

No. 757,374.

PATENTED APR. 12, 1904.

H. A. WEBSTER.
SEAM FOR SEWED ARTICLES.
APPLICATION FILED JULY 31, 1903.

NO MODEL.

Fig. 1.

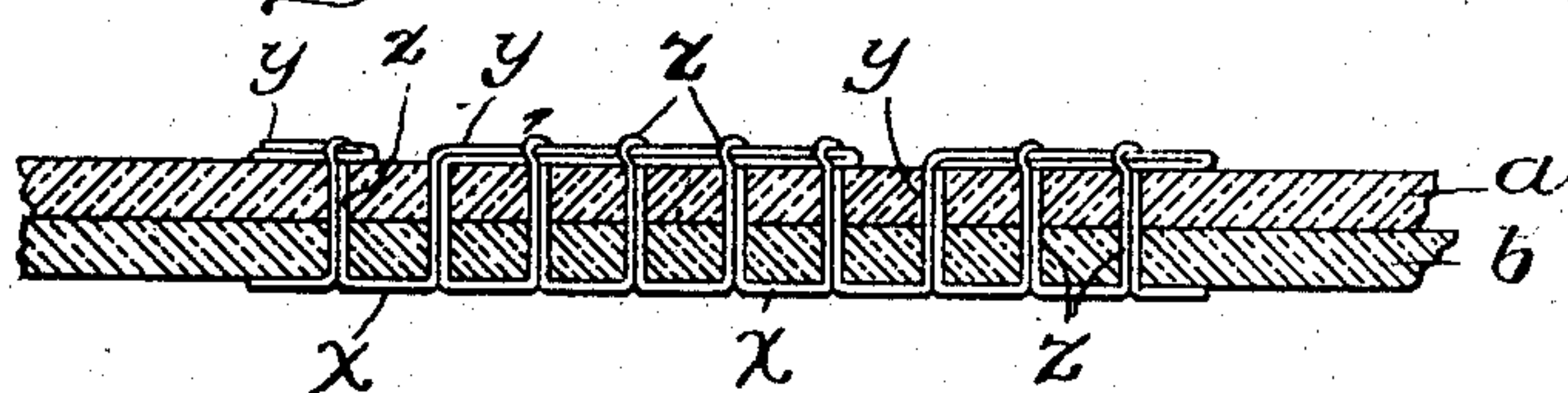


Fig. 2.

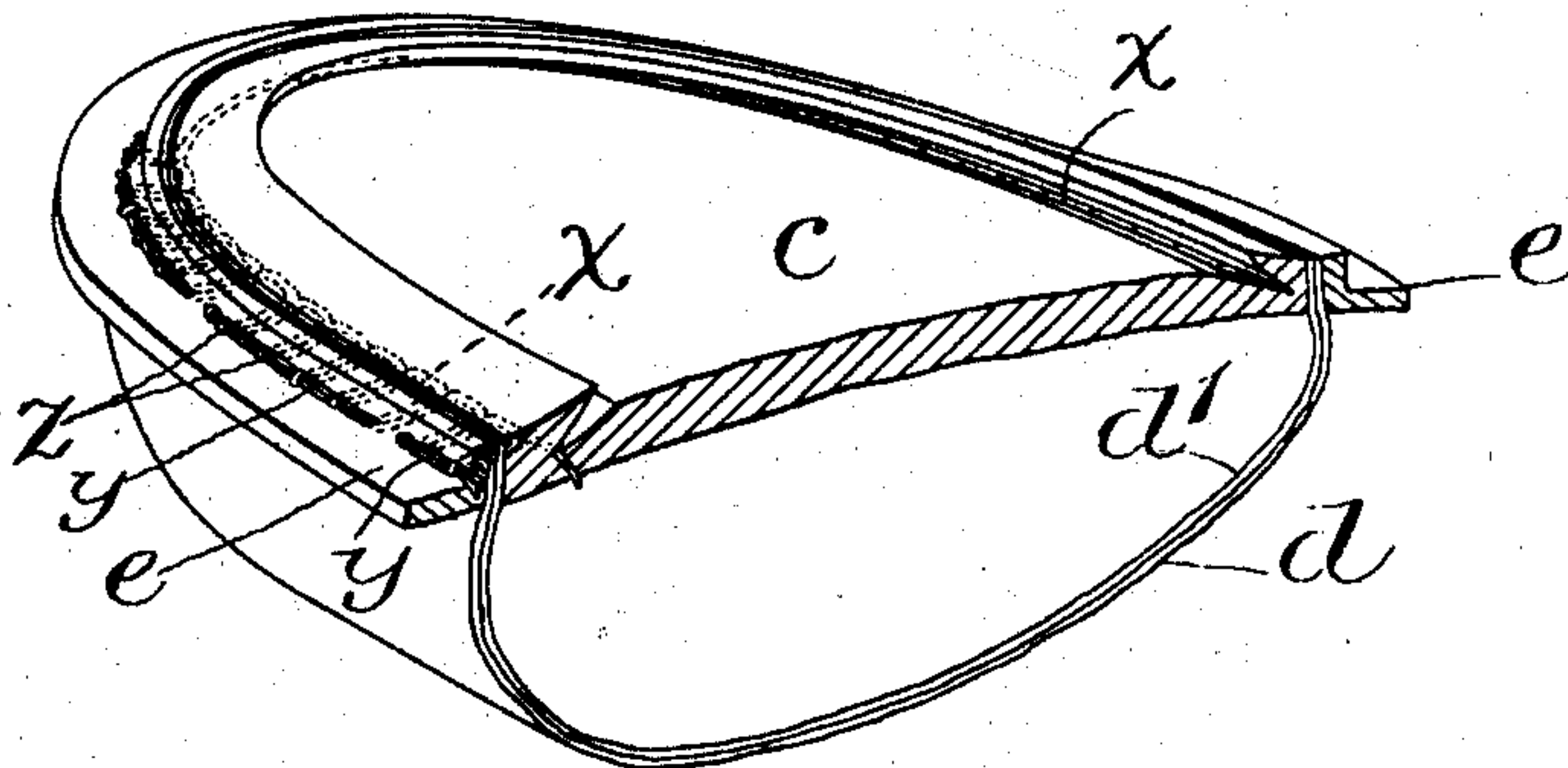


Fig. 3.

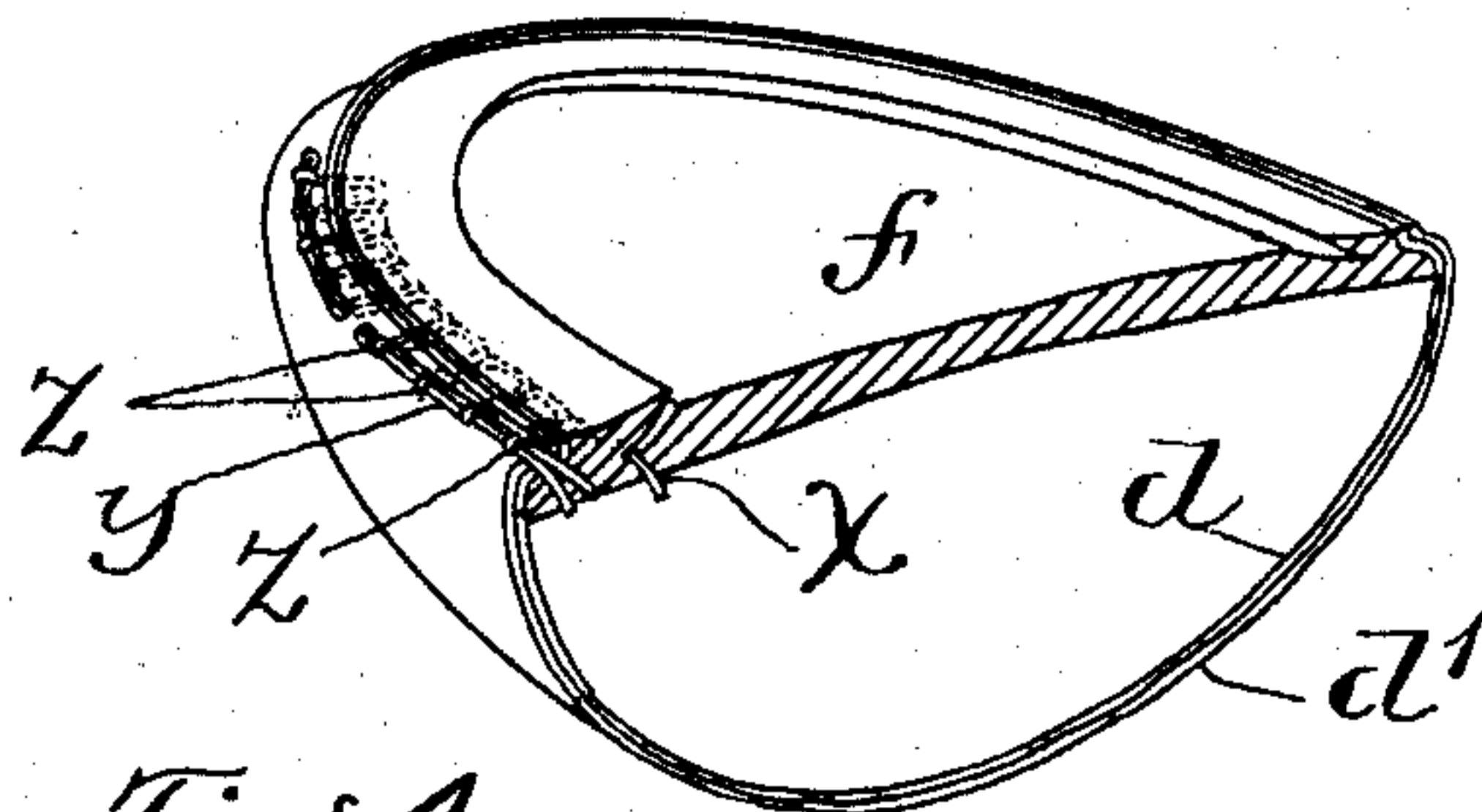
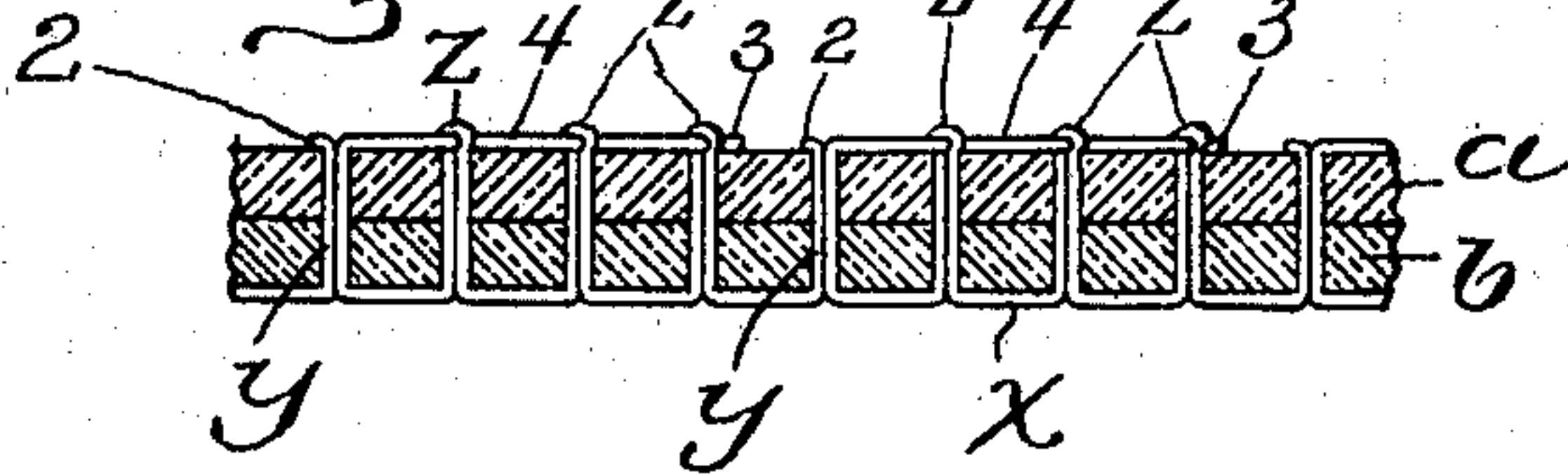


Fig. 4.



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UNITED STATES PATENT OFFICE.

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SEAM FOR SEWED ARTICLES.

SPECIFICATION forming part of Letters Patent No. 757,374, dated April 12, 1904.

Application filed July 31, 1903. Serial No. 167,666. (No model.)

To all whom it may concern:

Be it known that I, HAROLD A. WEBSTER, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Seams for Sewed Articles, of which the following is a specification.

The object of this invention is to provide a sewed seam for boots and shoes or other purposes, which seam shall employ a single thread formed into a plurality of part-connecting loops which are anchored and secured by locking members forming parts of the same thread.

To these ends the invention consists in the seam substantially as hereinafter described and claimed.

While the seam herein described and claimed may be applied to two or more parts of any kind of material, I have shown but three applications of the seam in the accompanying drawings, in which—

Figure 1 represents the inner and outer soles of a shoe which is the equivalent of a McKay sewed shoe, said soles being united by a single thread in accordance with this invention. Fig. 2 represents a perspective view, partly in section, of a welted shoe, parts of which are united by the same form of stitch as that shown in Fig. 1. Fig. 3 represents a perspective view, partly in section, of a portion of a turned shoe the upper and outer sole of which are united in accordance with this invention. Fig. 4 represents a view corresponding to Fig. 1, showing a different embodiment of my invention.

The same reference characters indicate the same parts in all the figures.

Referring first to Fig. 1, *a* and *b* represent the inner and outer soles of a shoe, the sewing-thread of which is represented at *x*. The single thread *x* is formed into a plurality of loops, all of which are drawn through the parts *b* and *a*, the body portion of the thread or the stretches between the loops bearing on the outer side of the part *b*. The loops *y*, hereinafter termed the "locking-loops," are of greater length than the intermediate loops *z* and pass through a plurality of the said intermediate loops. In Fig. 1 one locking-loop

y is shown as passing through and engaged and held by four intermediate loops *z*. The invention is not limited, however, to this number, as a greater or lesser number of intermediate loops *z* may be locked by each locking-loop.

Inasmuch as the seam described may be made by hand or by a variety of constructions of machinery, I have not attempted to show or describe herein any particular mechanism. It is sufficient to state that the loops *y* are drawn out by any suitable means and passed through the loops *z* and all of the loops tightened, the locking portions of the loops *y* bearing on the outer side of the part *a* or on the side of the work opposite the stretches of the single thread *x*.

In Fig. 2 the inner sole *c*, the upper *d*, and lining *d'*, respectively, and the welt *e* of a welted shoe are all shown as united by the same form of stitch as that represented in Fig. 1.

In Fig. 3 the outer sole *f* and the upper and lining *d* and *d'*, respectively, of a turned shoe are shown as united by a seam such as that shown in Figs. 1 and 2.

While I have shown the interlocked ends of the loops in Figs. 2 and 3 as located on the outer portions of the shoes shown in said figures, it is to be understood that the relative direction of the loop may be reversed, so that the interlocked ends of the loops will lie within the channel cut in the sole.

The seam above described and illustrated in Figs. 1, 2, and 3 comprises a plurality of loops, some of which are locking-loops extending through a series of intermediate loops, and therefore, owing to the fact that each locking-loop is held by a plurality of intermediate loops, there is no possibility of the seam becoming unraveled, although formed of a single thread. Another advantage of this improved seam is that the locking member for the intermediate loops being composed of a loop necessarily comprises two strands of thread, therefore rendering the seam stronger than if a single locking-thread were to extend through the intermediate loops.

It will be observed that the longer or lock-

ing loops are entirely independent of each other, each longer loop passing through one or more of the shorter or intermediate loops without engaging the next longer loop. Hence
 5 there are frequent interruptions or breaks in the continuity of the loops on one surface of the work, these interruptions insuring a very desirable degree of flexibility in the work, besides simplifying the stitch.
 10 It will be observed that the stitch above described comprises a series of loops z , drawn through the work and connected at their bases by stretches of thread integral with the loops and bearing on one side of the work and lock-
 15 ing members (composed of the longer loops y) forming parts of the same thread, each locking member bearing on another surface of the work and engaging one or more of the loops z . While I prefer the loop or double-thread form
 20 of the locking members shown in Figs. 1, 2, and 3 for the reasons above specified, I do not limit myself thereto. In Fig. 4 I show a seam of the same structure as that shown in Fig. 1, excepting that the locking members instead
 25 of being loops are single threads, each formed by cutting one side of a loop y in close proximity to one surface of the work, the cut forming two ends 2 3 and allowing the thread of said loop to be straightened out and drawn
 30 as a single-thread locking member 4 through one or more of the loops z . The locking mem-

bers thus formed are independent of each other and are interlocked only with the loops z , so that flexibility of the work is insured.

I claim—

1. A seam comprising a compound article or piece of work composed of two or more layers, a series of loops drawn through the work and connected at their bases by stretches of thread integral with the loops and bearing on one
 40 surface of the work, and locking members forming parts of the same thread, each locking member bearing on another surface of the work and engaging one or more of the loops, said locking members being independent of
 45 each other and interlocked only with the loops.

2. A seam comprising a compound article or piece of work composed of two or more layers, and a single thread bearing on one surface of the work and having a series of longer and
 50 shorter loops drawn through the work, the outer portion of each longer loop bearing on another surface of the work and passing through one or more of the shorter loops, the longer loops being independent of each other
 55 and interlocked only with the shorter loops.

In testimony whereof I have affixed my signature in presence of two witnesses.

HAROLD A. WEBSTER.

Witnesses:

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