

(No Model.)

2 Sheets—Sheet 1.

W. F. SPINNEY.

MOLD FOR FORMING HEEL STIFFENERS.

No. 304,144.

Patented Aug. 26, 1884.

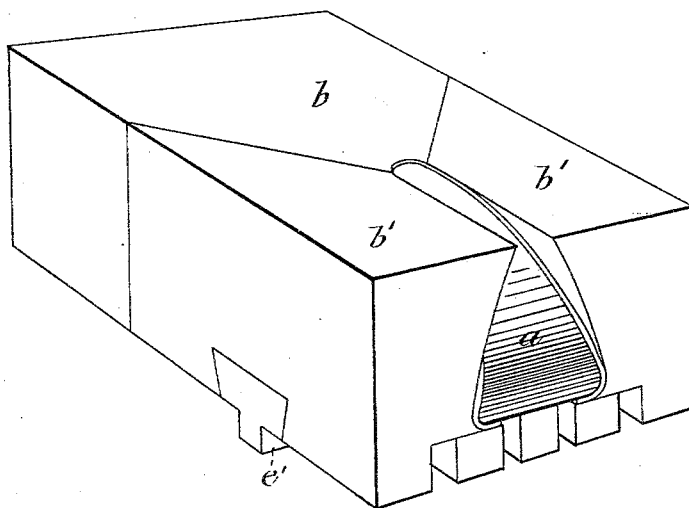


Fig. 1.

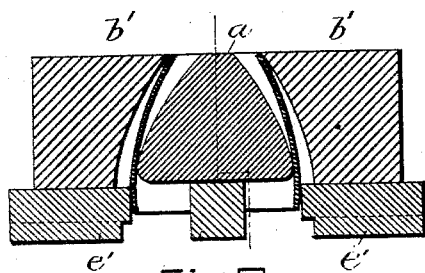


Fig. 2.

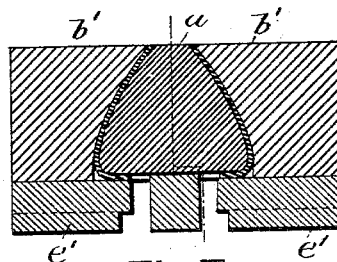


Fig. 3.

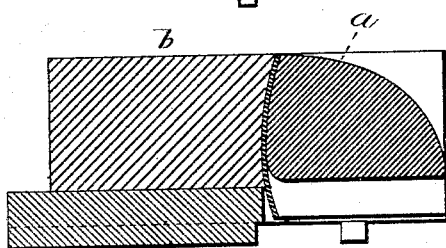


Fig. 4.

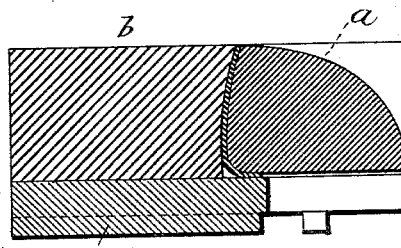


Fig. 5.

WITNESSES

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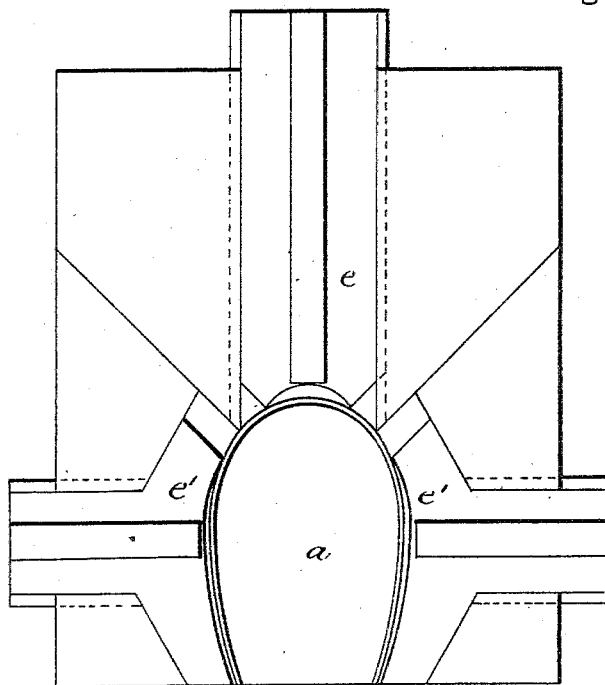


Fig. 6.

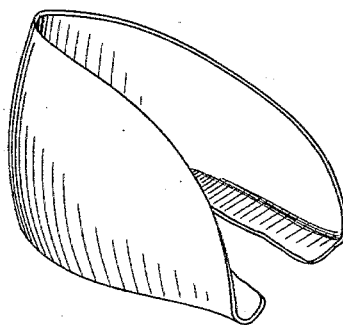


Fig. 7.

WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM F. SPINNEY, OF READING, MASSACHUSETTS.

MOLD FOR FORMING HEEL-STIFFENERS.

SPECIFICATION forming part of Letters Patent No. 304,144, dated August 26, 1884.

Application filed April 4, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. SPINNEY, of Reading, in the county of Middlesex and State of Massachusetts, have invented certain
5 Improvements in Means for Forming Heel-Stiffeners, of which the following is a specification.

This invention has for its object to provide improved means for forming flanged heel
10 counters or stiffeners; and it consists in an organized apparatus comprising a former or mold corresponding to the shape of the interior of the completed counter, sectional molds
15 adapted to press the counter-blank first against the rear and then against the sides of said former, and sectional flange-formers adapted to turn the bottom edge of the counter inwardly while the body of the counter is formed
20 and held between the central former and the sectional molds, as I will now proceed to describe.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of a former embodying my
25 invention, the parts being in the position they occupy when the counter is completely formed. Figs. 3 and 5 represent, respectively, a transverse and a longitudinal section of the former, the parts being in the same position as in Fig.
30 1. Fig. 2 represents a transverse section showing the parts in the position they occupy before the sides of the counter are finished. Fig. 4 represents a longitudinal section showing the body of the blank formed, but not the
35 flange. Fig. 6 represents a plan view showing the flange-formers in the position they occupy before the flange is formed. Fig. 7 represents a perspective view of the completed counter.

40 The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents the central mold or former, the surface of which conforms perfectly to the internal surface of the completed counter. Said former is rigidly supported
45 by any suitable means.

b b' represent sectional molds or formers, which are adapted to press the counter-blank closely against the central former, *a*. The
50 former *b* is adapted to move toward the cen-

tral former and press the heel or central portion of the blank against the corresponding portion of the central former, while the formers
b' b' are adapted to move in opposite directions against the sides of the central former and in
55 directions substantially at right angles with the movement of the former *b*.

e e' represent crimpers or formers, which turn the lower edge of the counter inwardly and form the flange thereof. Said crimpers
60 are adapted to move independently of the formers *b b'*, the crimper *e* moving in the same direction as the former *b*, and turning the heel portion of the flange, as shown in Fig.
5, while the crimpers *e'* move in the same
65 direction as the formers *b' b'*, and form the side portions of the flange, as shown in Fig. 3. In the present instance the crimpers slide in guides in the lower portions of the sectional
70 formers *b b'*.

The operation is as follows: The counter-blank is first placed upon the central former and grasped between the same and the rear
sectional former, *b*, as shown in Fig. 4. The side
75 sectional formers, *b' b'*, are then advanced and press the remaining portions of the body of the counter against the central former, the blank being of such size that the lower edge projects
below the pressing-surfaces of the formers. The flange formers or crimpers are then ad-
80 vanced either singly or successively, and turn the flange in a manner readily understood.

The movable parts above described may be operated by any suitable means.

The described mode of operation gives the
85 counter a permanent form, the material of the counter being firmly set or fixed.

If desired, the projecting edge which forms the flange may be notched at one or more
90 points to facilitate the formation of the flange.

It is obvious that the apparatus, when in operative position, may be inverted, so that the
flange-formers will be at the top of the apparatus instead of at the bottom. The position
95 last indicated may be found preferable in some respects to that shown in the drawings.

I claim—

1. The improved means herein described for forming heel-stiffeners, the same consisting of
a central form having an outer surface corre- 100

sponding in form to that of a counter-body and adapted to receive a counter-blank, sectional molds adapted to operate independently of each other to press the blank against the central portion and form the body portion of the counter, and the independent sectional crimpers or flange-formers adapted to operate independently of each other and of the said body-formers to turn the flange of the counter, substantially as set forth.

2. The improved means herein described for forming heel-stiffeners, the same consisting of

a central form, *a*, sectional molds *b b' b'*, adapted to press the body portion of the counter, and the independent sectional crimpers or flange-formers *e e' e'*, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 29th day of March, 1884.

WILLIAM F. SPINNEY.

Witnesses:

C. F. BROWN,

A. L. WHITE.