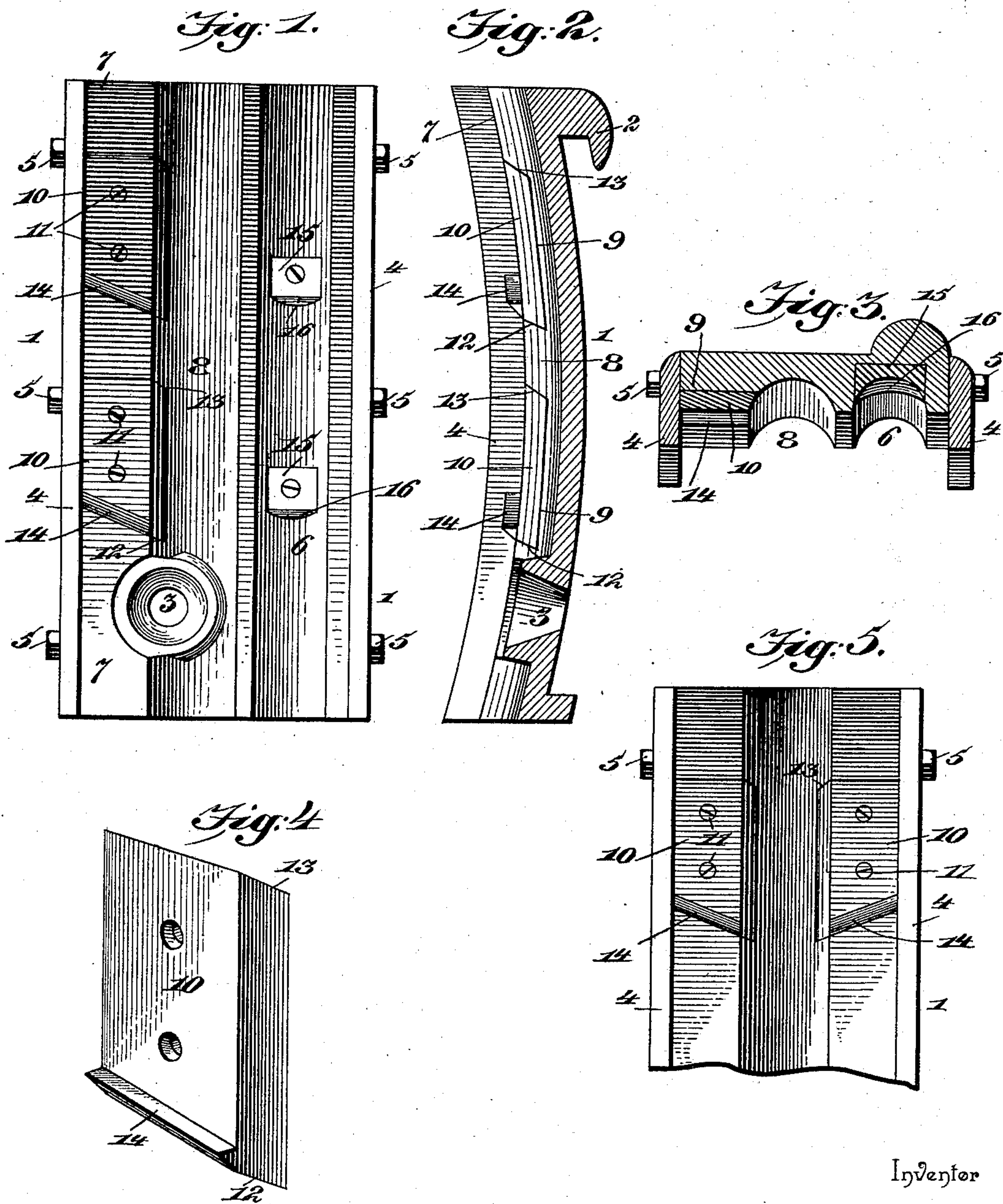


(No Model.)

F. H. BABCOCK.
TIRE TRIMMER.

No. 580,920.

Patented Apr. 20, 1897.



Inventor

Frank H. Babcock

Witnesses

H. G. Richter
Edwin Case.

By *his* Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

FRANK H. BABCOCK, OF JOHNSONBURG, PENNSYLVANIA, ASSIGNOR OF
TWO-THIRDS TO RUFUS A. RICHARDSON AND JOHN A. CRAIG, OF
SAME PLACE.

TIRE-TRIMMER.

SPECIFICATION forming part of Letters Patent No. 580,920, dated April 20, 1897.

Application filed January 22, 1897. Serial No. 620,241. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. BABCOCK, a citizen of the United States, residing at Johnsonburg, in the county of Elk and State of Pennsylvania, have invented a new and useful Tire-Trimmer, of which the following is a specification.

This invention relates to tire-trimmers, the object being to provide a device by which the tires or flanges of locomotive or car wheels may be trimmed during the ordinary braking operation and without necessitating the removal of the wheel from the locomotive or car.

The invention will be fully described hereinafter and particularly pointed out in the claims.

In the drawings, Figure 1 is a plan view of the device. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section. Fig. 4 is a perspective view of a detached detail. Fig. 5 is a plan view showing a modification.

Similar reference-numerals indicate similar parts in the several figures.

1 represents a brake-shoe of ordinary form and construction, provided with the usual hook 2 and opening 3, through the medium of which it is connected to the brake-head in the ordinary manner.

4 represents side flanges adjustably secured to the brake-shoe by means of screws 5, the object of these flanges being to hold the jaw in proper position to effect the trimming of the tire or flange of the wheel, and by means of their adjustability the device may be used on wheels of different widths. As shown in Figs. 1 and 3, the shoe is provided with the ordinary groove 6 for the reception of the flange of the wheel and with the ordinary bearing-surface 7 to engage the tread of the wheel and with a recessed portion 8, which corresponds with that part of the tread of the wheel which is usually worn by its contact with the rail, and against which portion the brake-shoe is preferably adapted not to bear.

The bearing-surface 7 is provided with recesses 9, adapted to receive the blocks 10, which are removably secured therein by screws 11 or other suitable fastening devices. The recesses are undercut at one end, as indicated at 12, and the opposite end may be either straight or inclined outwardly, as in-

indicated at 13, and the block is correspondingly shaped at its opposite ends to fit snugly in the recess. Projecting upwardly from the lower end of the block, or that end which fits in the undercut end of the recess, is a cutter 14, which is intended to cut down the tread of the wheel where it is not worn by contact with the rail in order to give the tread a straight bearing-surface across its periphery. These blocks, and particularly the cutting portion 14, will be of hardened steel, and they may be readily removed from the brake-shoe for the purpose of sharpening the cutting portion 14 or for replacing them when the cutting portion is entirely worn away. Preferably the cutting edge 14 will extend diagonally across the surface 7 for the purpose of giving a shearing cut.

15 represents blocks each provided with a cutting portion 16. The blocks 15 are removably fitted into that part of the brake-shoe adapted to engage the flange of the wheel. This cutting portion 16 is so shaped as to trim the periphery of the flange to its proper shape. As is well known, the wear between the side of the flange and the rail will frequently give the periphery of the flange almost a knife-edge, which frequently results in causing the wheel to run through a switch in the wrong direction and thereby cause an accident.

As shown in Fig. 5, the invention is intended to be applied to the blind-wheel of a locomotive, in which case it is necessary to trim off both sides of the periphery of the wheel, as the groove caused by contact with the rail is in the middle of the tread.

From the foregoing it will be seen that when the wheel of a locomotive or car has become unevenly worn by its contact with the rail my trimming device may be substituted for the ordinary brake-shoe which is applied to such wheel and that the trimming device will be brought into engagement with the wheel at each application of the brakes and will thereby soon trim down the uneven surface on the tread of the wheel and bring the flange to its proper form, at the same time serving almost as effectively as the ordinary brake-shoe for braking purposes, or in the case of a locomotive the latter may be jacked up

clear of the track and run carefully with the trimming appliance in contact with the wheel until it is trimmed.

It is of course to be understood that the cutting portion on the removable blocks will be of such form as to adapt them to the proper form of that portion of the wheel they operate upon.

By placing the cutting edge 14 at the end of the block fitting into the undercut end of the recess in the shoe the strain upon the fastenings caused by the friction between the wheel and cutting edge will be greatly reduced and transferred instead to the brake-shoe.

It will be understood that changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim is—

1. In a tire-trimmer, the combination with a brake-shoe having a recess formed in its wheel-engaging surface, of a block removably secured in said recess and provided with a projecting cutting edge, substantially as described.

2. In a tire-trimmer, the combination with a brake-shoe provided with a recess in its wheel-engaging surface, of a block removably secured in the said recess and provided with a projecting cutting edge extending diagonally across said engaging surface, substantially as described.

3. In a tire-trimmer, the combination with a brake-shoe provided with a recess in its wheel-engaging surface, said recess being undercut at one end, of a block removably fitted within said recess, and provided with a projecting cutting edge at its end which fits into the undercut end of the recess, substantially as described.

4. In a tire-trimmer, the combination with a brake-shoe and tire-trimming devices attached thereto, of side flanges adjustably secured to the brake-shoe, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANK H. BABCOCK.

Witnesses:

S. C. PARSHALL,
D. E. KENDIG.