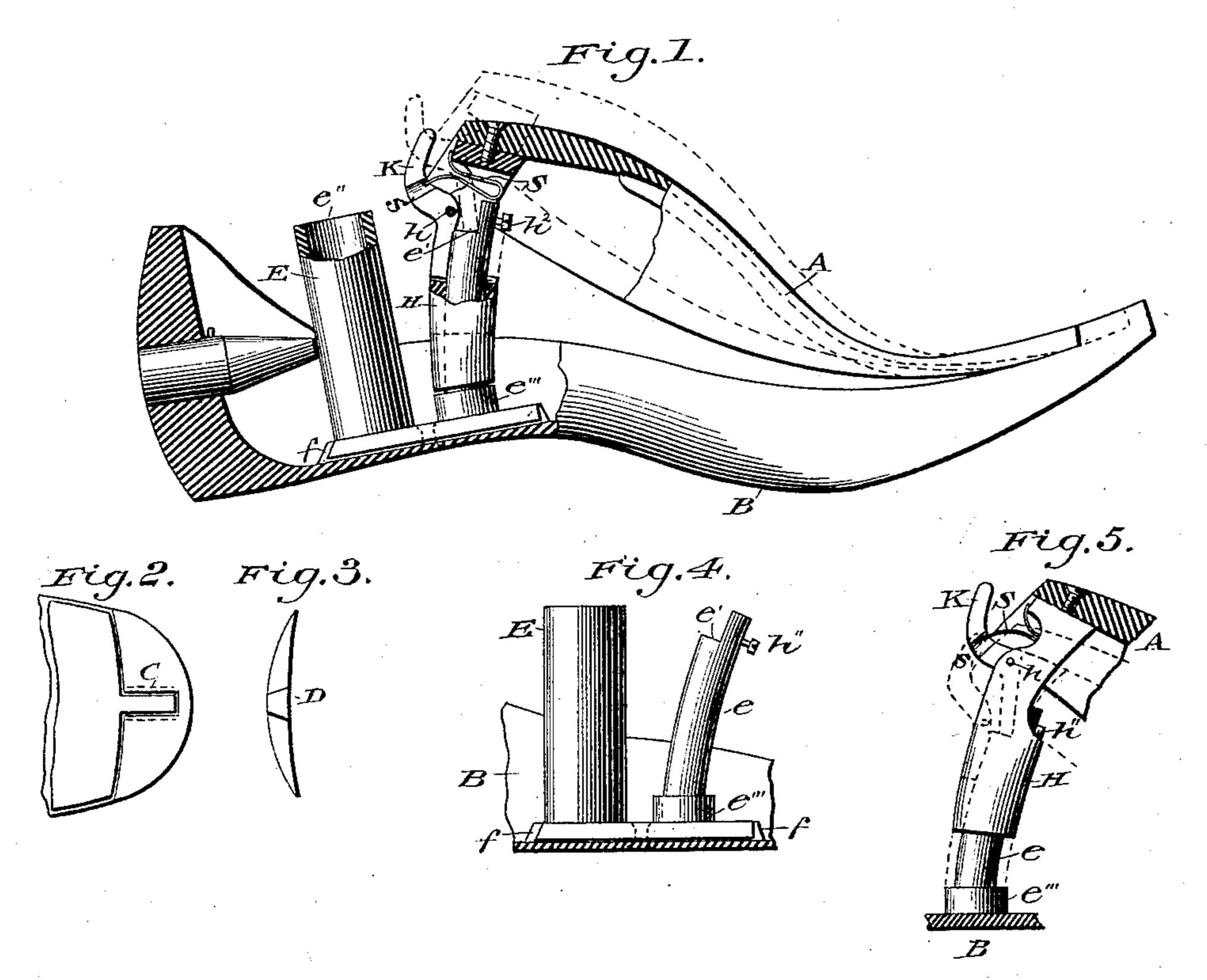
(No Model.)

G. A. REYNOLDS.

LAST.

No. 318,137.

Patented May 19, 1885.



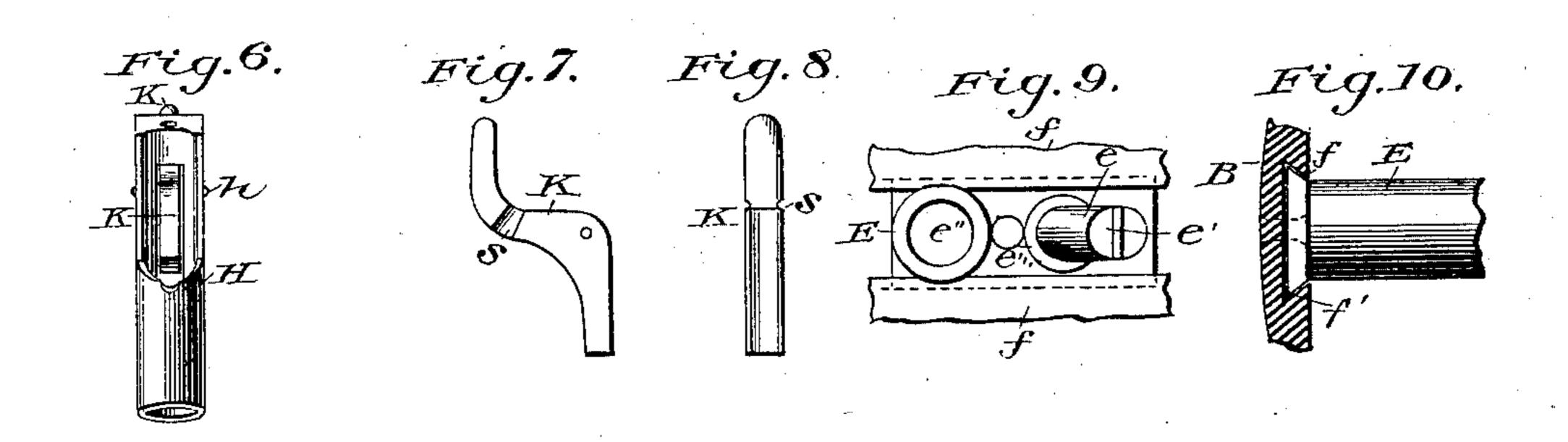




Fig. 12.

Witnesses: Chaples, E. Davenport Edward H. WElles Inventor. George a Reynolds

United States Patent Office.

GEORGE A. REYNOLDS, OF UTICA, NEW YORK.

LAST.

SPECIFICATION forming part of Letters Patent No. 318,137, dated May 19, 1885.

Application filed January 31, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. REYNOLDS, of the city of Utica, Oneida county, and State of New York, a citizen of the United States, 5 have invented a new and useful Improvement in Lasts; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters and fig-10 ures marked thereon.

My invention consists in attaching and securing the socket and post of a metallic collapsible last to the bottom thereof, and the mechanism for expanding the last and holding 15 the posts when a shoe is being lasted, and for contracting the parts when the last is inserted or removed from a lasted shoe, and other mechanism, hereinafter more fully described.

In the accompanying drawings, Figure 1 20 represents a side elevation of my last, and the broken lines show a section removed to expose the socket, upright, and tubular socket. Fig. 2 represents a top view of the section of the toe of my last. Fig. 3 represents an end view 25 of the top section of my last. Fig. 4 represents a side view of the socket and upright post, and in broken lines a section of the last. Fig. 5 represents a side view of the upright post and tubular socket, and the broken 30 lines indicate sections of the last to which the upright post and tubular socket are attached. Fig. 6 represents a front view of the tubular socket in which the catch works. Fig. 7 represents a side elevation of the catch. Fig. 8 35 represents a front view of the same. Fig. 9 represents a top view of the socket and upright post, showing the manner of attaching them to the bottom of the last and a section of the last. Fig. 10 represents a section of the socket | 40 and last. Fig. 11 represents a top view of the spring. Fig. 12 represents a side view of the same.

Having described my invention in reference 45 drawings, I will now proceed to describe the same by reference to the letters marked thereon, in which similar letters refer to corresponding parts throughout the several views.

A represents the top section of my collapsi-

thereof. These sections are joined at the toe by a dovetail slot, c, in the lower section and a corresponding tongue to fit the same in the upper section, so adjusted as to allow the upper section to contract or expand without 55 binding.

C represents the groove. D represents the tongue.

E represents a socket-post, and e" represents a socket formed in the post to receive and sup- 60 port the last, when in use, in the ordinary way.

e represents an upright post. The socketpost and the upright post are formed in one piece with a dovetailed flange, which is fitted in a dovetailed groove in the instep of the last 65 and rigidly bolted or riveted to section B.

e' represents a shoulder on the upper end of

upright post e.

e" represents a shoulder on the upright post, against which the tubular socket strikes when 70 the sections of the last are closed.

f represents the dovetail flanges on the surfaces of the socket and upright, and f' represents the groove for receiving the same.

H represents a tubular socket, a section of 75 which is cut away in Fig. 1, secured to A and fitting over upright e.

K is a catch fitting in tubular socket H, pivoted at h. This catch is crowded forward and held in place on shoulder e' of the upright post 80 by spring S. The catch is disengaged to allow the top section of the last A and the lower section thereof, B, to contract by pressing on the arm of the catch. h'' is a screw inserted in the end of the upright post to prevent ex- 85 cessive expansion of the last, and shoulder $e^{\prime\prime\prime}$ to prevent too much contraction thereof.

S' is a circular end of the spring fitting on

to the arm of the catch.

Operation: The last being extended to in- 90 sert the same in a boot or shoe, the operator presses the arm of the catch upward, which moves the lower end from shoulder e' of the to the figures illustrated in the accompanying | upright, and the two sections A and B are crowded together. To expand the same, the 95 top A is drawn upward until the spring moves and holds the catch in position on the shoulder e' of the upright. In lasting a shoe, the last is extended and the socket e'' placed on a pro-50 ble last. B represents the bottom section jecting pin in the bench or form and the work 100 fitted over the same. The last is then contracted and removed, as described.

What I claim as new, and desire to secure

by Letters Patent, is—

A; provided with tongue D, part B, provided with groove C, socket E, upright e, with shoulders e and e", formed in one piece, with projecting flanges fitting in a groove and held rigidly to the instep of section B, a tubular socket, H, rigidly secured to A and fitting over the upright e, and provided at the lower end with circular band, as described, screw h", to prevent excessive expansion, and catch K, for holding the sections when expanded, in combination, substantially as described.

2. The herein-described collapsible shell-last having two sections joined at the toe by dovetail groove and tongue, as described, the lower section of the last having a dovetail groove in the longitudinal center of the heel,

in combination with socket E and upright e, held in place by dovetail flange inserted in a groove and rigidly secured to section B, a tubular socket secured to A and fitting over 25 the upright, and provided with suitable means for opening and closing the two sections of the last, as described.

3. In a metallic collapsible shell-last, upright e, attached to section B, as described, in 30 combination with tubular socket H, secured to section A, adapted to fit over the upright post, as described, and catch K, held in place by spring S, adapted to hold the last rigidly when expanded and to permit the contraction 35 of the last at the will of the operator, as described.

GEORGE A. REYNOLDS.

Witnesses:

H. M. Love, C. D. F. Hoxie.