

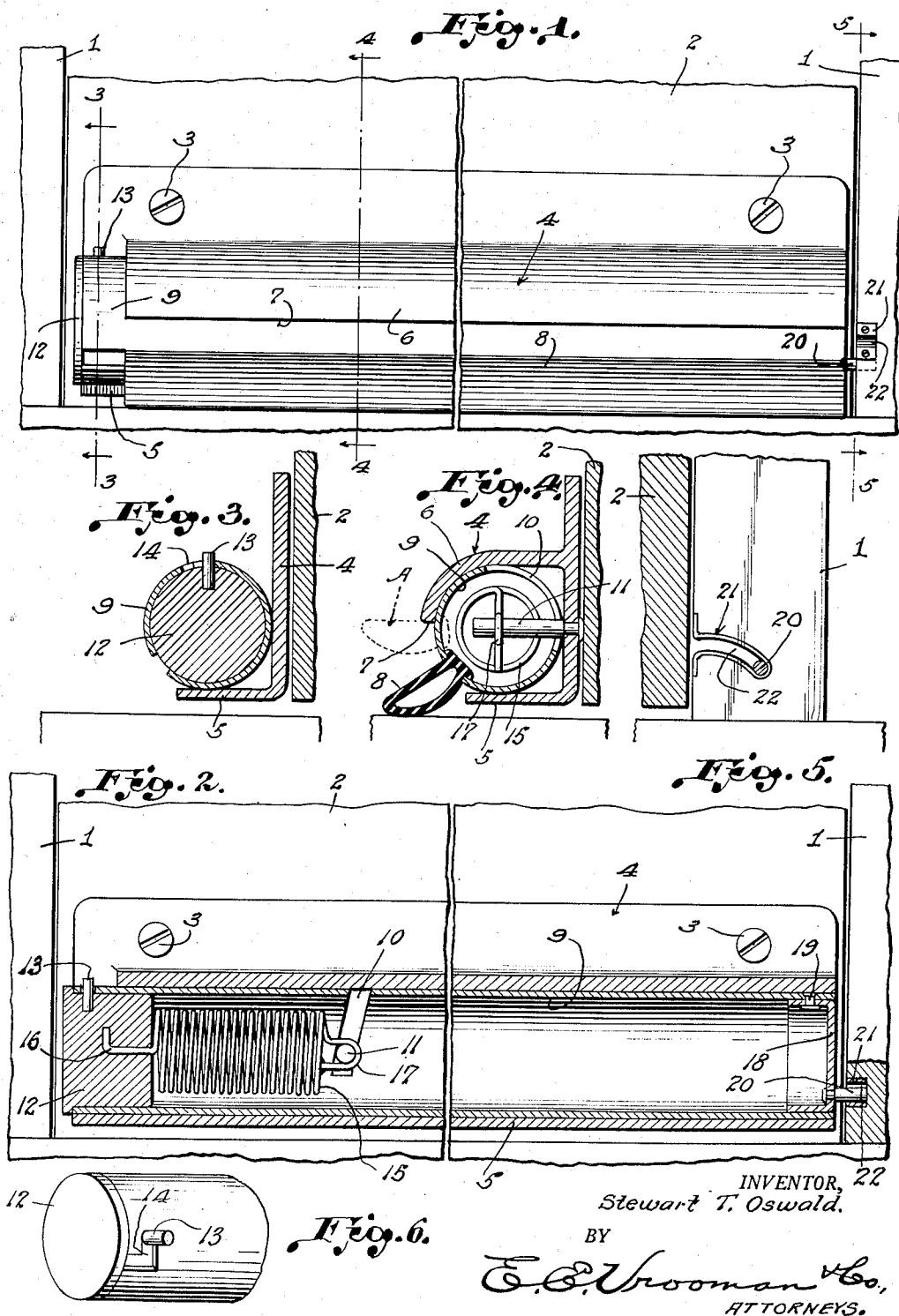
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ALL-WEATHER DOOR-SILL SEAL

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ALL-WEATHER DOORSILL SEAL

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2 Claims. (Cl. 20—65)

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This invention relates to an all-weather door-sill seal.

An object of the invention is the construction of an efficient device which will cause a seal on the floor or a seal against a door-sill, for the purpose of keeping out driving rains, snows, and cold air.

Another object of the invention is the construction of an efficient device that can be positioned in different places, such as on a door that opens from the left, or on doors opening outwardly.

A still further object of the invention is to produce an efficient device that will fit tightly the door and jamb, as well as sealing the door against drafts and other disagreeable conditions. Further, this device will function with or without a door-sill.

Also the device will help to eliminate outside noises.

With the foregoing and other objects in view, this invention comprises certain novel constructions, combinations, and arrangements of parts as will be hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims.

In the drawings:

Fig. 1 is a view in front elevation of a device constructed in accordance with the present invention.

Fig. 2 is a vertical longitudinal central sectional view of the device.

Fig. 3 is a transverse sectional view taken on line 3—3, Fig. 1, looking in the direction of the arrows.

Fig. 4 is a transverse sectional view taken on line 4—4, Fig. 1, and looking in the direction of the arrows.

Fig. 5 is a transverse sectional view taken on line 5—5, Fig. 1, and looking in the direction of the arrows.

Fig. 6 is a fragmentary perspective view showing particularly the L-shape slot formed in the rotatable sleeve.

Referring to the drawings, in which the preferred embodiment of this invention is illustrated, 1 designates an ordinary door frame and 2 is the hinged door. Attached by screws 3 is a casing 4 which is provided with a lower horizontal portion 5 and a top curved portion 6. The casing 4 is provided with a side slot 7 in which the seal 8 works. This seal 8 can be made of any material, such as felt or rubber, the drawing being shown as rubber. The seal 8 is carried by a rotatable sleeve 9. This sleeve 9 has a transverse slot 10 in which is positioned a stud pin 11. This stud

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pin 11 is fixedly secured at its inner end to the casing 4, Fig. 4.

A cap plug 12 is placed in the inner end of the rotatable sleeve 9. A lockpin 13 is mounted on the cap plug 12 and this pin 13 is positioned in the L-shape slot 14. A coiled spring 15 is fastened at 16 in the cap plug 12, Fig. 2. The other end 17 of the spring 15 is fastened around the stud pin 11. When assembling the device a torsional strain is placed upon the coiled spring 15 so that the normal tendency of the strain is to hold the seal 8 in the raised position as shown by dotted lines A, Fig. 4. In assembling, when the operator has twisted the coil spring 15 then the cap plug 12 is inserted into sleeve 9 with the lock pin 13 resting in the L-shape slot 14.

On the outer end of the sleeve 9 is a closure cap 18, Fig. 2; this cap being securely fastened by rivet 19 within the sleeve 9. A cam pin 20 is fastened off center to cap 18. On the frame 1 is secured a curved or cam metal casing 21 which fits into a similar cut out portion in the frame 1. When the door is being closed the cam pin 1 first engages the top of the cam slot 22 formed in the metal casing 21 and as the door continued to be closed the cam pin 20 rides down the slot causing the rotatable sleeve 9 to rotate within casing 4 for placing the seal 8 against the floor, or any similar surface. When the door is opened the cam pin 20 rides out of the slot 22 until the seal 8 takes the position A shown in Fig. 4.

It will be apparent from the foregoing description that the slot 10 is provided to permit rotary movement of the sleeve 9 during its operation.

While I have described the preferred embodiment of the invention and illustrated the same in the accompanying drawings, certain minor changes or alterations may appear to one skilled in the art to which this invention relates during the extensive manufacture of the same, and I, therefore, reserve the right to make such changes or alterations as shall fairly fall within the scope of the appended claims.

What I claim is:

1. In a device of the class described, the combination with a door frame, a door hingedly mounted on said door frame, of a casing fixedly secured to said door, a stud pin extending outwardly from said casing, a rotatable sleeve in said casing, said sleeve provided with a slot between its ends, said stud pin extending through to said slot, said sleeve provided with a seal, a cap plug in one end of said sleeve, a coiled spring in said sleeve and having one end fastened to said cap plug with the other end mounted fixedly upon

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said stud pin, a cap on one end of said sleeve, a cam pin mounted off center on said cap, and means on said door frame and cooperating with said cam pin for turning said sleeve within said casing, whereby said seal is placed in a sealing position. 5

2. In a device of a class described, the combination with a door frame, a door hingedly mounted on said door frame, of a casing provided with a side opening secured to said door, a stud pin extending from a portion of said casing, a rotatable sleeve in said casing, said sleeve provided with a transverse slot, said stud pin in said transverse slot, said sleeve provided with a seal extending through said side opening, a cap plug in one end of said sleeve, said sleeve provided at said cap plug with an L-shape slot, a lock pin on said cap plug and in said L-shape slot, a coil spring having one end fixedly secured in said cap plug, said coil spring having one end around said stud pin, a cap secured in one end of said sleeve, 10

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a cam pin fixedly secured off center to said cap, and said door provided with cam means adapted to receive said cam pin.

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