

I. W. SPORE.

Improvement in Brake-Blocks for Vehicles.

No. 115,129.

Patented May 23, 1871.

Fig 1.

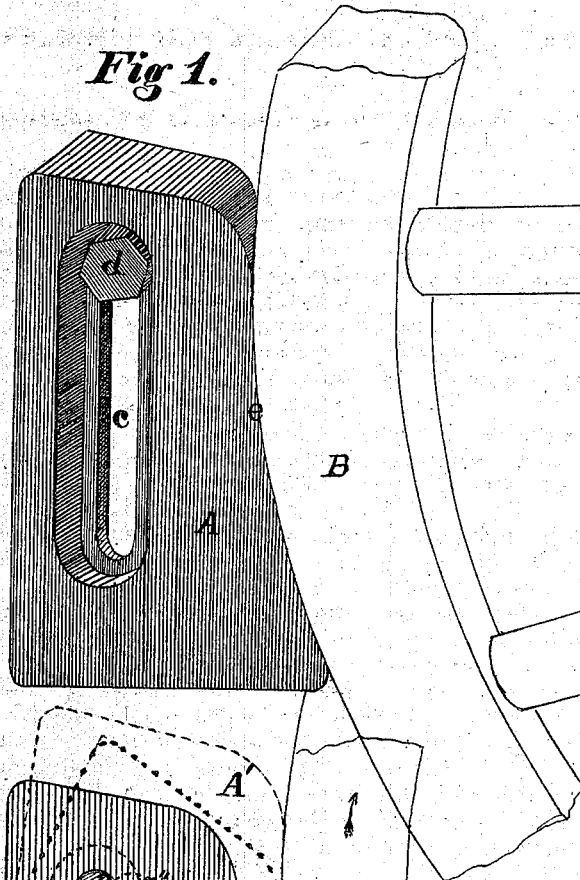
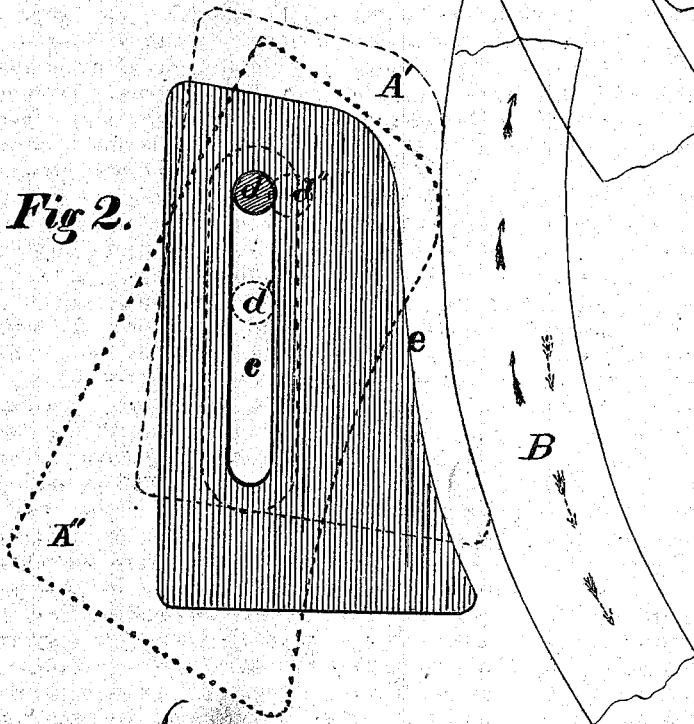


Fig 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

ISAAC W. SPORE, OF NEW SCOTLAND, NEW YORK.

IMPROVEMENT IN BRAKE-BLOCKS FOR VEHICLES.

Specification forming part of Letters Patent No. 115,129, dated May 23, 1871; antedated May 15, 1871.

To all whom it may concern:

Be it known that I, ISAAC W. SPORE, of the town of New Scotland, county of Albany, State of New York, have invented certain new Improvements in "Brake-Blocks;" and I do hereby declare that the following is a specification thereof, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 represents a perspective view of the brake-block as improved, and a section of a wheel. Fig. 2 is a side elevation of the same.

My invention relates to a brake-block, so constructed and arranged as to act on the back of a wheel, and will tend to wedge tighter against the wheel of a vehicle when the said brake-block is brought in contact with wheels revolving forward, and will be capable of heeling out backward from the wheels when in contact with back-revolving wheels; and the invention consists in the employment of a wedge-shaped block furnished with a curved side of bearing-surface (to correspond with the curve of the wheels intended to be used with the same) and a straight side back, which wedge-shaped block is provided with an oblong slot, commencing near the top of the block and running down to near the bottom of the same, and parallel with the said back straight side, so as to throw the whole wedge of the block past the said slot and between it and the curved side. The said block is swung from any suitable pivot, free to travel the entire length of the slot, if required, by the action of a forward-revolving wheel on the said block, while the block itself is free to turn on the said pivot, and be capable of heeling up back when in contact with a back-revolving wheel, in such a manner as will render the said block incapable of holding the said wheel from revolving when in the act of backing the vehicle.

To enable others skilled in the art to make and use my invention, I will proceed to describe it in reference to the accompanying drawing and letters of reference marked thereon, the same letters indicating like parts.

In the drawing, A represents the brake-block. B is a section of a forward wheel. The said brake-block is made wedge-shaped, and furnished with a curved line, *e*, of surface in

front corresponding with the curve of the wheel B, while the back side of the said block may be made straight. I also make in the said block, at a short distance from its back, a straight oblong slot, C, which slot C, commencing at near the top end of the block, runs vertically down to near the lower end of the same, and in such a direction (relatively with the curved line *e*) as will make the position of the block between the said slot C and the curved line *e* wedge-like in form, with the base of the said wedge below, while the point or top of the said wedge is made to round over and fall in with the top line of surface of the block, which top line of surface approaches nearer the slot than any part of the line *e*, as shown. The said block B is hung from a spindle or pivot, *d*, attached to any suitable brake bar or arm, (not shown,) on which spindle *d* the said block can swing when required, and around which spindle the slot C can work as the block is thrown up or dropped down.

The manner in which this brake-block operates in practical use is as follows: The block is arranged to operate on the back of the wheel, and when the brake-block A is out of action with the wheel B the said block will hang at the upper end of the slot C from the spindle *d*; but when the said block is thrown in contact with the wheel B when revolving forward, as indicated by full-line arrows, Fig. 2, the forward rolling of the said wheel will carry the said block A upward, the slot in the wheel moving on the spindle *d* until the said block is carried somewhat to the position of A', as shown by dotted lines, while the pin *d* will occupy, relatively, the position of *d''*, or near such position, more or less, either way. When the wheel B is revolved backward, as indicated by dotted arrows, (as in the case of backing a vehicle,) and the bar carrying the block A is thrown forward toward the wheel, (by any of the devices employed for that purpose,) the contact of the said backward-revolving wheel with the block A will be transferred from the curved-face surface *e* to or past the rounded corner above, and by such point of contact will heel upward and back the body of the said block A somewhat to the position shown by A'' in dotted lines, and in such a manner as will throw the curved line of surface *e* from a continuous and crowding con-

fact with the face of the wheel B, and in such a position that the pressure of the block in contact will be only equal to the weight of the block multiplied by the leverage of the longest end from the center of the spindle *d*.

This brake-block possesses advantages over those wedge-shaped slotted blocks intended to act on the hind wheel, the bases of which wedges are above, inasmuch as such blocks must necessarily be more or less complicated with adjuncts to insure their proper working, while a block constructed after my invention is not only simple and inexpensive, but perfectly practical in all its operations under any

of the several necessary attendant circumstances of a brake-block in its connection with either car, wagon, or even hoisting wheels.

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

The block A, constructed as shown and described, provided with the slot C, when hung upon the pin *d* so as to have an up-and-down and pendulum motion, substantially as set forth.

ISAAC W. SPORE.

Witnesses:

ALEX. SELKIRK,

WM. J. HOLMES.