent, is—

1. In combination with a car or vehicle, a headlight, a truck, a flexible connection between the headlight and the truck automatically operated by the truck, and which is adjustably secured to said truck for turning said headlight at an angle coincident with a railway-curve.

2. In combination with a car or vehicle, a headlight, a truck, a flexible connection between the headlight and the truck, adjustably secured on the opposite sides of the truck, and automatically turning the headlight coincident with a railway-curve or roadway.

3. In combination with a car or vehicle, a headlight, a truck, a flexible connection between the headlight and the truck adjustably secured to the truck near the opposite sides thereof, the opposite ends of said flexible connection being secured to an adjustable link on an arm for turning a headlight or lantern toward the center of a railway or roadway.

4. In combination with a car or vehicle, a headlight, a truck, a flexible connection between the headlight and the truck adapted to automatically turn a headlight coincident

with the curve of a railway-track through the medium of an adjustable link and an arm for supporting said link secured upon a standard as shown.

- 5 5. In combination with a car or vehicle, a removably-secured headlight, a truck, a flexible connection between the headlight and the truck for turning the headlight at an angle co-

incident with the curve of a railway or roadway.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH J. SHIPLEY.

Witnesses:

GEO. H. CHANDLEE,  
WILL. H. CHANDLEE.