(No Model.)

A. L. CUSHMAN.

DUST GUARD FOR CAR AXLE BOXES.

No. 456,479. Patented July 21, 1891.

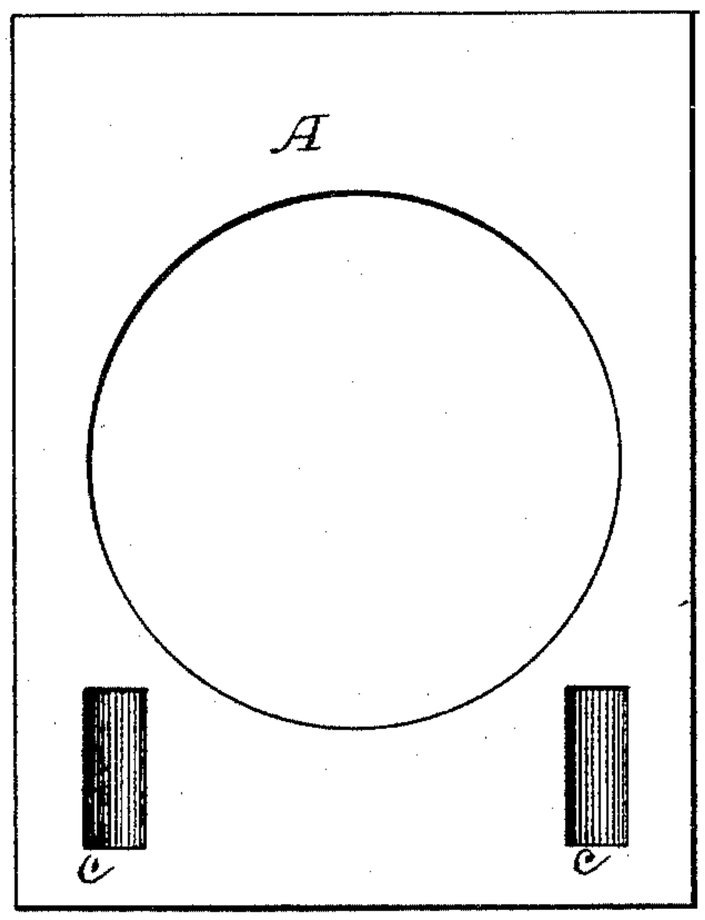

Fig 3.

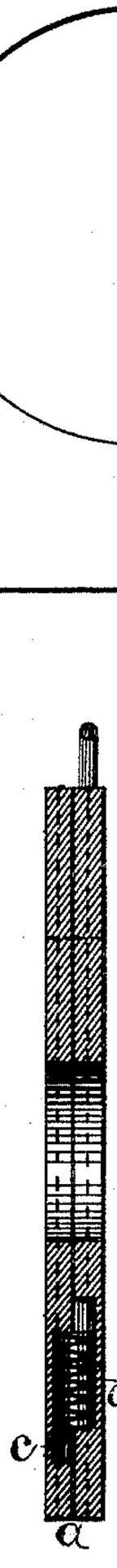

Fig 2.

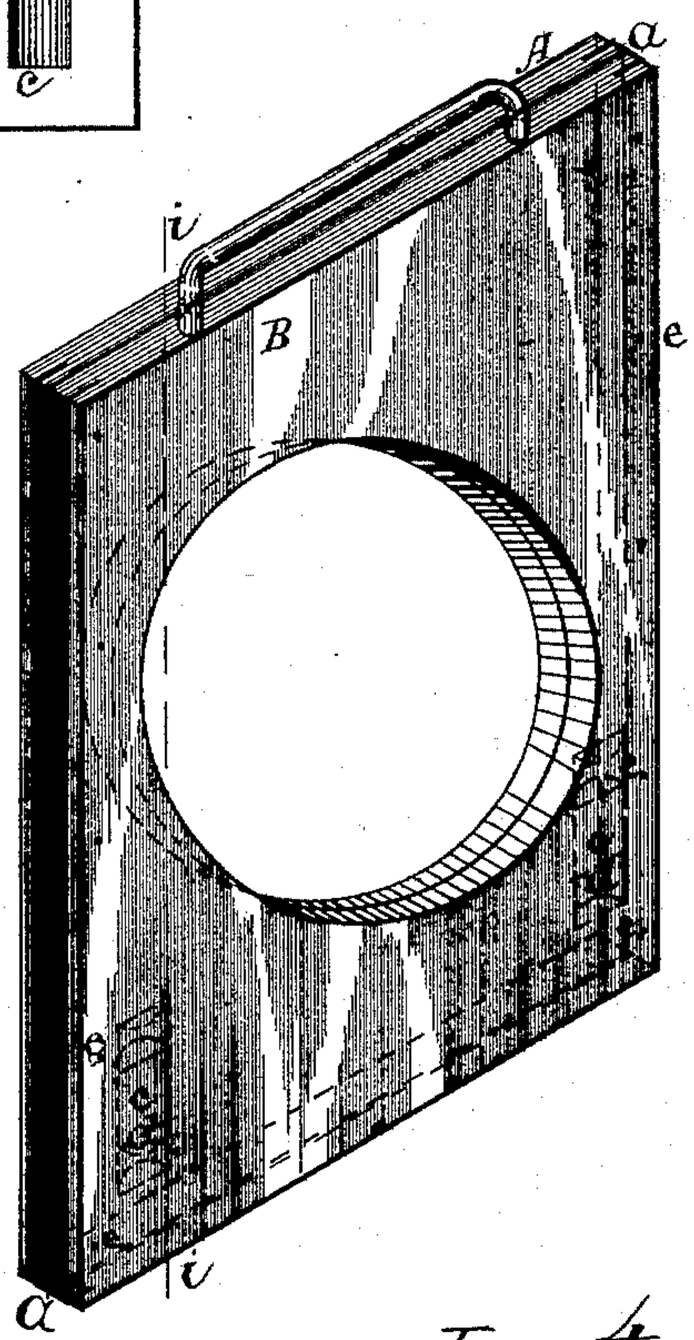

Fig 1.

Witnesses
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DUST-GUARD FOR CAR-AXLE BOXES.

SPECIFICATION forming part of Letters Patent No. 456,479, dated July 21, 1891.

Application filed December 23, 1890. Serial No. 375,627. (No model.)

To all whom it may concern:

Be it known that I, ABE. L. CUSHMAN, a citizen of the United States, residing at Concord, in the county of Merrimac and State of New Hampshire, have invented a certain new and useful Improvement in Dust-Guards for Car-Axle Boxes, of which the following is a specification.

The improved dust-guard for car-axle boxes of this invention, in substance, is composed of blocks, preferably made of wood, having through each a corresponding hole of a diameter to receive and fit the car-axle and in the contiguous faces of both, opposed recesses or cavities, in combination with springs contained in said opposed recesses of said blocks, substantially as hereinafter described.

In the drawings forming part of this specification, Figure 1 is an isometrical perspective view of a dust-guard of this invention. Fig. 2 is a transverse vertical section on line *i i*, Fig. 1. Fig. 3 is a face view of the block detached.

In the drawings, A B are two similar blocks, preferably of wood, of any suitable kind. These blocks are placed side against side and each has a hole through it, both of corresponding diameter and a diameter suitable to receive and fit the car-axle with which the blocks are to be used.

c c are recesses or cavities at one and the same end portion and at the contiguous sides of each block A B. Each recess is vertical, and horizontally each is semi-cylindrical. There are two recesses for each block—one on each side of the vertical plane of the axle and below the axle-holes of the blocks—and all the recesses are axially parallel with each other and the vertical axial plane of the blocks, and those on the same side of said axial plane are in a corresponding vertical plane and with the axle-holes of the blocks registered, their upper and lower ends lapping by each other correspondingly in both sets.

d d are spiral springs, one placed in each set of the opposed cavities of the blocks and end to end held between the upper end of one and the lower end of the other cavity. The opposed vertical edges of each block have a vertical groove to receive the opposite edge portions of strips *a* of sheet metal, each suitably shaped therefor, and along the edge portion of one block secured to it by pins *e* and along the edge portion in the other block free to move in the groove thereof.

The blocks A B, constructed and disposed and connected together and in combination with the springs, all as explained, are free to move upon each other, and when placed on a car-axle and suitably held in the axle-box by the action of their springs they automatically adjust themselves to the axle, compensating for the wear of each other, and so secure at all times close contact with the axle and prevent the entrance of dust into the box, the advantages of which are manifest without particular mention.

The metal strips *a* hold the blocks together and allow them to move freely upon each other against and with the pressure or tension of the springs.

I claim—

1. A dust-guard for car-axles and their boxes, constructed of blocks A B, placed side by side and having registering axle-receiving holes, in combination with a spring or springs confined end to end on and extending across from one to the other of said blocks, substantially as described, and for the purposes specified.

2. A dust-guard for car-axles and their boxes, constructed of blocks A B, placed side by side and having registering axle-receiving holes and cavities in their contiguous faces, in combination with springs confined end to end in said cavities and extending across from one to the other of said blocks, substantially as described, and for the purposes specified.

3. A dust-guard for car-axles and their boxes, constructed of blocks A B, placed side by side and having registering axle-receiving holes, in combination with a spring or springs confined end to end on and extending across from one to the other of said blocks and strips held on one and loosely interlocked with the other of the blocks, substantially as described, for the purposes specified.

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Witnesses:

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