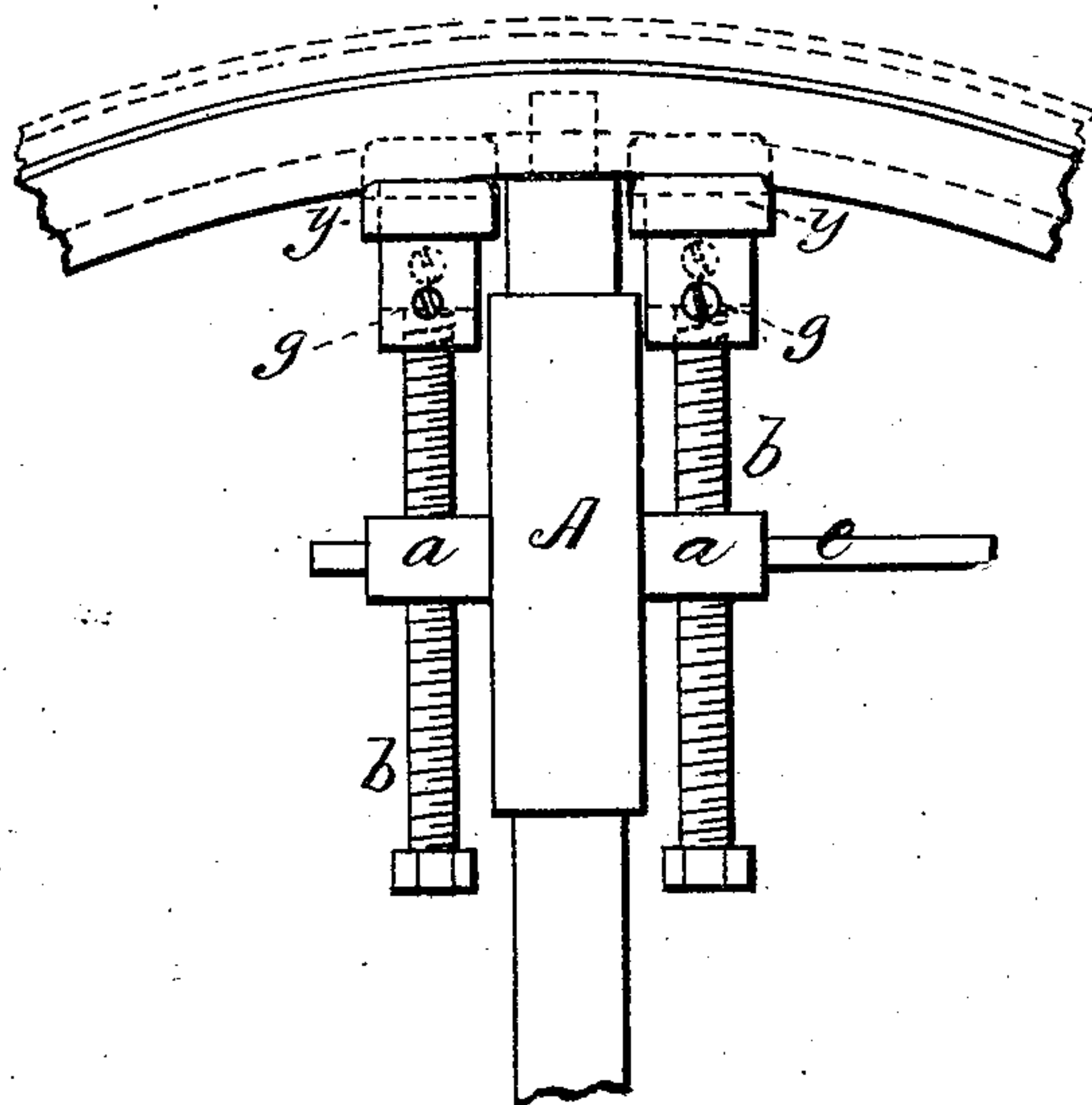


I. H. SPELMAN.  
Tire-Setting Machine.

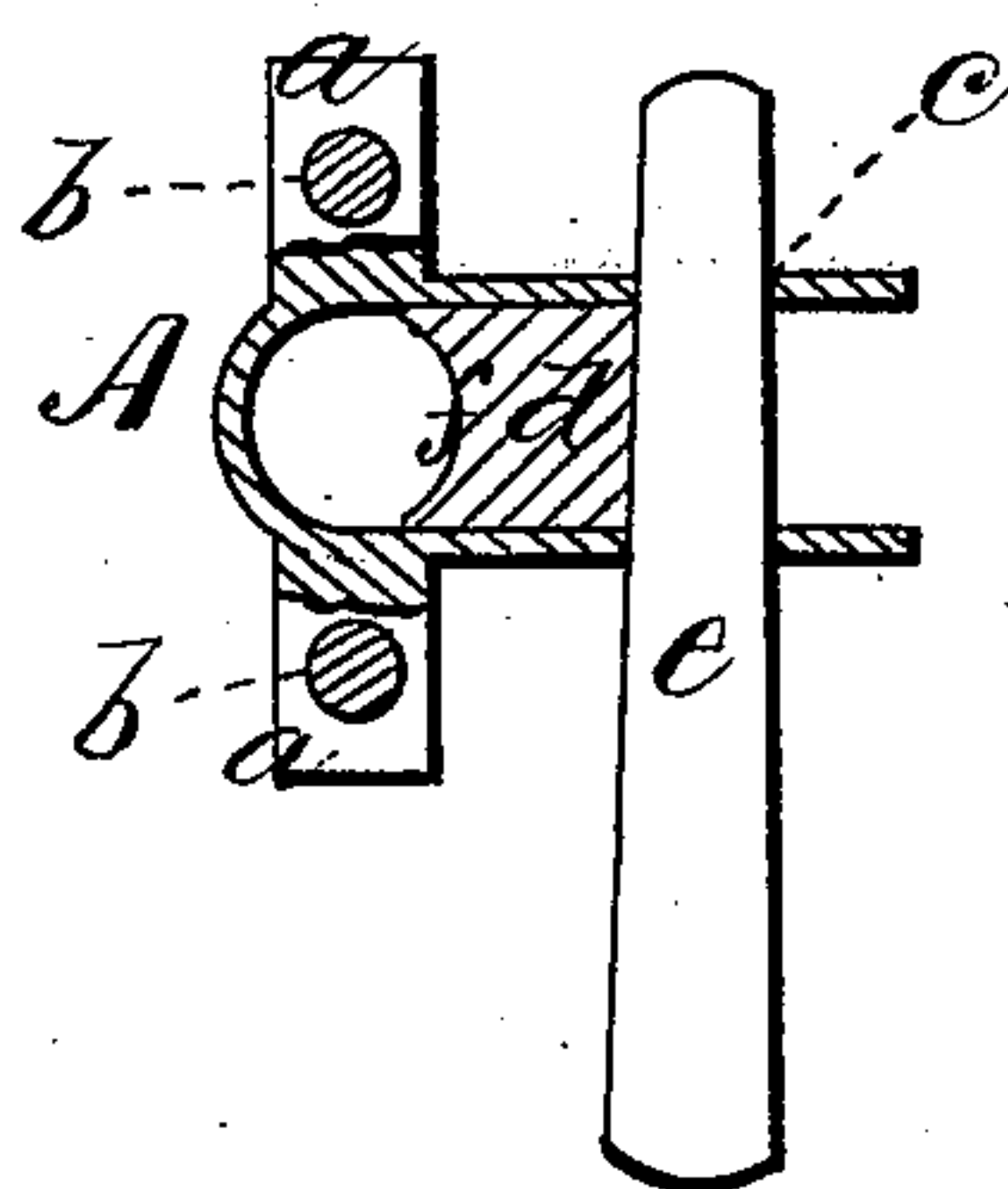
No. 167,798.

Patented Sept. 14, 1875.

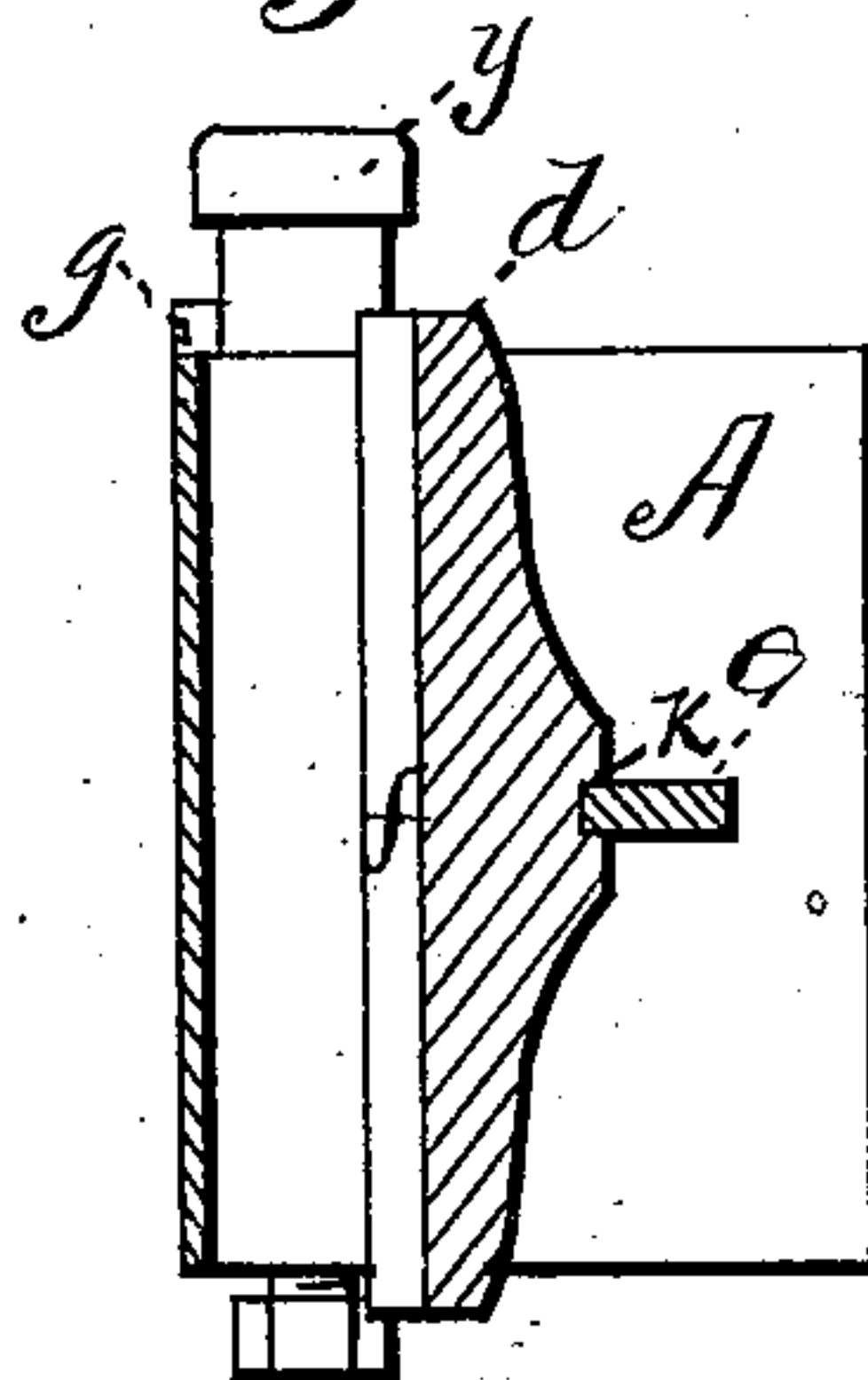
*Fig 1*



*Fig 2*



*Fig 3*



WITNESSES.

*Robert Everett*  
*E. H. Bates*

INVENTOR

*Irwin H. Spelman,*  
*Chipman and Spelman & Co.,*

ATTORNEYS

# UNITED STATES PATENT OFFICE

IRWIN H. SPELMAN, OF CORTLAND, OHIO.

## IMPROVEMENT IN TIRE-SETTING MACHINES.

Specification forming part of Letters Patent No. **167,798**, dated September 14, 1875; application filed July 3, 1875.

*To all whom it may concern :*

Be it known that I, IRWIN H. SPELMAN, of Cortland, in the county of Trumbull and State of Ohio, have invented a new and valuable Improvement in Tire-Setting Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of my device; and Figs. 2 and 3 are detail views of the same.

This invention relates to tire-setting machines; and it consists in the construction and novel arrangement of the U-shaped spoke-plate, its slide-block and fastening-wedge, in connection with the set-screws and swivel-caps, all as will be hereafter fully shown and described.

In the accompanying drawings, the letter A designates a U-shaped spoke-plate, which is provided with ears or projections *a*, through which the set-screws *b* pass. It is also provided with slots *c*, which are cut in each side of the spoke-plate near the center, and directly opposite, for the reception of the wedge *e*, as shown in Fig. 2. *d* is a slide-block, which is constructed so as to fit in between the sides of the spoke-plate, and is provided with two grooves, one, *f*, being formed longitudinally to fit the spoke, and the other, *k*, arranged transversely on the back of the block, so as to receive the wedge *e*, which passes through the spoke-plate and prevents the slide-block from slipping up or down. When the wedge is forced against the slide-block the pressure will be upon the center.

The lugs or ears of the U-shaped spoke-plate are provided with threads for engage-

ment with the two set-screws *g*, which have at their ends revolving or swiveled caps *y*, held in place by screw-pins, which fit into annular grooves formed upon the ends of the set-screws. The other ends of the set-screws are provided with wrench-heads whereby they may be turned.

The mode of operation is as follows: I remove the wedge *e* and slip the slide-block out. I then place the spoke-plate around the spoke and replace the slide-block, and force the wedge *e* through the slots in the spoke-plate A, after which the wedge is driven firmly in place by a few light blows on its larger end, thereby securing the whole machine rigidly in place upon the spoke near the felloes of the wheel. I then turn the set-screws and force the swivel-caps against the felloes, causing a space to be made between the spokes and felloes, which being filled with a suitable substance, such as tarred twine, will tighten the wheel and prevent rattling.

I am aware that a tire-tightener, having jaws, slide-blocks, set-screws with swivel-caps, and hinged staple, as shown in Letters Patent granted to W. D. G. Quigley, dated April 15, 1873, No. 137,957, is not new, and therefore I do not claim such invention broadly; but

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

The U-shaped spoke-plate A, having threaded ears *a a* and slots *c*, the slide-block *d*, having grooves *f k*, the set-screws *g* having swivel-caps *y*, and the wedge *e*, all constructed and combined as described.

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

IRWIN H. SPELMAN.

Witnesses:

W. A. CRAFT,  
T. HILLOCK.