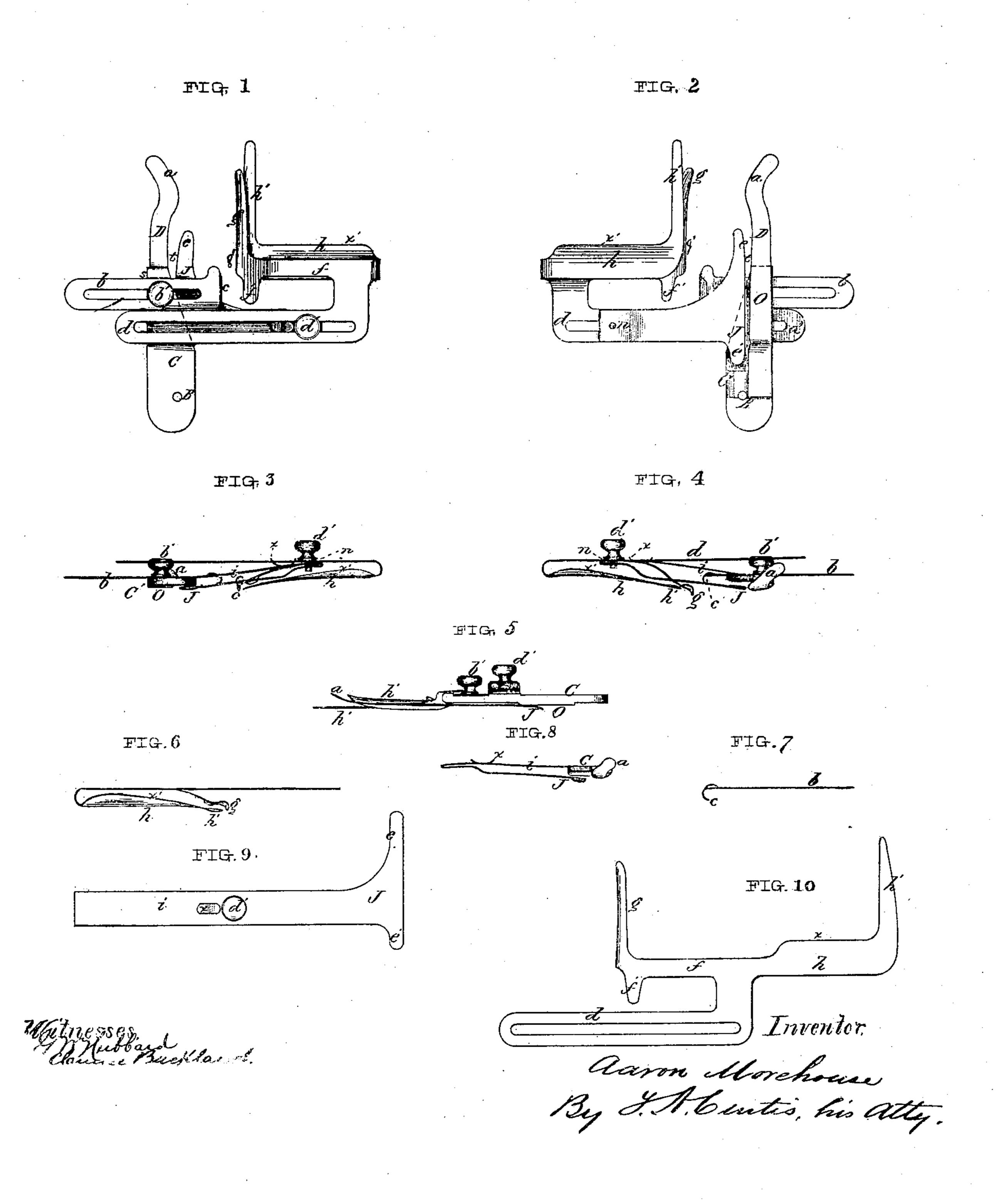
A. MOREHOUSE. TUCKING DEVICE FOR SEWING MACHINES.

No. 110,670.

Patented Jan. 3, 1871.



Anited States Patent Office.

AARON MOREHOUSE, OF HARTFORD, CONNECTICUT.

Letters Patent No. 110,670, dated January 3, 1871.

IMPROVEMENT IN TUCKING DEVICES FOR SEWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, AARON MOREHOUSE, of Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful improved Tucker or Plaiter for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification and to the letters of reference marked thereon, in which—

Figure 1 is a plan view of my invention;

Figure 2 is a reverse plan view of the same;

Figure 3 is an end view;

Figure 4 is an opposite end view;

Figure 5 is a side view;

Figure 6 is a side view of that part of the device which regulates the distance between the tucks or plaits;

Figure 7 is a side view of the gauge which regulates

the width of the tucks or plaits;

Figure 8 is a side view of the spring guide which is attached to the main bar;

Figure 9 is a plan view of the spring gange before

it is bent or doubled; and
Riggre 10 is a plan view of the larger outside gauge

Figure 10 is a plan view of the larger outside gauge before it is bent.

My invention relates to a device to be attached to the presser-foot or presser-bar of a sewing-machine, for folding the cloth while it is being sewed in making tucks or plaits, and is an improvement upon the device for which Letters Patent were granted to Aaron Morehouse and Alfred R. Heath, August 4, 1868, No. 80,653; and

It consists of a short bar of metal, having upon its lower side a guide-swell similar to that shown in the device for which said Letters Patent were granted; and to this bar is attached a spring guide to press the lower parts of the tuck together, to insure the passage of the needle through the entire lower edge of the fold.

The bar has also another piece attached to the under side, which may be termed the presser-guide, and is designed to give direction to the cloth in pressing it over to one side to form the fold.

The bar has a slotted gauge attached thereto, having a turned down or guiding-edge, and which is made adjustable upon the bar by means of a small thumbscrew passing through the slot into a threaded hole in the bar; and to the said bar is also attached a slotted gauge, one part of which is bent nearly together, and the end of each bent part is elongated in a direction at nearly right angles to the slotted part of the gauge, and parallel to the direction of the movement of the cloth through the machine and the inner edge of the upper elongated part is bent down in nearly a vertical direction just inside the inner edge of the lower elongated part.

That others skilled in the art may be able to make and use my invention, I will proceed to describe its construction and the mode of its operation.

In the drawing—

O represents the main bar, which, as represented, is particularly adapted to the Wheeler & Wilson machine, in which a glass presser-foot is used, although it may be arranged to be adapted to any of the machines in market by changing the outer end of the main bar to suit the construction of the presser-foot of any particular machine, and according as the work passes under the needle in different machines, whether in one direction or another, the device may be made as shown in the drawing, or it may be reversed in its arrangement and all its parts placed upon the opposite side of the needle-hole B.

The guide-swell is shown at O, and is precisely similar to and serves the same purpose as that shown in Letters Patent granted to Aaron Morehouse and Alfred R. Heath September 7, 1869, No. 94,628.

The spring guide is shown at J, and is the termination of the piece i which is attached to the bar C, and extends out to one side at about a right angle to the said bar, and is then bent or doubled and extends back to a point underneath the said bar.

At its termination it is widened or extended out into the point e, and this point may be somewhat curved backward so as to leave a little more space between this part of the spring guide J and the presser-guide, which is shown at D, and which is attached by soldering or other convenient method to the bar O.

This presser-guide may be curved near the end, as shown at a, as this form facilitates the passage of the cloth into the space between the guide-swell O and the spring-guide J, and underneath the bar C.

The curved part of this presser-guide, at the end a, presses down upon the cloth passing underneath it sufficiently hard to prevent the edge which is folded from moving or working to one side, the edge of such folded part passing along upon the cloth-plate and against the edge of the curved part a, although there is one thickness of cloth between said part a and the edge of the fold.

The gauge b, having a longitudinal slot therein, and a turned-down edge, c, thereon, is attached to the bar C by means of a small thumb-screw inserted through the slot and into a threaded hole in the bar C, and the bar may be recessed at s to receive the gauge and secure it more firmly in place.

The piece d, having the arms f and h, is attached to the piece i by means of a thumb-screw passing through a longitudinal slot in the piece d and entering a threaded hole at n.

The arm h is bent or doubled underneath the arm f, and upon the extremity of this arm f is an elon-

gated part or projection g, extending at nearly right angles to the arm f, said projection having a turned-down edge, g'; and the end of this projection g may be slightly turned inward and upward to facilitate the passage of the cloth under the same, and, if desirable, a small point, f', bent downward a little, may be used to guide the cloth under the back part of the spring-guide J, or said back part may be widened to accomplish the same result.

The arm h, which is bent underneath the arm f, has an elongated part or projection, h', thereon, extending horizontally at nearly right angles to the arm h, the projection g being just over and its turned-

down edge a little inside the projection h'.

The arm h may be somewhat wider than the arm f, and its outer edge x' may be turned upward a little to permit the cloth to pass freely under the said arm h.

A small piece, x, may be attached to the piece i, which piece x being raised somewhat enters the longitudinal slot in the piece d, and prevents any side or

swaying movement of the gauge or piece d.

A small point or projection, c', may be formed upon the guage b, which point may be turned upward slightly that the cloth may pass freely through said gauge b, although this is not necessary for the successful operation of the gauge.

The operation of the device is as follows:

The device is attached to the presser-foot or presser-bar of the machine, and the cloth is gathered somewhat loosely and passed into the slot t between the presser-guide D and the spring-guide J, and as the cloth passes in it is folded together, and aided by the presser-guide D and the side of the bar C, shown in dotted lines in figs. 1 and 2, the fold is turned over into a horizontal position and passes underneath and against the turned-down edge of the guide b.

The spring guide J keeps the lower part of the fold up against the guide-swell O, so that the needle passes through the lower part of both sides of the fold.

The fold which has been previously sewed is passed in between the arms f and h and their projections g and h', the latter pressing the fold up against the turned-down edge of the part g, shown at g', which turned-down edge also presses down against the lower

edge of the fold which is passing between the two arms f and h.

It will be perceived that the cloth or the main body of the cloth passes along in contact with the cloth-plate of the machine, while only each separate fold passes between the two arms f and h.

A small swell or curved point may be placed nearer the slot t, its edge raised a little and similar to the part a, if desirable, to still further assist in folding over the cloth as it passes through said slot.

I am aware that various tuckers and plaiters have been used heretofore, as shown in the before-mentioned Letters Patent and others, and I do not claim the same, nor any part thereof, irrespective of my construction and arrangement of the same; but having described my invention,

What I do claim as new, and desire to secure by

Letters Patent, is—

1. The presser-guide D, when attached to and used in connection with the main bar C, having the guideswell O thereon, and having the spring guide J attached thereto, substantially as herein described.

2. The same in connection with the adjustable gauge b, constructed and operating substantially as

specified.

3. The combination of the main bar C, presserguide D, spring guide J, gauge b, and gauge d, all constructed and operating substantially as set forth.

- 4. The adjustable gauge d, having the arms f and h thereon, and formed so that the sewed tuck or plait may pass between and in contact with said arms, and be guided in its passage by the edge g, while the main body of cloth passes underneath both said arms and upon the cloth-plate of the machine, substantially as described.
- 5. Devices substantially as described, and attached wholly to the presser-foot or presser-bar, whereby the fold in the fabric is gauged or measured, folded, and sewed simultaneously, and the cloth-plate is left entirely free, substantially as set forth.

 AARON MOREHOUSE.

Witnesses:

ROSOSWELL F. BLODGETT, C. H. COOLEY.