

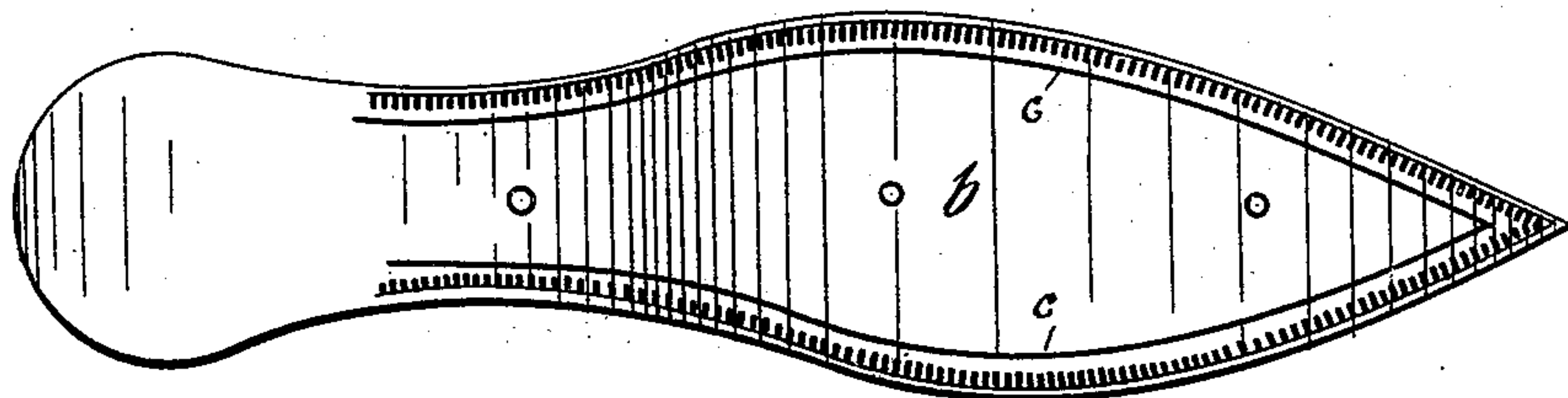
(No Model.)

J. J. JORDAN & J. A. KELLY.  
SHOE.

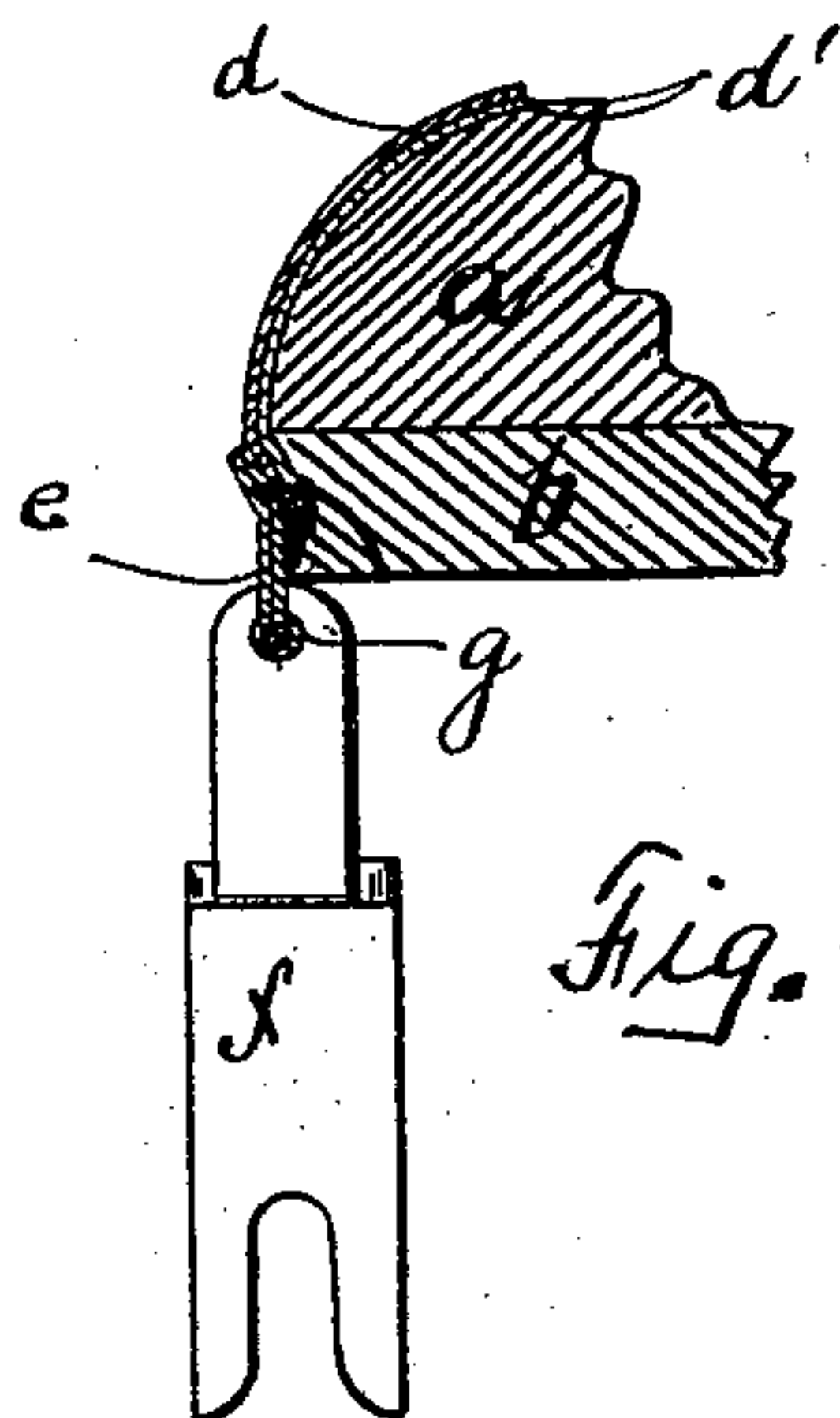
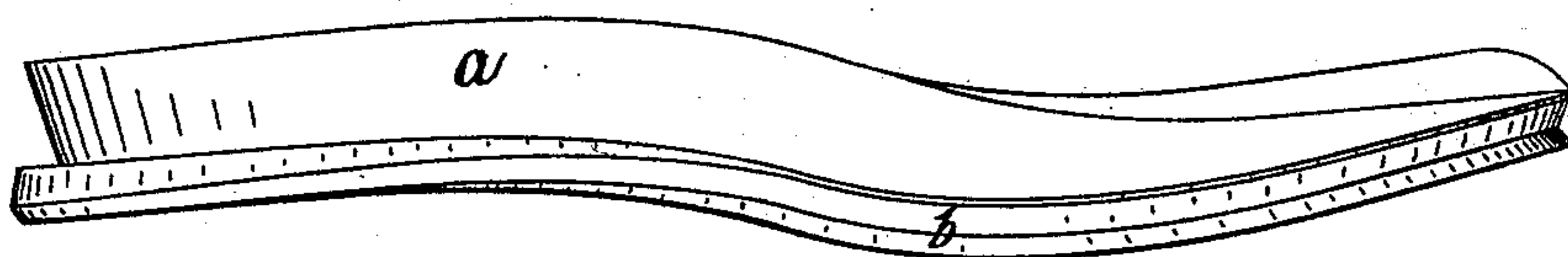
No. 581,122.

Patented Apr. 20, 1897.

*Fig. 1*

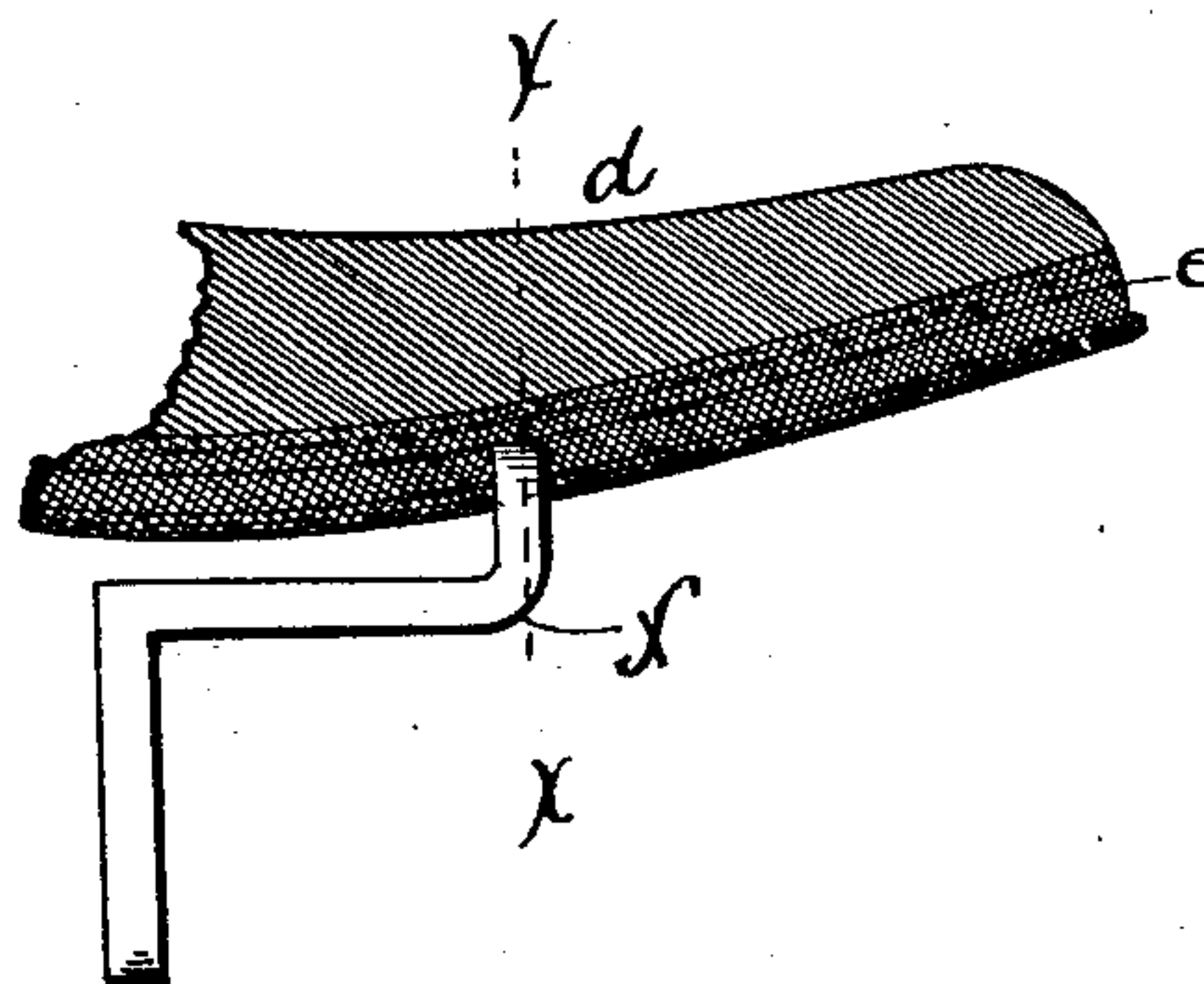


*Fig. 2*

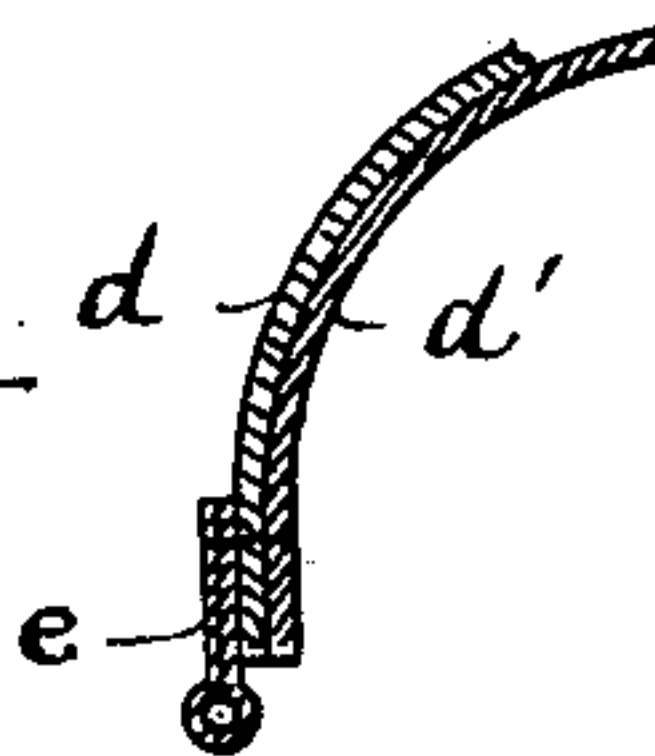


*Fig. 4*

*Fig. 3*



*Fig. 5*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES J. JORDAN AND JOHN A. KELLY, OF SYRACUSE, NEW YORK.

## SHOE.

SPECIFICATION forming part of Letters Patent No. 581,122, dated April 20, 1897.

Application filed April 22, 1896. Serial No. 588,629. (No model.)

*To all whom it may concern:*

Be it known that we, JAMES J. JORDAN and JOHN A. KELLY, of Syracuse, in the county of Onondaga, in the State of New York, have  
5 invented new and useful Improvements in Shoes, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the manufacture  
10 of shoes.

Heretofore in the manufacture of shoes it has always been necessary to last the shoes—that is, to first tack to the bottom of the last an inner sole, then pull the upper over the last  
15 and tack it to this inner sole, and then sew the uppers to the sole, after which the tacks are pulled out and the surplus upper-stock is trimmed off. Our invention, however, seeks primarily to obviate this lasting process, for the reason that it is more expensive  
20 than the process herein set forth.

The old method of lasting requires the continued use of the last during the time the shoe is being bottomed, whereas by our method  
25 we do not require a regular last until after the upper has been sewed to the sole, the sole having previously been placed upon a form, and as soon as the sewing is completed the thick edge of the rand is cut off, leaving the  
30 web portion sewed in as a stay to strengthen the sewing against ripping. Then the form is removed and is again ready for use. To the end therefore of obviating the old process of first lasting the shoe our object is to accomplish, first, the saving of stock; second, avoid-  
35 ing the necessity of lasting the shoe, and, third, in sewing the upper direct to the sole—that is, the doing of the lasting and sewing all in one operation and strengthening the  
40 sewing with a stay at the same time; and to that end our invention consists, first, in cutting the upper the exact size which is desired and attaching thereto a rand, either by sewing it or cementing it or securing it in any  
45 other ordinary way. We then place the sole upon a form, and by means of a feeder or a holder which has been specially prepared we grip the rand and upper to which the rand is attached and hold the upper in its exact position—that is, in a position to make the shoe  
50 of the exact size desired—while the machine

stitches the upper and rand to the sole. It will thus be observed that by cutting the upper to the exact size which is desired we obviate the necessity of trimming off the surplus upper-stock around the edge, as is ordinarily done in the lasting process, thereby saving this amount of stock upon each shoe. If the shoe is a “turned” shoe, it may then be turned and finished in the ordinary way.  
55 In constructing a “welt” shoe this same process is observed, except that the welt and rand, upper, and insole are all stitched at once, and the outer sole is then attached to the welt in the usual way.  
60

By constructing shoes by the lasting process it requires the use of the last, as stated above, for several days, according to the quality of the goods manufactured, from the time the upper is tacked to it until it is ready to be removed.  
65

The lasting process requires the keeping on hand of a large number of lasts of various sizes, but by our improved process about two-thirds the number of lasts will do the same work,  
75 for the reason that it only requires the use of a form until the upper is sewed to the sole, after which the form is removed and a regular last put in its place, thereby saving about one-third or one-half of the time and using about  
80 one-third less lasts in bottoming shoes. By our process we also save the time consumed in tacking the upper to the inner sole, the tacks, which are no small amount, and the surplus upper-stock, which stock is trimmed  
85 away after the lasting and sewing has been completed in the old way. We have also found that in shoes made by the lasting process there is a tendency for the linings to wrinkle, and the upper-stock used in the  
90 cheaper grade of goods is stretched to such an extent that the grain of the upper-stock is opened, while in our process the linings and upper are held together by the rand and secured together by one operation. Further-  
95 more, the upper is not strained over the form, as is the case when lasted over a last in the ordinary way, and thus we avoid the wrinkling of the lining and the opening of the grain of the upper.  
100

Referring now to the drawings, Figure 1 is a plan view of the bottom of the sole. Fig.

2 is a side view of said sole placed upon a form. Fig. 3 is a portion of the front end of a shoe in the process of construction, it being held by the feeder or the holder while being sewed, 5 the feeder just preceding the needle. Fig. 4 shows a cross-section on line  $x x$ , Fig. 3. Fig. 5 shows a view of the upper and lining to which the rand is sewed or otherwise secured. 10  $a$  is the form.  $b$  is the sole secured thereto, having a channel  $c$  cut in the lower face in the ordinary way for the purpose of sewing it to the upper.  $d$  is the upper,  $d'$  being the lining secured thereto. 15  $e$  is the rand, constructed substantially as shown, which is secured to the upper for the purpose of holding it in the exact position.  $f$  is the feeder or holder, which is attached to the ordinary sewing-machine. The holder 20 is preferably provided with an opening  $g$ , which may grip the rand yieldingly—that is, it may be released at any time desired by

passing the bead on the rand through and out of the opening.

Having described our invention, what we 25 desire to secure by Letters Patent is—

A boot or shoe having a sole provided with a groove or channel in its outer edge, an upper having a binding provided with a beaded 30 lower edge, said binding secured to the lower edge of the upper whereby the upper and binding may be stitched into the channel or groove of the sole, the beaded portion of said binding subsequently trimmed or cut away 35 and the shoe finished in the ordinary manner, substantially as described.

In witness whereof we have hereunto set our hands this 17th day of April, 1896.

JAMES J. JORDAN.  
JOHN A. KELLY.

In presence of—

C. W. SMITH,  
HOWARD P. DENISON.