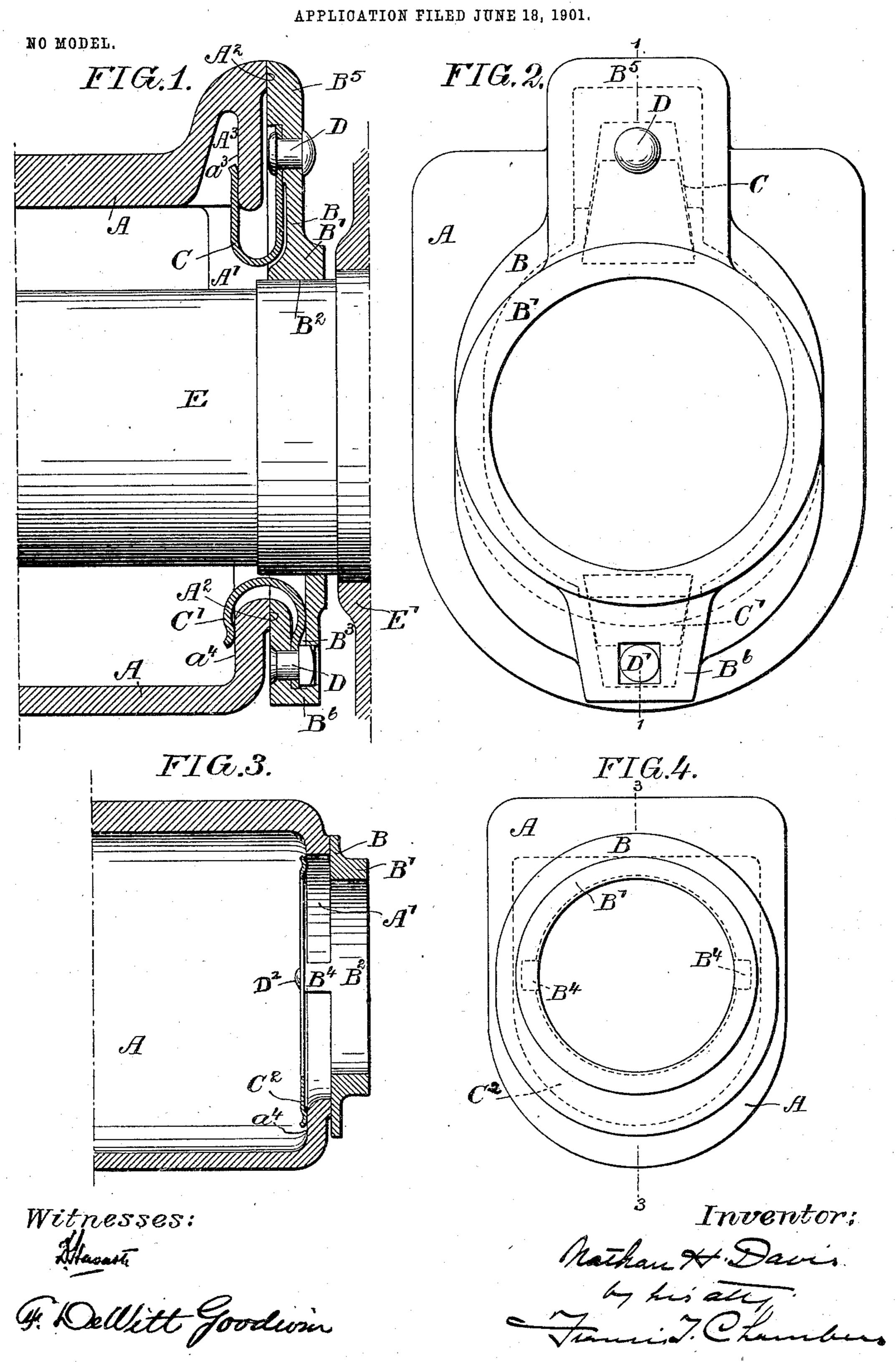
N. H. DAVIS. DUST GUARD FOR AXLE BOXES.



United States Patent Office.

NATHAN H. DAVIS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO MCCORD & COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF NEW JERSEY.

DUST-GUARD FOR AXLE-BOXES.

SPECIFICATION forming part of Letters Patent No. 725,049, dated April 14, 1903.

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To all whom it may concern:

Beitknown that I, NATHAN H. DAVIS, a citizen of the United States of America, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a certain new and useful Improvement in Dust-Guards for Axle-Boxes, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part thereof.

My invention relates to dust-guards used in connection with axle-boxes, and has for its object to provide a simple and efficient device and construction for securing a dust-guard to an axle-box, my invention consisting, broadly speaking, in providing a dust-guard adapted to fit against the outside of the rear end of the axle-box and in securing it against said face, and with the necessary freedom of movement upon said face, by a spring or springs engaging the dust-guard and resting directly on the inside of the wall against which it is abutted, said springs being preferably firmly secured to the dust-guard.

Reference being now had to the drawings, in which my invention is illustrated in what I believe to be its best forms, Figure 1 is a sectional view through the end of the axlebox and through the center of the dust-guard, taken as on the section-line 11 of Fig. 2. Fig. 2 is an end view of the dust-guard and axlebox. Fig. 3 is a sectional view taken on the line 33 of Fig. 4, illustrating a modified construction embodying my invention; and Fig. 4 is an end view of the said modified construction.

A indicates the axle-box, which may be of any usual construction, A' indicating the opening formed through the rear wall of the axle-box for the passage of the axle, which opening, as is well known, is considerably larger in all directions than the diameter of the axle.

A² indicates a preferably raised and smooth-45 finished face on the rear axle-box wall, against which wall the dust-guard rests.

A³, Fig. 1, indicates a cavity formed in the upper end of the axle-box to give passage to a clamp or spring, a^3 and a^4 indicating the

walls against which the springs abut and 50 press.

Bindicates the dust-guard, which, as shown, is a cast plate having an annular thickened portion B' surrounding the perforation B², through which the axle passes.

B³, Fig. 1, indicates a cavity which forms a convenient holding device for one end of a spring, and B⁴, Fig. 3, indicates an inwardly-extending lug, of which several may be provided, which extend from the dust-guard 60 through the opening A' and serve as abutments to which springs may be fastened.

C and C', Figs. 1 and 2, and C², Figs. 3 and 4, indicate springs by which the dust-guard is held clamped against the face of the axle-65 box. The springs C and C' are of hook or U shape, the one being fastened to the dust-guard by insertion in the cavity B^3 and also by the rivet D', while the inner ends of the hook-springs extend into the axle-box and 70 abut against the walls a^3 a^4 .

It will be obvious that in the construction shown it is practicable to detach the axle-box by moving it upward, so as to disengage the hooked spring C' with the inner face of the 75 axle-box wall, after which the hooked spring C can be detached by drawing the dust-guard downward. It will also be obvious that a single one of the springs would serve to hold the dust-guard in place if made of sufficient 80 power. In the construction shown in Fig. 3 the annular spring-plate (indicated at C²) is fastened to the lugs B⁴ of the dust-guard by rivets, as indicated at D², such an annular plate serving the same purpose as the hooked 85 springs in the first illustrated construction.

I have illustrated at E in Fig. 1 the axle extending through the dust-guard into the axle-box, E' indicating a section of the wheel attached to the axle.

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

1. In combination with an axle-box, a dust-guard applied to the outer face of the rear 95 end of the axle-box and a spring engaged with the dust-guard and resting directly on the inside of the wall against which the dust-guard

rests, said spring acting to hold the dust-guard against the axle-box while permitting it to

move on said box.

2. In combination with an axle-box, a dust-5 guard applied to the outer face of the rear end of the axle-box and a spring directly and firmly secured to the dust-guard and directly engaged on the inside of the wall against which the dust-guard rests, said spring actto ing to hold the dust-guard against the axlebox while permitting it to move on said box.

3. In combination with an axle-box, a dustguard applied to the outer face of the rear end of the axle-box and a hook-shaped spring 15 secured to the dust-guard and engaged on the inside of the wall against which the dustguard rests, said spring acting to hold the

dust-guard against the axle-box while permitting it to move on said box.

4. In combination with an axle-box, a dust-20 guard applied to the outer face of the rear end of the axle-box, hook-shaped springs secured to opposite sides of the dust-guard and their free ends extending in opposite directions and engaged on the inside of the wall 25 against which the dust-guard rests, said springs acting to hold the dust-guard against the axle-box, while permitting it to move on said box.

NATHAN H. DAVIS.

CHAS. A. MYERS, D. STEWART.