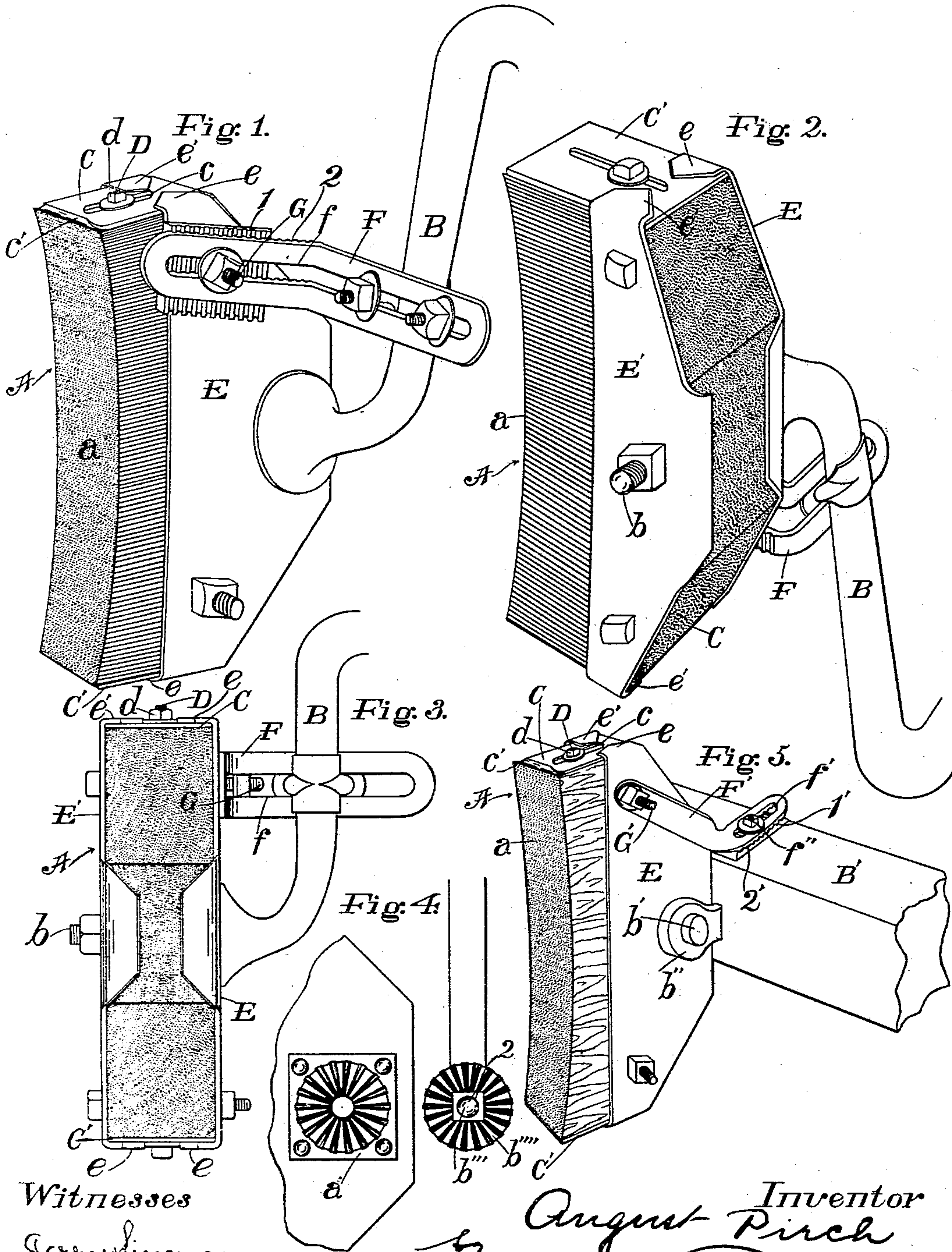


(No Model.)

A. PIRCH.
WAGON BRAKE.

No. 557,699.

Patented Apr. 7. 1896.



Witnesses

Gerryslingman.

F. M. Townsend

Inventor
August Pirch
Hazard & Townsend
his attys.

UNITED STATES PATENT OFFICE.

AUGUST PIRCH, OF LOS ANGELES, CALIFORNIA.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 557,699, dated April 7, 1896.

Application filed September 20, 1895. Serial No. 563,063. (No model.)

To all whom it may concern:

Be it known that I, AUGUST PIRCH, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Brake, of which the following is a specification.

My invention is applicable to various kinds of brakes, and especially to wagon-brakes.

The object of my invention is to provide a brake which will wear longer and will be more effective and satisfactory in operation than the brakes now in use.

Another object is to avoid the unequal wearing of the brake-block.

The accompanying drawings illustrate my invention.

Figure 1 is a fragmental perspective view illustrating my invention viewed from the upper and inner side. Fig. 2 is a perspective view of the same from the under and outer side. Fig. 3 is a rear elevation. Fig. 4 shows a modification. These four views show the invention applied to a metal brake-bar. Fig. 5 is a fragmental perspective view showing my invention applied to a wooden brake-bar.

In the drawings, A is a brake-block which is adjustably pivoted to its support B. By this arrangement the brake-block can be adjusted to the wheel to take up any unevenness of wear which may occur. Owing to the grit that is ordinarily carried into the space between the wheel and the brake-block, the brake-block with common brakes is worn rapidly, and at its upper portion more quickly than in its lower portion, and by this adjustable device I am able to take up this wear, so that the block will always contact properly with the wheel.

In order to prevent the rapid wear which ordinarily occurs by reason of the sand or other grit carried between the brake-block and the tire by the revolution of the wheel, my improved brake-block is provided at its upper end with a scraper blade or plate C, adapted to scrape mud and other accretions from the tire of the wheel which is to be engaged by the brake-block, and I make the scraper-plate adjustable, so that it can be adjusted to correspond to the wear either of the block or of the scraper. The means which I provide for adjusting such plate with relation

to the wheel-engaging face *a* of the block consists of a bolt D, which extends longitudinally through the block from end to end and projects from the upper end of the block and is passed through a slot *c* in the scraper-plate. The bolt is provided with a nut *d* to screw down upon and clamp the plate. A lag-screw can be used if preferred; but by extending the bolt longitudinally through the block transverse the grain thereof and through the reinforcing-plates C C' the block is confined and strengthened by the plates and all liability of splitting the block is avoided. The front end of the plate is provided with an upwardly-projecting lip *c'* to extend along the face of the tire to more readily separate the dirt from the wheel.

In order to prevent the rapid wearing of the brake-block, I arrange the same with the ends of its grain to engage the tire of the wheel and provide the block with metal reinforcing-plates E E' C C'. The upper reinforcing-plate and the scraper-plate are one and the same, and the lower reinforcing-plate is similar to the scraper-plate except that it is not necessarily so constructed as to scrape the wheel. It may be so constructed if desired. The end plates C and C' are adjustably secured on the ends of the wooden block, and the side plates E and E' are fastened to the sides of the wooden block and provided with end hooks *e e'* fitted over the end plates, so that the strain of the wheel upon the block tending to force it endwise will be borne by the hooks of the side plates.

The brake-block is pivoted to the brake-bar B or B' by a suitable pivot. In the form shown in Figs. 1 to 3 the pivot *b* is a part of the iron or steel brake-bar B, while in Fig. 5 the pivot *b'* is a separate pin set in eyebolts *b''*. F F' indicate braces for holding the blocks in proper relation to their respective brake-bars. The brace is shown fastened to the brake-bar at one end; but since the office of the brace is to hold the upper part of the brake-block firmly against the wheel it will perform its office even though it is not secured to the brake-bar if it is arranged to engage with such bar to prevent the upper part of the block being forced too far to the rear.

G indicates a bolt fastened to the brake-block and projecting therefrom into a slot *f*

in the brace. By loosening the nut of the bolt the block can be adjusted to any position, and then by tightening the nut the brace will be clamped so as to hold the block firmly
5 in the desired position.

In Fig. 4 the pivot b''' is provided with a notched plate b'''' , which engages a notched plate a' fastened to the brake-block. The notched plate b'''' is fitted to the pivot b''' ,
10 which has an angular shank 2 to keep the plate b'''' from turning thereon. This form is deemed preferable to the form in which a separate brace, as shown in the other views, is used, except in case of applying my inven-
15 tion to one of the brakes now in use, and in that case the brace is preferred.

In Fig. 5 the brace F' is pivoted to the brake-block A by a bolt G' and the opposite end of the brace is provided with a slot f'
20 and the brace is fastened to the brake-bar B' by a bolt f'' passed through the slot f' .

1, in Fig. 1, indicates a corrugated plate fastened to the brake-block and arranged to engage a corrugated face 2 on the brace F.

25 In the form shown in Fig. 5, 1' indicates a corrugated plate fastened to the brake-bar B and arranged to engage a corrugated face 2' on the brace F'.

In Fig. 5 only one of the eyebolts b'' is
30 shown. It is to be understood that a duplicate of the same is provided on the other side of the block, the same being hidden in this view by the block.

Now, having described my invention, what
35 I claim as new, and desire to secure by Letters Patent, is—

1. In a brake, the combination of the block formed of wood arranged with the ends of its grain to engage the tire of the wheel; the
40 metal reinforcing-plates arranged on the top

and the bottom of such block; and the bolt passing longitudinally through the block from end to end thereof and through the plates to clamp the plates upon the block to prevent the block from splitting, substantially as set
45 forth.

2. In a brake, the brake-block set forth composed of the wooden block having the ends of its grain arranged to engage the wheel; the end plates adjustably secured on the ends
50 of the wooden block, and the side plates fastened to the sides of the wooden block and provided with the end hooks fitted over the end plates.

3. In a brake, the brake-block set forth
55 composed of the wooden block having the ends of its grain arranged to engage the wheel; the end plates arranged on the ends of the block; the side plates fastened to the sides of the block and provided with the end hooks
60 fitted over the end plates; and the bolt passing longitudinally through the block and the end plates and arranged to clamp the end plates upon the block to prevent it from splitting, substantially as set forth.
65

4. The combination of the brake-bar; the brake-block pivoted thereto; the brace arranged to engage the brake-bar and adjustable means for fastening the brace to the
70 brake-block.

5. In a brake, the combination of the block; the end plates arranged on the ends of the block; and the side plates secured upon the sides of the block and provided with the end hooks fitted over the end plates.

AUGUST PIRCH.

Witnesses:

JAMES R. TOWNSEND,
F. M. TOWNSEND.