

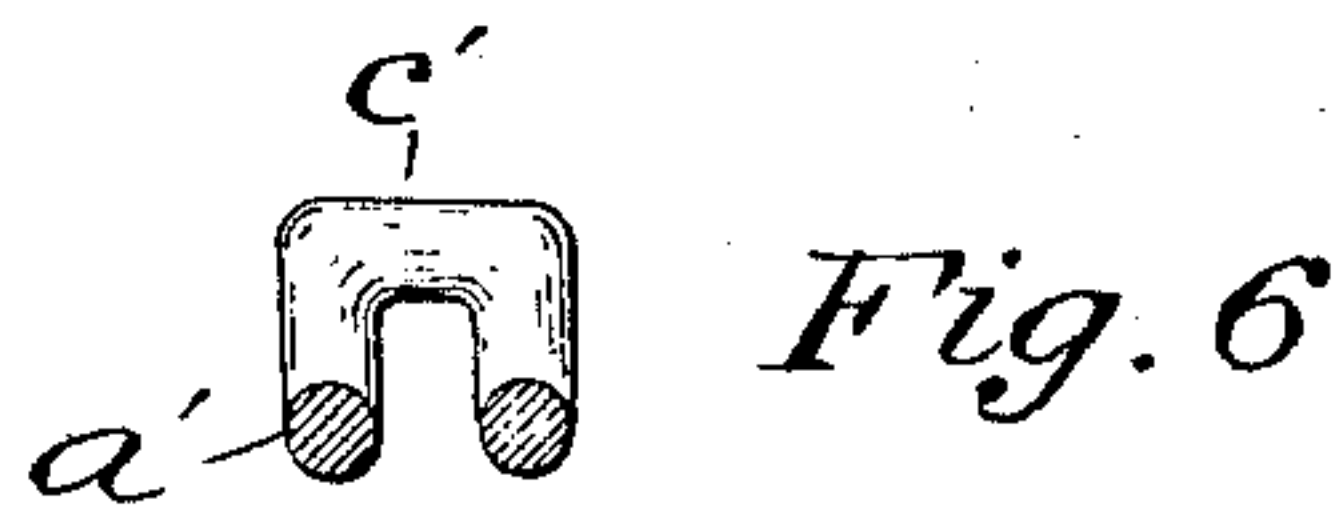
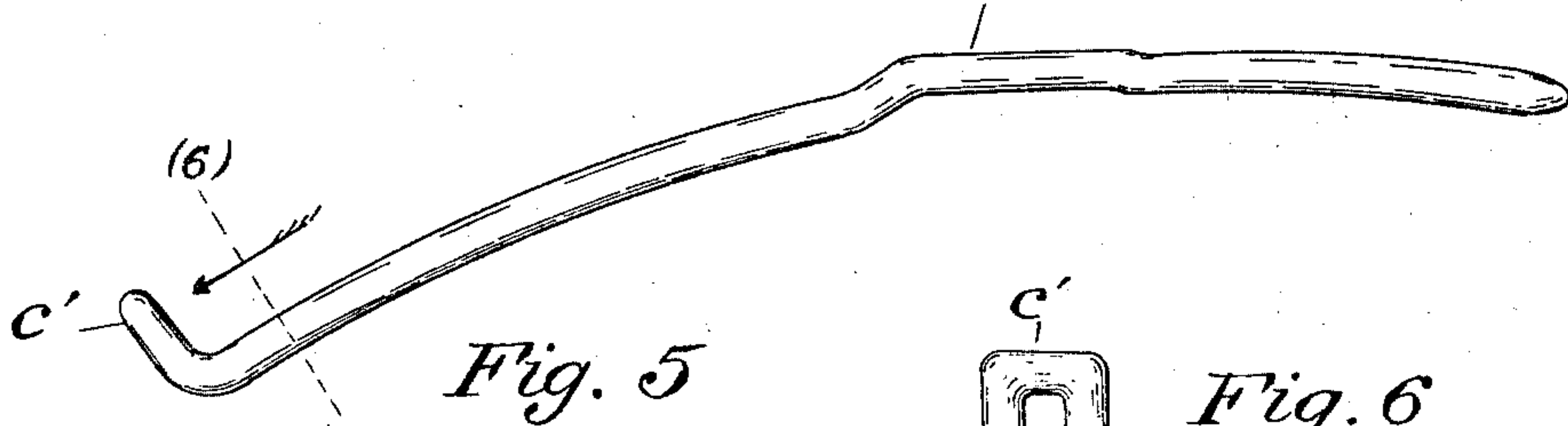
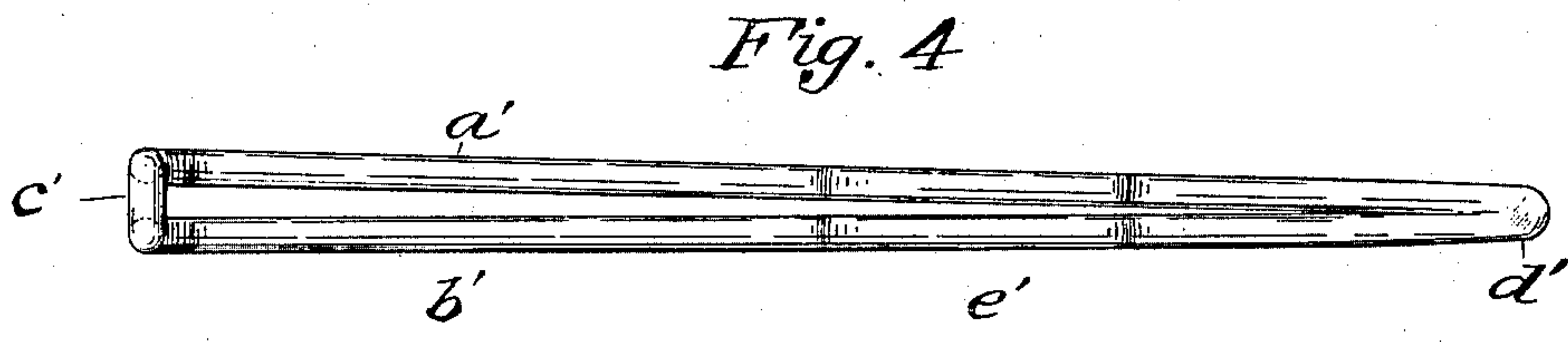
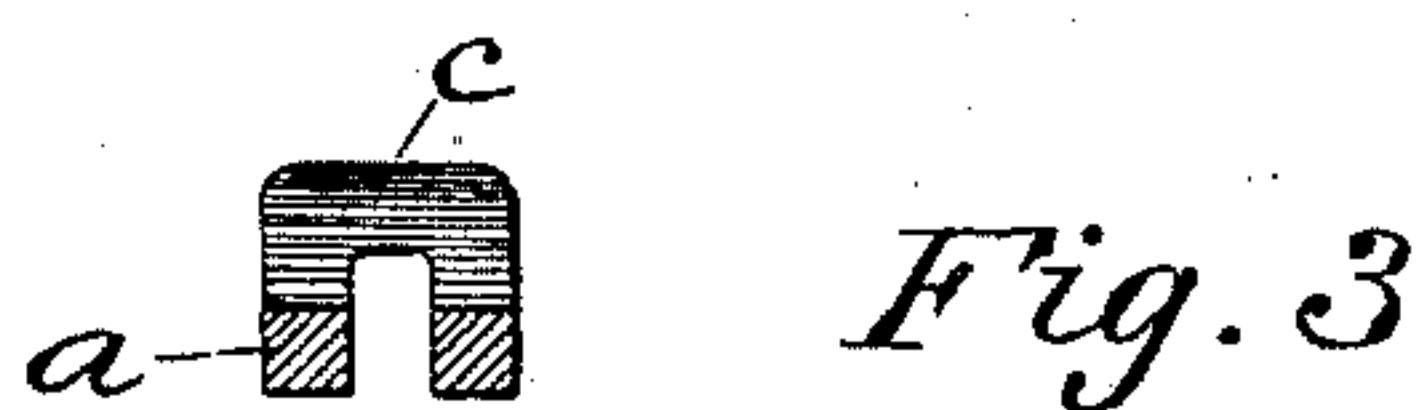
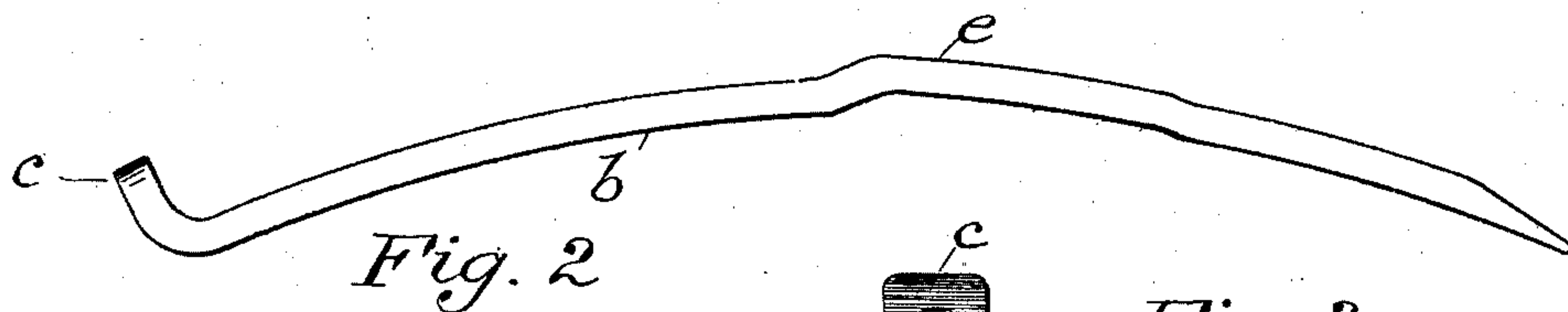
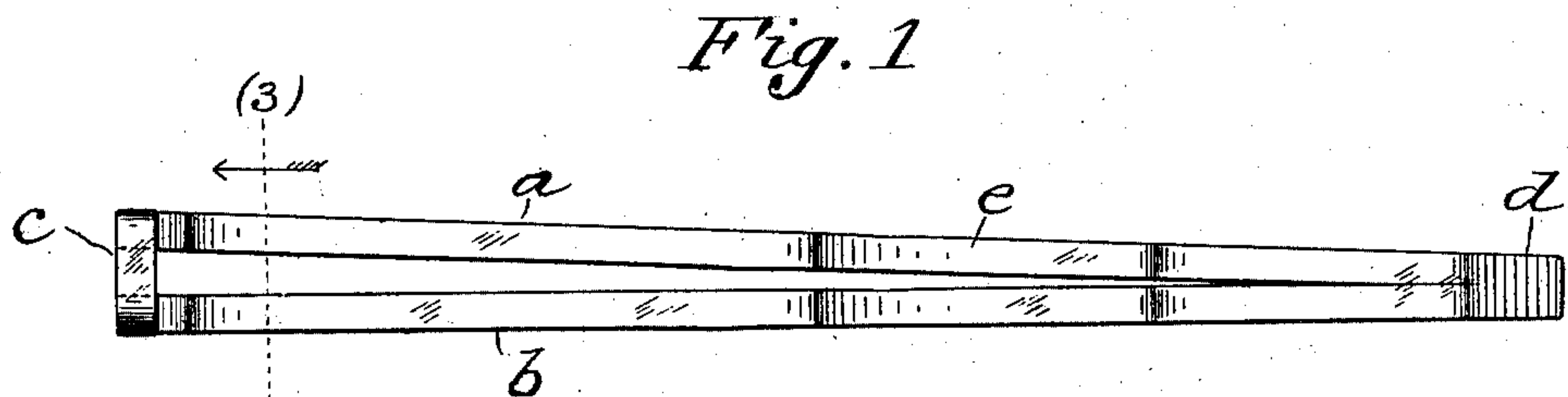
No. 737,674.

PATENTED SEPT. 1, 1903

A. L. STREETER.  
BRAKE SHOE KEY.

APPLICATION FILED MAR. 9, 1903.

NO MODEL.



Witness:

*J. W. H. Clay*  
*Chas. H. Ebert*

Inventor,

*Alfred L. Streeter*

By

*Paul Synnestvedt*  
Att'y.

# UNITED STATES PATENT OFFICE.

ALFRED L. STREETER, OF CHICAGO, ILLINOIS.

## BRAKE-SHOE KEY.

SPECIFICATION forming part of Letters Patent No. 737,674, dated September 1, 1903.

Application filed March 9, 1903. Serial No. 146,908. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED L. STREETER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brake-Shoe Keys, of which the following is a specification.

My invention relates to the brakes used upon railway-cars, and particularly the means for attaching the brake-blocks of wearing-shoes to the brake-heads.

The objects of my invention are to provide a retaining-key to cooperate with the attaching-lug of the shoe in such a way as to hold the same tightly, but resiliently, in place, and to provide an attaching-key which can be inserted and withdrawn without undue strain upon the attaching-lug, and generally to improve the quality and design of the keys for attaching brakes to the brake-block.

In order to attain these and other objects, I provide the device illustrated in two preferred forms in the accompanying drawings, wherein—

Figures 1, 2, and 3 are respectively a plan, a side elevation, and a cross-section of the form of key which I now prefer. Figs. 4, 5, and 6 are respectively a plan, a side elevation, and a cross-section of another form of the key as made from round iron.

It not unfrequently happens that in driving in a common solid bar-key in attaching the brake-block to the head the key does not exactly fit and the blows are liable to break off the attaching-lug of the block, and since the width of the key is fixed the fit in the lug is very unsatisfactory and the key is liable to become wedged in place, so that it cannot be removed. Again, the ordinary key having little resiliency does not hold the block tightly in place, or if it does this it induces a strain on the brake-head when the pressure is applied.

To overcome these difficulties and provide a superior key, I use a small bar or wire of, say, about a quarter-inch section and bend it, as shown in the figures, to form a head, taper the laps of the bar toward each other, and weld the ends together, as shown at *d* and *d'*. The general form of the bars *a b* is vertically circular, as usual, and from the head *c* they converge toward the point *d* and

are spaced at such a distance apart as to require them to spring inwardly to enter the attaching-lug. The upward hump *e e'* is also provided in order to securely retain the key in place and to press the block tightly against the head, while at the same time giving it a resilient attachment to avoid strains upon the head in any other than the proper place.

The modification shown in Figs. 4, 5, and 6 employs a round rod or wire, but is otherwise the same as the preferred form, the ends *d'* being welded together to form the point of the key.

As a result of this construction the key when in place is resilient, both vertically and sidewise, in the attaching-lug, and it is easily inserted and easily removed without danger of breaking the lug or any other part. In the action of the brake-block on the wheel it is capable of giving both ways and allows the block to find its proper seat upon the brake-head. This is a great advantage, since there is great danger in driving these keys of fracturing or breaking off the lug or some parts of the shoe, allowing it to drop down upon the track and sometimes causing serious accidents, especially where the block is liable to drop in a rail-frog or between the rail and guard-rail. Other advantages of the device will appear to those familiar with their use.

Having thus described my invention and illustrated its use, what I claim, and desire to secure by Letters Patent, is the following:

1. An attaching-key for brake-blocks composed of two resilient members with their ends attached.

2. A key composed of two bars bent at one end to form a head, attached at the other end and converging toward one another.

3. An attaching-key for brake-blocks consisting of two bars attached at each end being parallel in one direction and converging in direction perpendicular thereto, whereby the key is resilient in width, substantially as described.

4. A split and laterally-resilient brake-block key having a raised hump near its middle to secure it in place in the lug.

5. A brake-block key consisting of two bars parallel in side elevation and converging in plan, having their two ends attached and a



hump near the middle of their length, substantially as described.

6. A brake-block key split substantially throughout its length and having converging  
5 sides and an upward hump near the middle thereof.

7. A brake-block key consisting of a rod bent upon itself to form two converging members welded at their ends and bent upwardly  
10 at the folded end to form a head, both bars

being provided with humps near the middle thereof.

In testimony whereof I have hereunto signed my name in the presence of the subscribing witnesses.

ALFRED L. STREETER.

Witnesses:

PAUL CARPENTER,  
EDWARD C. BURNS.