(No Model.)

W. J. CRANFORD.

TIRE TIGHTENER.

No. 606,050. Patented June 21, 1898.

Fig. 1.

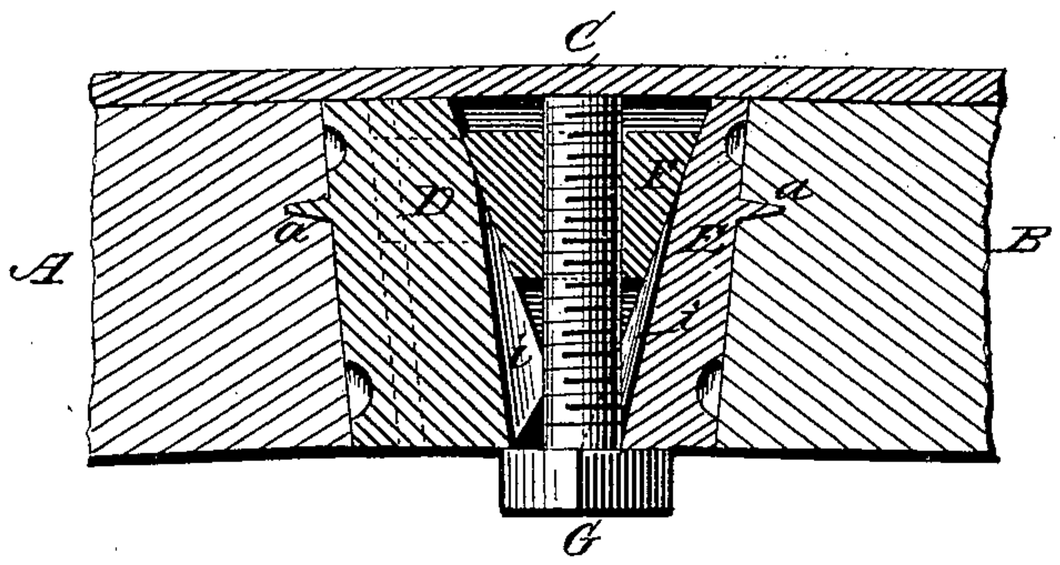


Fig. 2.

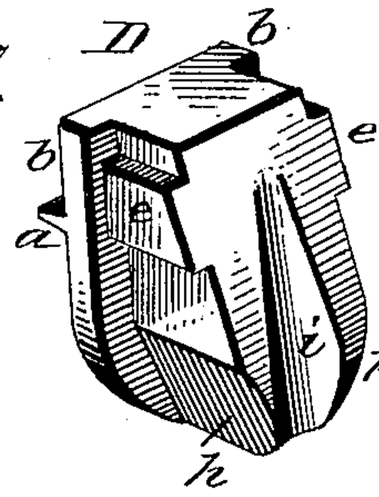


Fig. 3.

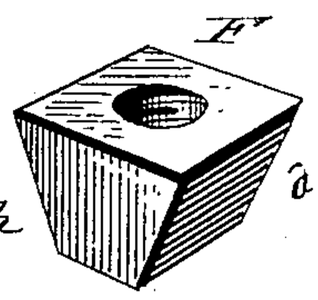


Fig. 4.

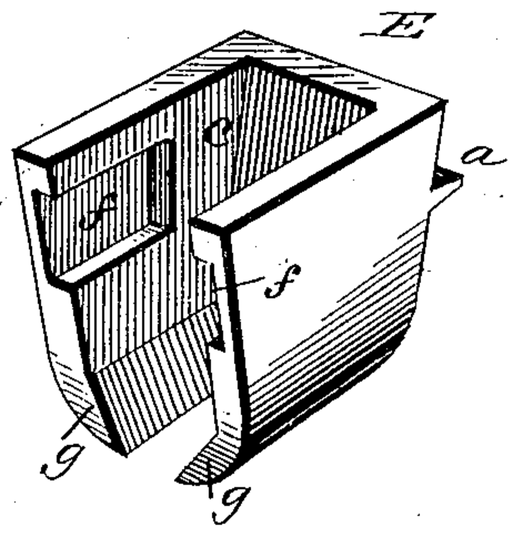
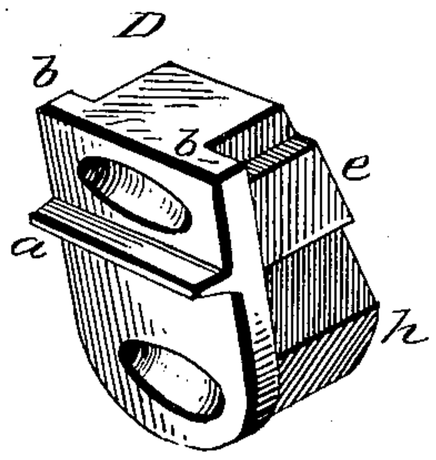


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM J. CRANFORD, OF ASHEVILLE, NORTH CAROLINA.

TIRE-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 606,050, dated June 21, 1898.

Application filed December 8, 1897. Serial No. 661,163. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. CRANFORD, a citizen of the United States, residing at Asheville, in the county of Buncombe and State of North Carolina, have invented certain new and useful Improvements in Tire-Tighteners; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has for its object to provide a simple and effective device as a permanent attachment to a vehicle-wheel, by means of which the tire when loose may be successfully and readily tightened by the expansion of the felly; and the invention consists in a device constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a sectional view of a portion of a rim of a vehicle-wheel, showing the application of my device thereto and disposed between the adjoining ends of the felly; Fig. 2, a perspective view of one of the movable sections, which bears against one of the ends of the felly; Fig. 3, a similar view of the wedge-shaped block; Fig. 4, a similar view of the opposite section, which bears against the opposite end of the felly; Fig. 5, a perspective view of Fig. 2 to more clearly show the construction of the outer end thereof.

In the accompanying drawings, A B represent the two adjoining ends of the felly of a vehicle-wheel, and C the usual tire.

The tire-tightening device consists of the two laterally-movable sections D E and the central wedge-shaped expanding-block F, provided with suitable means for moving it either up or down as circumstances require. Each of the sections D E has a wedge-shaped rib *a*, which extends horizontally across the outer end of the section and adapted to be driven into the wood of the felly to form a continuation of the end thereof. The section D has laterally-extending flanges *b*, which bear against the outer edges *d* of the section E when the two sections are close together. The section D fits into the recess *c* of the section E and is formed upon its sides with guide-shoulders *e* to engage with guide-mortises *f* upon the inner sides of the section E. The side walls of the section E extend inwardly at their lower ends, as shown at *g*, and the section D has inwardly-beveled sides *h* to correspond therewith, thereby forming a more perfect fitting of the two sections when together and each forming a guide for the other.

Each of the sections D E is formed with a groove *i* for the adjusting-screw G, so that the sections can be brought closer together. This screw G engages with a screw-threaded hole in a wedge-shaped block F, located between the two sections D E, and by turning the screw the block will be caused to move up or down, as the case may be. When moved down or in a direction toward the lower ends of the sections, it will cause the section to be forced out laterally and expand the felly, which will tighten the tire upon the rim of the wheel.

Any suitable and well-known means may be employed for moving the block F as found most practical.

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

A tire-tightener, consisting of two metal sections and a movable wedge-shaped block located between the same for moving the sections in a lateral or outward direction, one of said sections having laterally-extending flanges, guide-shoulders at right angles therewith, and inwardly-beveled sides, and the opposite section having recess, guide-mortises upon the side walls thereof which extend inwardly at their lower ends to adapt them to the bevel sides of the opposite section, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM J. CRANFORD.

Witnesses:

WILLIAM W. WEST,

E. SLUDER.