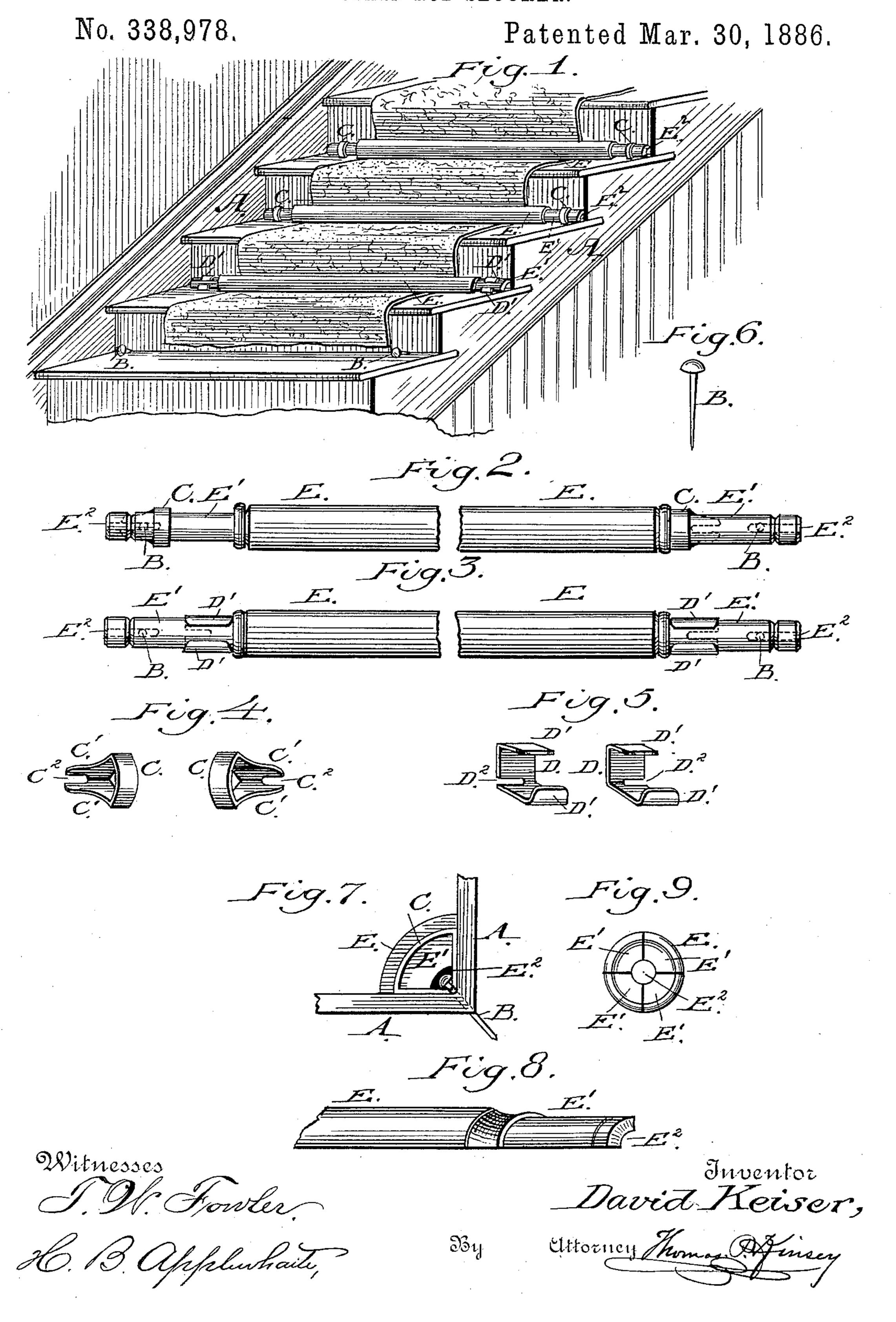
## D. KEISER.

STAIR ROD SECURER.



## IJNITED STATES PATENT OFFICE.

## DAVID KEISER, OF READING, PENNSYLVANIA.

## STAIR-ROD SECURER.

SPECIFICATION forming part of Letters Patent No. 333,978, dated March 30, 1886.

Application filed December 12, 1885. Serial No. 185,437. (No model.)

To all whom it may concern:

Be it known that I, DAVID KEISER, a citizen of the United States, residing at the city of Reading, county of Berks, State of Pennsyl-5 vania, have invented a new and useful Improvement in Stair-Rods and Fasteners, of

which the following is a specification.

This improvement relates more particularly to rods intended for box stairways, and it perro mits the rod to be made the full length of the tread of the stairway. It is, however, applicable to hand-rail stairways, forming a neat finish thereto.

The difficulty in applying rods to box stairs 15 has suggested quite a number of devices for the purpose of overcoming the same; but, as a carpet-dealer for many years, I have seen nothing prior to my improvements that would give ease of application with security to the rod 20 when in place.

The drawings herewith, forming a part of this specification, fully disclose my improvement, like letters of reference indicating like

parts.

Figure 1 is a perspective view of part of a stairway, showing the application of my improvement. Fig. 2 represents a stair-rod having solid fasteners set thereon, one engaged and one ready for engagement with the fixed 30 nail or screw. Fig. 3 represents a stair - rod with open-jawed fasteners thereon set inward, ready for lifting out or for engagement; Fig. 4, perspective views of a pair of solid fasteners; Fig. 5, perspective views of a pair of 35 open-jawed fasteners. Fig. 6 represents a nail or screw driven diagonally into the angle of the tread and riser of the stairway, upon the shank of which the fasteners are secured by the slots therein; Fig. 7, an enlarged end view 40 of a fastener in place, showing the nail or screw-head holding the same. Fig. 8 represents one end of a wooden stair-rod, showing the central longitudinal groove for the clearance of the nail or screw head; Fig. 9, an 45 end view of the turned-up stair-rod, showing the end perforation and the manner in which it is quatered, making four rods for service.

In the drawings, A represents a stairway; B, nails or screws driven diagonally in the

50 angle of the treads and risers.

form to receive the stair-rod, (in this case a wooden one,) provided with a projected nose, C', slotted at C<sup>2</sup> to slip upon the shank of the nail or screw.

D is an open - jawed fastener, bent at right angles, having turned over jaws D', with a slot, D<sup>2</sup>, in the angle for the purpose of locking the same upon the nail or screw.

E shows the stair - rod; E', an offset at the 60 ends of the same of such length and diameter as will permit the fasteners CD to slide over the same, and when placed with their backs against the offset will permit the rod and fasteners to drop between and clear of the nail or 65 screw heads; E<sup>2</sup>, a groove in the ends of the rods produced by boring prior to the quatering of the solid rod, the said groove permitting the rod to lie close against the carpet and clear the head of the nail or screw, which otherwise 70

I do not limit myself to a wooden stair-rod, in combination with the fasteners, as their shell outline may be adapted to any of the metallic rods now in use, and the fasteners 75 may be made broad and of an ornamental character, and of any suitable metal.

it could not do.

To apply the improvement, it is only necessary to place at equal points from the sides of the stairway, and diagonally to the treads and 80 risers, either a nail or screw driven so that the head will just permit the slot C<sup>2</sup> or D<sup>2</sup> to pass the shank, and the head to snugly hold the fastener in that position. This having been done, the rods E are taken in hand, and 85 the selected fasteners slipped over the offset E' and against the shoulder of the rod, and being then pressed in place against the carpet the fasteners are slid away from the shoulders toward the ends, which passes the slot C<sup>2</sup> or D<sup>2</sup> 90 over the shank of the nail or screw, and the rod is securely held in place.

The nails or screws may be so arranged upon the stairs that the position of the fasteners upon the rods would be reversed, and to se- 95 cure the fasteners it would be necessary to shove them toward the shoulders. This will be a matter of choice. In the closed fasteners the slot C<sup>2</sup> is projected in the nose C' outside of the line of the band, for the purpose of ad- 100 mitting the application of a screw-driver in C represents a closed fastener adapted in | permanently fixing the fasteners. When they

are used upon hand - rail stairways, the open jaws D' provide the same facilities upon the fasteners D.

I am aware that Rogers, on August 10, 1869, 5 was granted Patent No. 93,474, for a stair-rod, of a semicircular cross-sectioned form, in which patent said rod was grooved at the ends to form a shell-covering for the purpose of concealing an eccentric pin placed at each end in 10 the base of said groove, the rod being secured against the riser only by screw-eyes adapted to receive said pin; but I believe myself to be the first to construct wooden stair-rods of a segmental cross-section, in which the inner 15 corner of the angle is removed for the purpose of clearing the head of a screw or nail placed diagonally at the junction of the tread and riser, and securing said rod with an equal bearing upon both tread and riser, as shown and 20 described.

Having described the construction and shown the use and advantages of my improvement, I desire to secure by Letters Patent the following claim thereon:

In combination with a stair-rod, as described, and nails or screws driven diagonally in the angle of the tread and riser, an integral cast or formed fastener, C, adapted to receive said stair-rod ends, and provided at the angle of the same with a slot, C², adapted to the shanks 30 of said nail or screw, and a nose-piece, C′, whereby the same may be slid in contact with or released from the said nail or screw, substantially as and for the purpose set forth.

DAVID KEISER.

Witnesses:

J. HOWARD FRIES, AMOS MANWILLER.