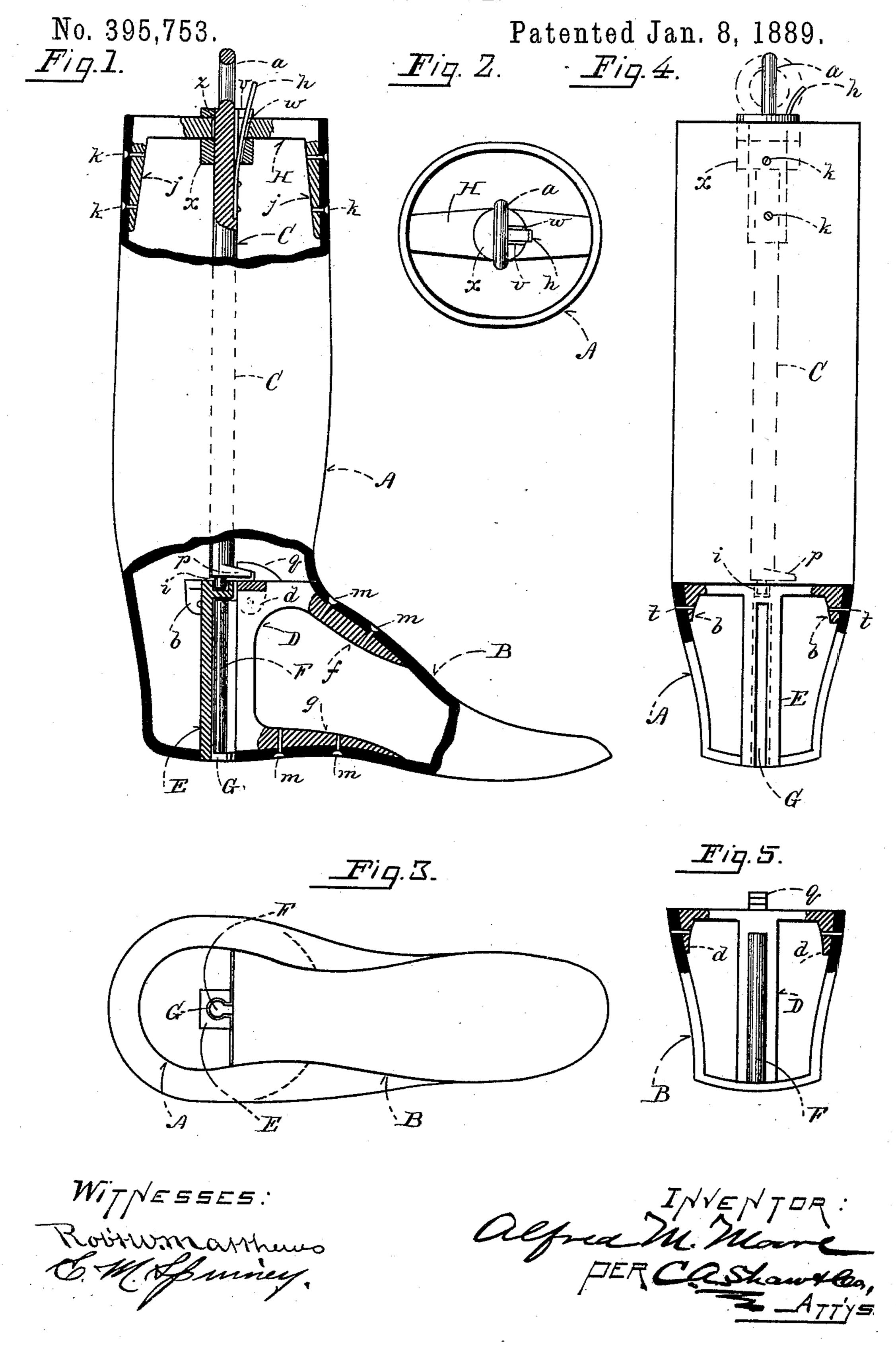
A. M. MOORE.

BOOT TREE.



United States Patent Office.

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BOOT-TREE.

SPECIFICATION forming part of Letters Patent No. 395,753, dated January 8, 1889.

Application filed May 29, 1888. Serial No. 275,446. (No model.)

To all whom it may concern:

Be it known that I, Alfred M. Moore, of Malden, in the county of Middlesex, State of Massachusetts, have invented a certain new and useful Improvement in Boot-Trees, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved boot-tree, a portion of the body being broken away to show the interior; Fig. 2, a top plan view of the leg portion; Fig. 3, a bottom plan view; Fig. 4, a front elevation, the foot portion being removed; and Fig. 5, a rear elevation of the foot portion.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to that class of boot-trees which are employed in the manuator facture of rubber boots; and it consists in certain novel features, as hereinafter fully set forth and claimed, the object being to produce a more effective, and otherwise desirable de-

a more effective and otherwise desirable device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation:

In the drawings, A represents the leg portion, and B the foot-piece, of the tree, these parts being constructed hollow and separable and composed of a compound of wood fiber, papier-maché, or similar material.

The leg A is provided with a centrally-arranged vertical standard, E, having a vertically-arranged dovetail-groove, G, on the side next the foot-piece. The standard is provided at its top with two laterally-projecting arms or braces, b, (see Fig. 4,) which are secured to the sides of the leg-piece by rivets t, and serve to assist in keeping said standard in position. The upper portion of the standard E is provided centrally with a hole or socket, i, (see

Fig. 1,) adapted to receive the lower end of 50 the clamping-bar C, hereinafter described.

The foot-piece B is provided interiorly with a brace, D, having two forwardly-projecting arms, fg, which are respectively secured to the instep and sole portions thereof by rivets 55 m, as shown in Fig. 1. The brace D is also provided on its upper portion with laterally-projecting arms or braces d, (see Fig. 5,) secured by rivets to the sides of said foot-piece and designed to assist in keeping said brace 60 in position. A dovetail, F, fitted to slide in the dovetail groove G of the standard E, is formed on the rear of the brace D.

The rod C is provided at its upper end with a handle, a, and disposed on said rod near 65 said handle is a lateral brace, H, having downwardly-projecting arms j secured to the sides of the leg A by rivets k, and a hub, x, on its under side, through which said rod passes. The rod C passes through a circular hole, z, 70 in the hub x, into which opens a laterally-arranged slot, w. (See Figs. 1 and 2.) An upwardly-projecting flat spring, h, is secured to the rod C and passes through the hole z, said spring being adapted to enter the slot w in the 75 hub x and prevent said rod from turning therein.

The lower end of the rod C is provided with a laterally - projecting inclined flange, p, adapted to be turned under a locking-cam, q, 80 on the brace D of the foot-piece and lock said piece to the leg portion.

In the use of my improvement the footpiece B is first inserted in the foot portion of the boot to be treed. The leg portion A is 85 then inserted in the leg of the boot, the parts being so arranged that the dovetail F will enter the groove G, when, by revolving the rod C, the flange p will pass under the lockingcam q on the brace D of the foot-piece, the 90 spring h at the same time entering the slot win the brace H, thus firmly locking the leg portion and foot-piece together and preventing them from becoming accidentally unfastened. To remove the tree from the boot, the 95 spring h is forced back against the rod C until it is free from the slot w, said rod being then turned until the flange p passes from under the cam q, when the leg A may be detached from the foot-piece and both withdrawn from the boot in a manner that will be readily understood by all conversant with such matters without a more explicit description.

Having thus explained my invention, what

I claim is—

1. In a boot-tree, the combination of a hollow leg portion, a centrally-disposed vertical standard secured in the bottom of said leg portion and provided in its outer face with a dovetail groove, a vertically-arranged locking-rod provided with a flange near its lower end, said rod being journaled in the top of said standard and in a brace in said leg portion, a foot-piece provided with a brace having a dovetail adapted to entersaid dovetail groove, and a locking-cam on said brace adapted to engage the flange on said rod and thereby secure said leg portion to said foot-piece, substantially as set forth.

2. In a boot-tree, the combination of a hollow leg portion, a centrally-disposed vertical standard secured in the bottom of said leg portion and provided in its outer face with a dovetail groove, a vertically-arranged locking rod provided with a flange near its lower end, said rod being journaled in the top of said standard and in a brace in said leg portion, a

foot-piece provided with a brace having a 30 dovetail adapted to entersaid dovetail groove, a locking-cam on said brace adapted to engage the flange on said rod, and thereby secure said leg portion to said foot-piece, and a spring on said rod adapted to enter a slot in 35 the brace in said leg portion and keep the rod from turning, whereby said cam and flange are prevented from becoming accidentally disengaged, substantially as described.

3. In a boot-tree, the combination of the leg A, the standard E, provided with the dovetail groove G, hole i, and arms d, the brace H, provided with the hole z and slot w, the locking-rod G, provided with the flange p and journaled to revolve in the holes iz, the spring h, 45 secured to said rod and adapted to enter the slot w and prevent said rod from revolving, the foot-piece G, the brace G, secured in said foot-piece and provided with the dovetail G, adapted to enter said dovetail groove, and the 50 locking-cam G on said brace, said cam being adapted to engage the flange G and secure said foot-piece to said leg portion, substantially as set forth.

ALFRED M. MOORE.

Witnesses:

O. M. SHAW, E. M. SPINNEY.