

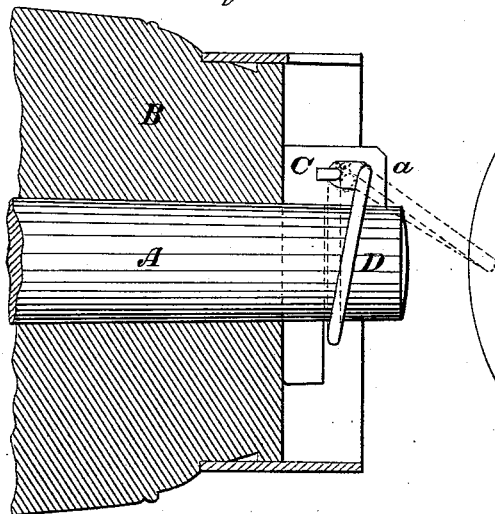
L. B. GUSMAN.

Linchpin.

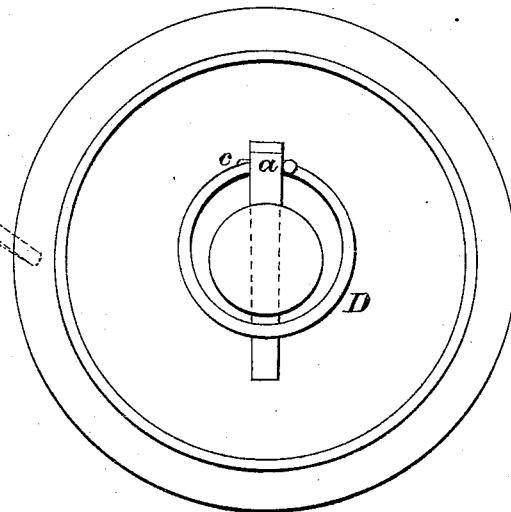
No. 53,220.

Patented Mar. 13, 1866.

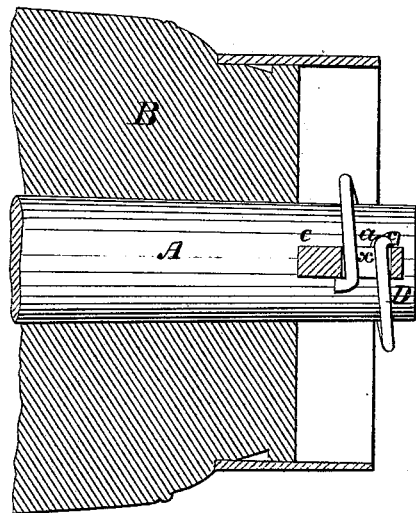
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:

*Wm. Albert Seal*  
*John Parker*

Inventor:

*L. B. Gusman*  
*By his attorney*  
*Henry Howson*

# UNITED STATES PATENT OFFICE.

LEWIS B. GUSMAN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND EDWIN STEER, OF SAME PLACE.

## IMPROVEMENT IN LINCHPINS.

Specification forming part of Letters Patent No. 53,220, dated March 13, 1866.

### *To all whom it may concern:*

Be it known that I, L. B. GUSMAN, of Philadelphia, Pennsylvania, have invented an Improvement in Linchpins; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a slotted linchpin in combination with a spiral spring which encircles the end of the axle, the said spring being constructed and connected to the linchpin as fully described hereafter, so that, although it may be readily raised to allow the pin to be withdrawn, it cannot be thrown from its position by the jolting of the vehicle, the pin being thus securely held in its place.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a view, partly in section, showing my improved linchpin applied to an axle; Fig. 2, an end view of Fig. 1; and Fig. 3, a plan view of Fig. 1, partly in section.

A represents one end of an axle, and B the hub of a wheel turning on the said axle. Through an opening in the axle A passes a linchpin, C, and at the upper end of the latter is a lug or projection, *a*, in which is a slot, *x*. Through the slot *x* pass the ends of a metal spring, D, which is bent to a spiral form and encircles the end of the axle, the ends of the said spring being maintained by the elasticity of the same in the opposite ends of the slot *x*, as shown in the drawings. At each end of the spring D is a lip, *c*, which bears against

the side of the projection *a* and prevents the spring from turning in the slot.

Rings have been heretofore hung to linchpins so as to encircle the ends of the axles, and thus prevent the pins from being thrown from their places. Such devices are defective, however, as the ring is sometimes thrown outward by the jolting of the vehicle and the pin escapes from its position.

In the above-described device the ends of the spring D are maintained so firmly in the ends of the slot *x* that it is impossible for the spring to be moved from its position by the jolting of the vehicle. When, however, it is desired to remove the pin, the spring, by the application of a slight pressure outward, is moved to the position shown in red lines, Fig. 1, when the pin may be withdrawn.

It will be seen that the device is not only more efficient than that in which a solid ring is used, but that it is also cheaper, inasmuch as it is not necessary to weld the ends of the ring together after it has been attached to the pin.

I claim as my invention and desire to secure by Letters Patent—

The linchpin C, with its slot *x*, in combination with the spring D, the latter being constructed and attached to the linchpin, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEWIS B. GUSMAN.

Witnesses:

CHARLES E. FOSTER,  
JOHN WHITE.