

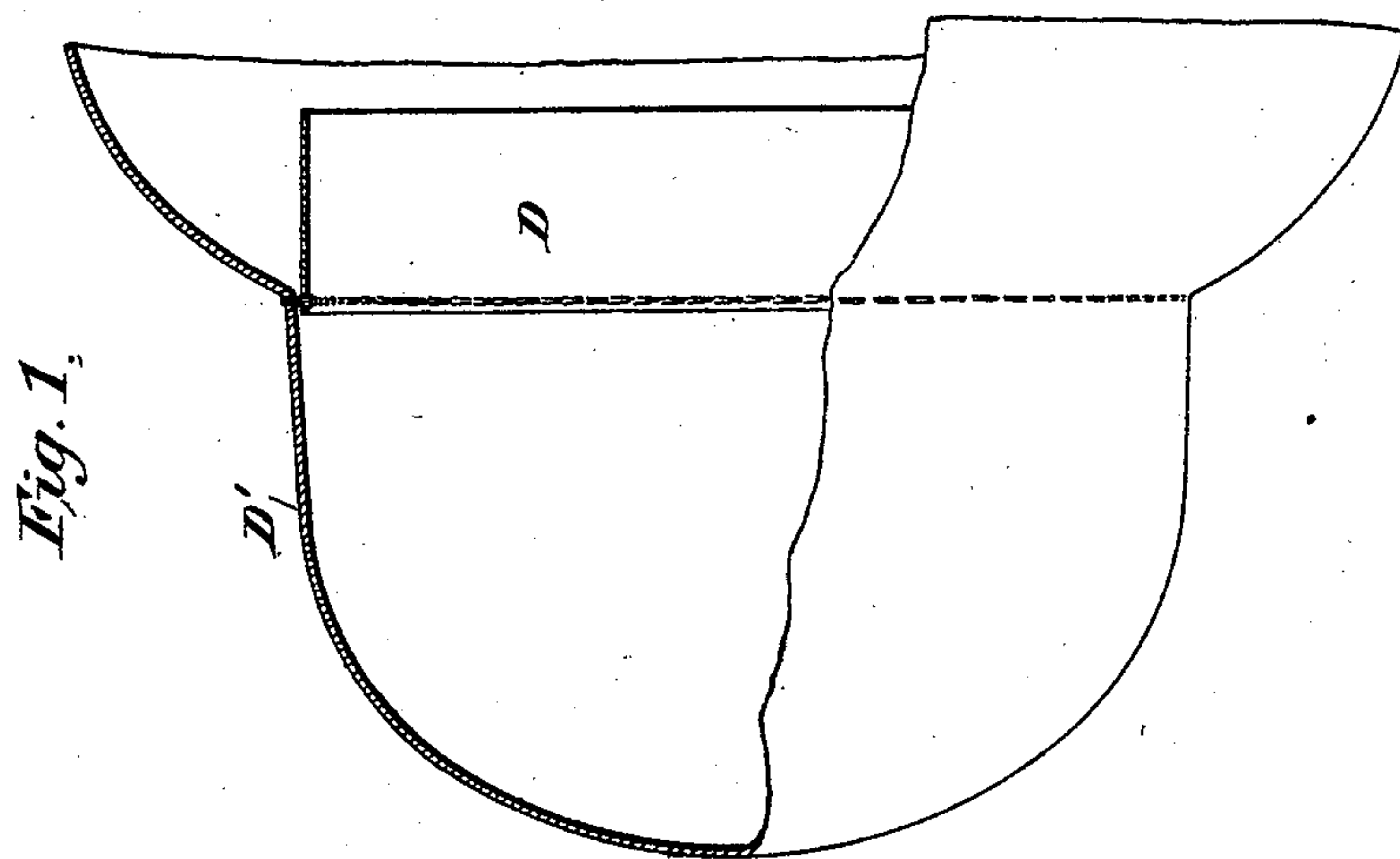
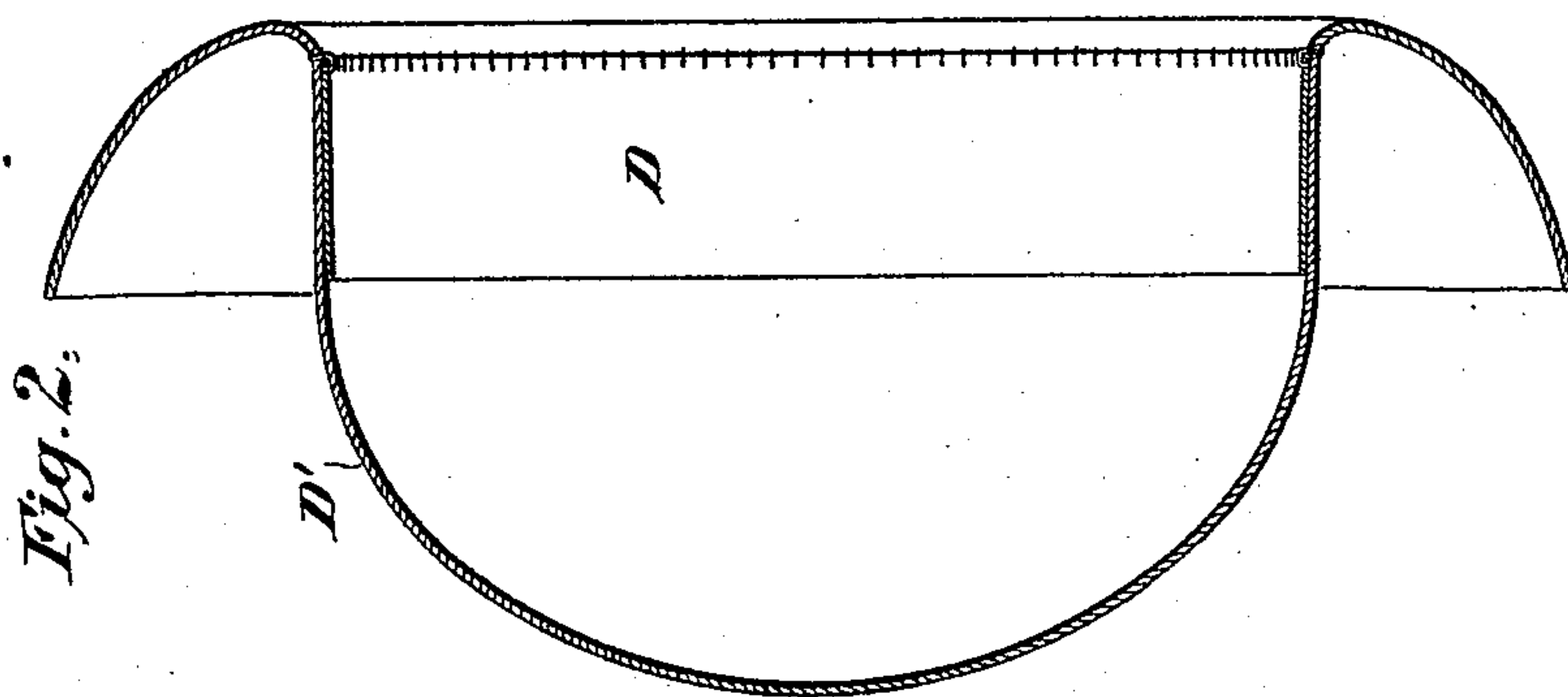
(No Model.)

2 Sheets—Sheet 1.

D. HOWELL.
HAT.

No. 528,777.

Patented Nov. 6, 1894.



Witnesses
C. E. Ashley
H. W. Lloyd.

Inventor
David Howell
By his Attorney
Thomas Ewing Jr.

(No Model.)

2 Sheets—Sheet 2.

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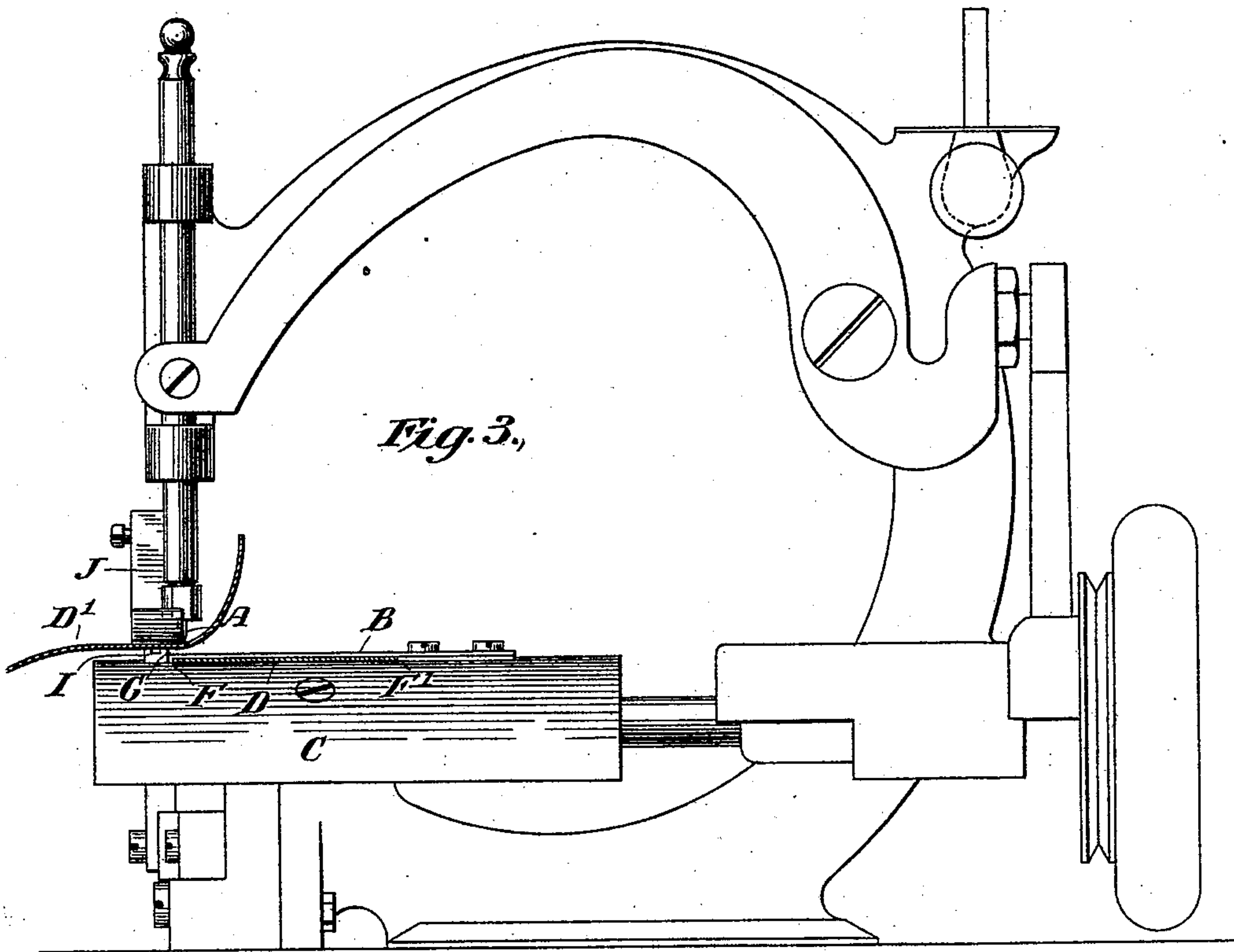


Fig. 3.

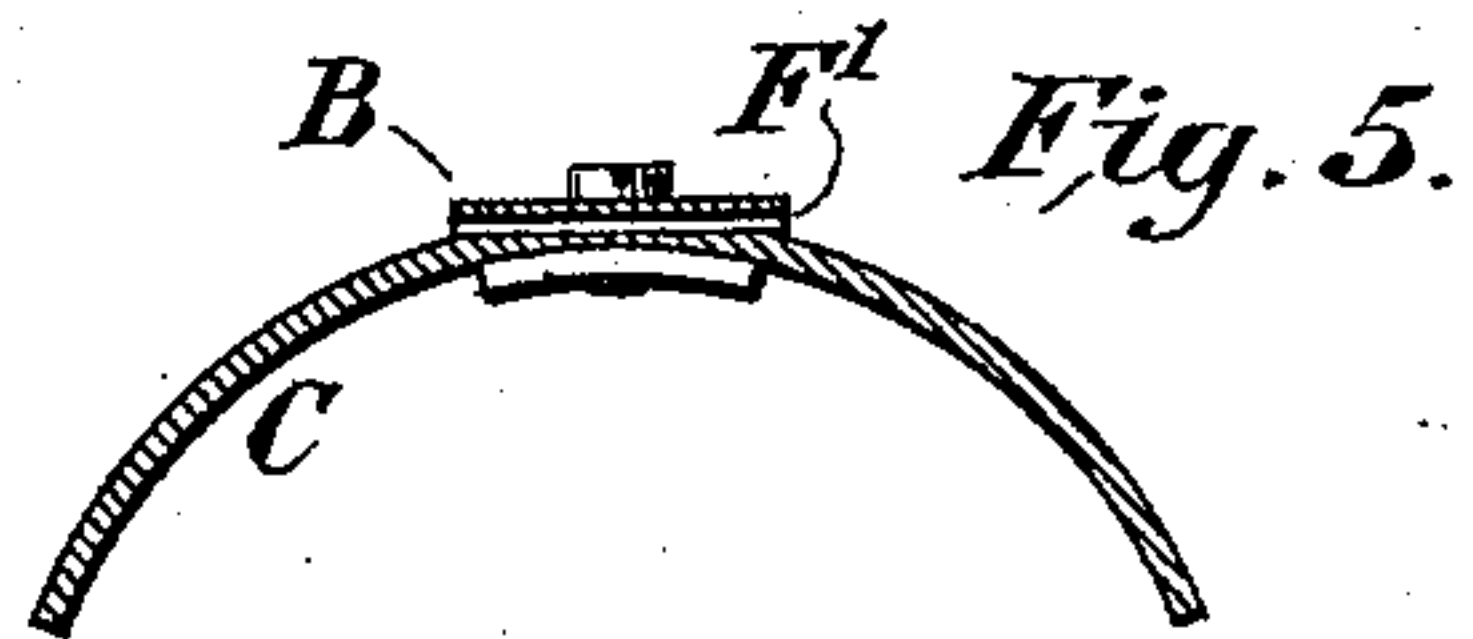


Fig. 5.

Fig. 4.

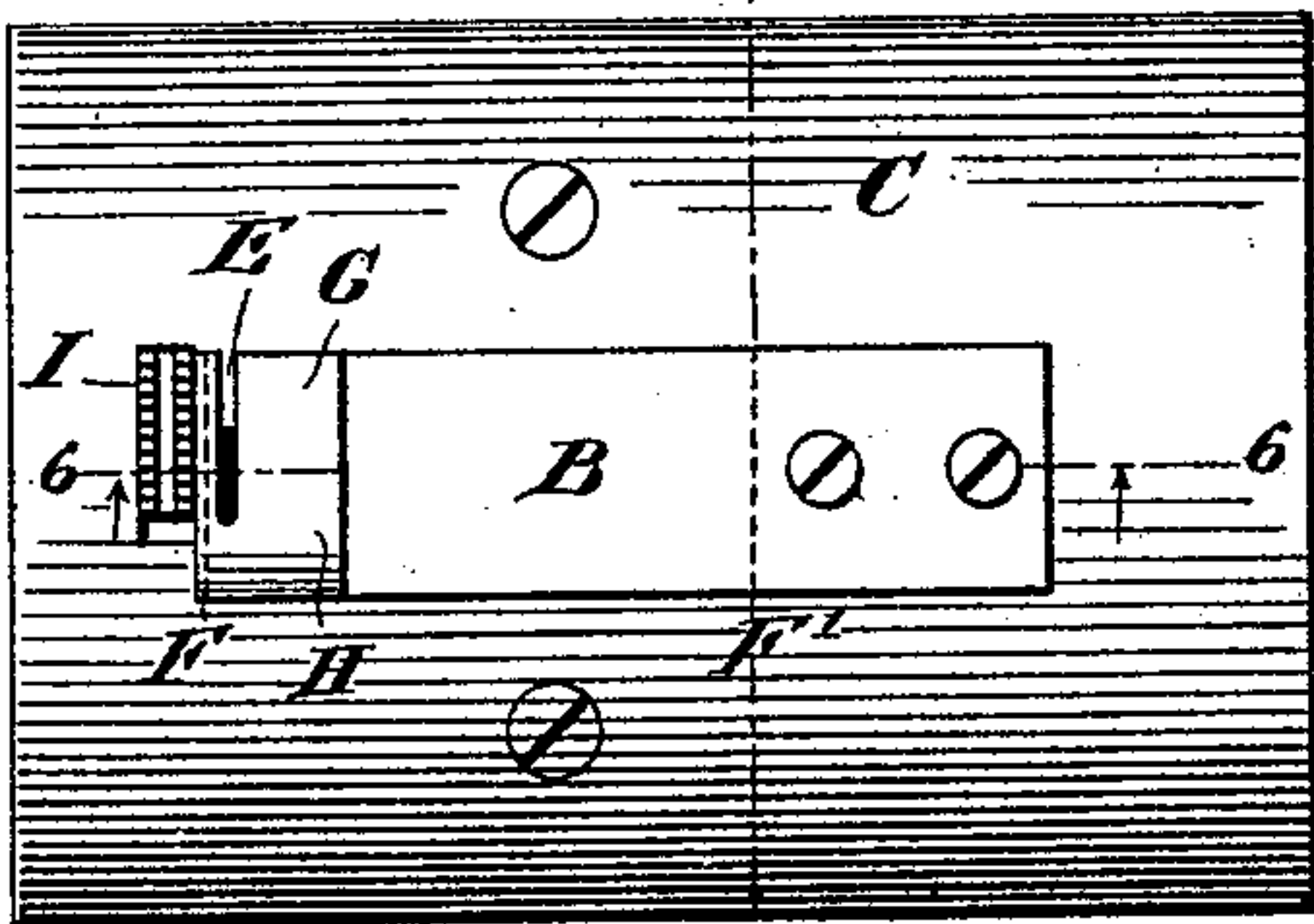
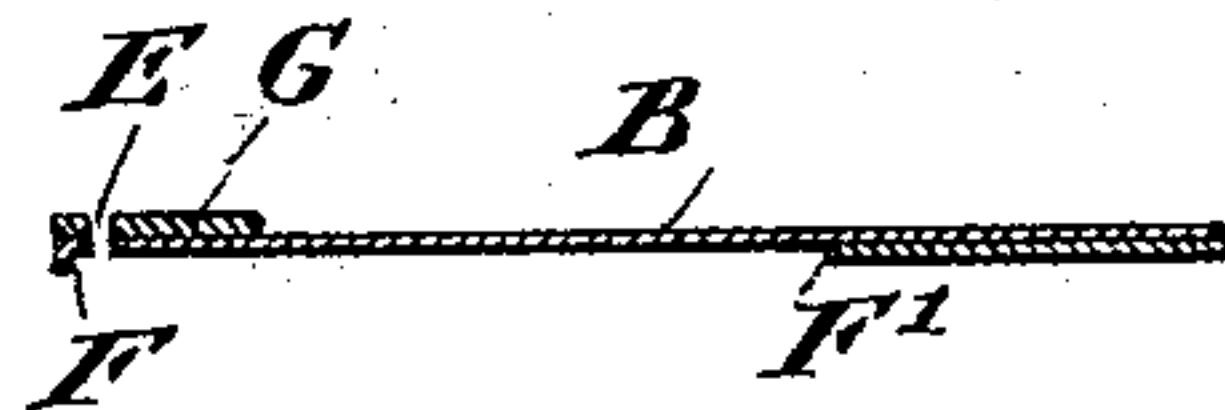


Fig. 7.



Fig. 6.



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UNITED STATES PATENT OFFICE.

DAVID HOWELL, OF YONKERS, NEW YORK.

HAT.

SPECIFICATION forming part of Letters Patent No. 528,777, dated November 6, 1894.

Application filed October 17, 1891. Serial No. 408,973. (No model.)

To all whom it may concern:

Be it known that I, DAVID HOWELL, a citizen of the United States of America, residing at Yonkers, county of Westchester, State of New York, have invented certain new and useful Improvements in Hats, of which the following is a specification.

My invention consists in an improved hat in which the sweat leather is attached directly to the hat-body by a stitch which runs around the body on its outer side and around the leather on its inner side, and is loose or slack with the sweat leather turned outward, and permits the leather to be turned into the hat-body without folding on itself. The slack is so adjusted that when the leather is turned into place it will all be taken up, and will not only not be loose, but the thread will be drawn tight so as to snugly draw down the edge of the leather against the hat-body.

In the manufacture of hats it is common to sew the leather in by hand with a whip stitch. This work is neat but costly. The leather can be sewed in my improved hat with a machine and is of the same neat appearance as when the leather is sewed on with a whip stitch by hand. The stitch is more regular than the hand-sewed stitch and the work much less costly. To accomplish this I have invented an improved sewing machine which I illustrate and describe in order to explain the best method known to me of making my improved hat; but I claim the hat only in this application.

In the accompanying drawings which form a part of this specification Figure 1 shows my improved hat with the leather turned out. Fig. 2 shows my improved hat with the leather turned in. Fig. 3 is an elevation of the machine with the hat and leather in position for sewing. Figs. 4, 5, 6, and 7 are details of the machine.

The machine shown is of the Willcox & Gibbs type but I place on the cloth-plate back of the needle a thin strip which I call the separating plate to hold the hat and leather apart while being sewed and thus secure the desired slack stitch. The thickness of this plate under the needle determines the slack of the stitch which should be about equal to the distance from the edge of the leather to the line of needle-holes in the leather.

Referring to Figs. 3 to 7, A is the needle; B, the separating plate attached to the cloth-plate C; D the leather and D' the hat; E, a slot in the separating plate beneath which is a slot through the cloth-plate to admit the passage of the needle; F F', guide shoulders on the under side of the separating plate; G, a small strip or piece of brass attached to the upper side of the separating plate under the needle to increase the thickness of the plate, and which tapers off as shown at H on the side from which the work is fed; I, the feed-dog, and J the presser-foot. The cloth-plate is flattened off under the separating plate as shown in Fig. 5 to gain space.

The leather is guided by the shoulders F F' and held down by the plate B. The hat is fed forward by the feed-dog and is guided by the operator who keeps the band of the hat, *i. e.*, the line at which the body ends and the rim begins traveling along the inner edge of the presser-foot. The separating plate secures the desired slack. The leather is thus sewed to the hat with a slack stitch running around the hat, the loops of which, constituting the locking of the thread as shown in Fig. 1 lie along the edge of the leather on its under, which is its inner, side or face. The stitch shown is a chain stitch. The needle passes down through the hat-body and leather where the thread is caught by the hook of the machine and is drawn into a loop. The needle is carried back through the insertion and the thread is carried with the needle along the outside of the hat to the next point of insertion. Thus the chain of loops lies along that side of the sweat-leather, herein called the inner side, which is hid from view when the leather is turned into its proper position in the hat. Those parts of the stitch which run parallel to the chain of loops run around the outside of the body of the hat.

When the leather is turned into the hat-body, the locking of the chain under the leather is hid, and nothing is seen from the inside of the hat but the straight threads which lie between it and the leather when the leather is turned out, and which, when the leather is turned in lie near its edge. In this position the slack is taken up and the stitching closely resembles hand work, but being put in by machine is more regular. The

structure however is quite different. In hand-whipped work the thread draws the leather to the hat-body opposite the needle holes, and draws the edge of the leather down upon the hat-body where the thread passes over the edge; for in hand-whipped work, each thread passes from each needle hole in the leather over the edge to the hat-body, and each thread also passes from each needle hole directly into the hat-body; but in my construction, when the leather is turned into place, the stitches interlock on the inner side or back of the leather, and the two branches of each loop lead out of the same needle hole to the outer or front side of the leather, and over the edge to the hat-body. In other words, the thread does not make the circle through the leather and over its edge, and back through the hat-body, though the two threads lie so close together that they look like the one thread in hand-whipped work. As both of the attaching threads from each needle hole lie on the front of the leather they will both exert a tension to hold it firmly in place at its edge and draw down its outer corner, and further, since there is no thread directly between the needle holes and the hat-body, the tension of the two threads on the front tends to draw the leather away from the hat-body at the line of needle holes, and assists in curling or flanging the edge of the leather. This flanging is further assisted by the fact that when the leather is attached it is coiled in a smaller circle than the interior of the hat-body against which it is to lie. It results from all this that the raw edge of the leather is concealed, even better than in hand-whipped stitching, especially if it is beveled in the usual way.

I do not limit myself to any particular style of hat though I have applied my invention to soft fur and wool hats; nor to any particular style of loose stitch though I prefer the chain stitch shown; nor to the use of any particular form of machine; nor even to doing the work by a machine as the hat can be sewed by hand by introducing between hat and leather a strip of paper or card-board to take the place of plate B, the strip being torn out after the sewing is completed.

What I claim, and desire to secure by Letters Patent, is—

1. A hat in which the sweat-leather is attached directly to the hat-body with a stitch which runs around the body on its outer side and around the leather on its inner side and is slack between the body and the leather, so that the leather can be turned in and out without folding on itself, substantially as described.

2. A hat in which the sweat-leather is attached directly to the hat-body with a stitch which runs around the body on its outer side and around the leather on its inner side and is slack between the body and the leather, the slack of the stitch being equal to the distance between the edge of the leather and the line of needle holes therein, so that the leather can be turned in and out without folding on itself, and when turned will take up all the slack of the stitch, substantially as described.

Signed by me, at Yonkers, Westchester county, State of New York, this 15th day of October, 1891.

DAVID HOWELL.

Witnesses:

WM. H. FISHER,
WM. H. SCHULTZ.