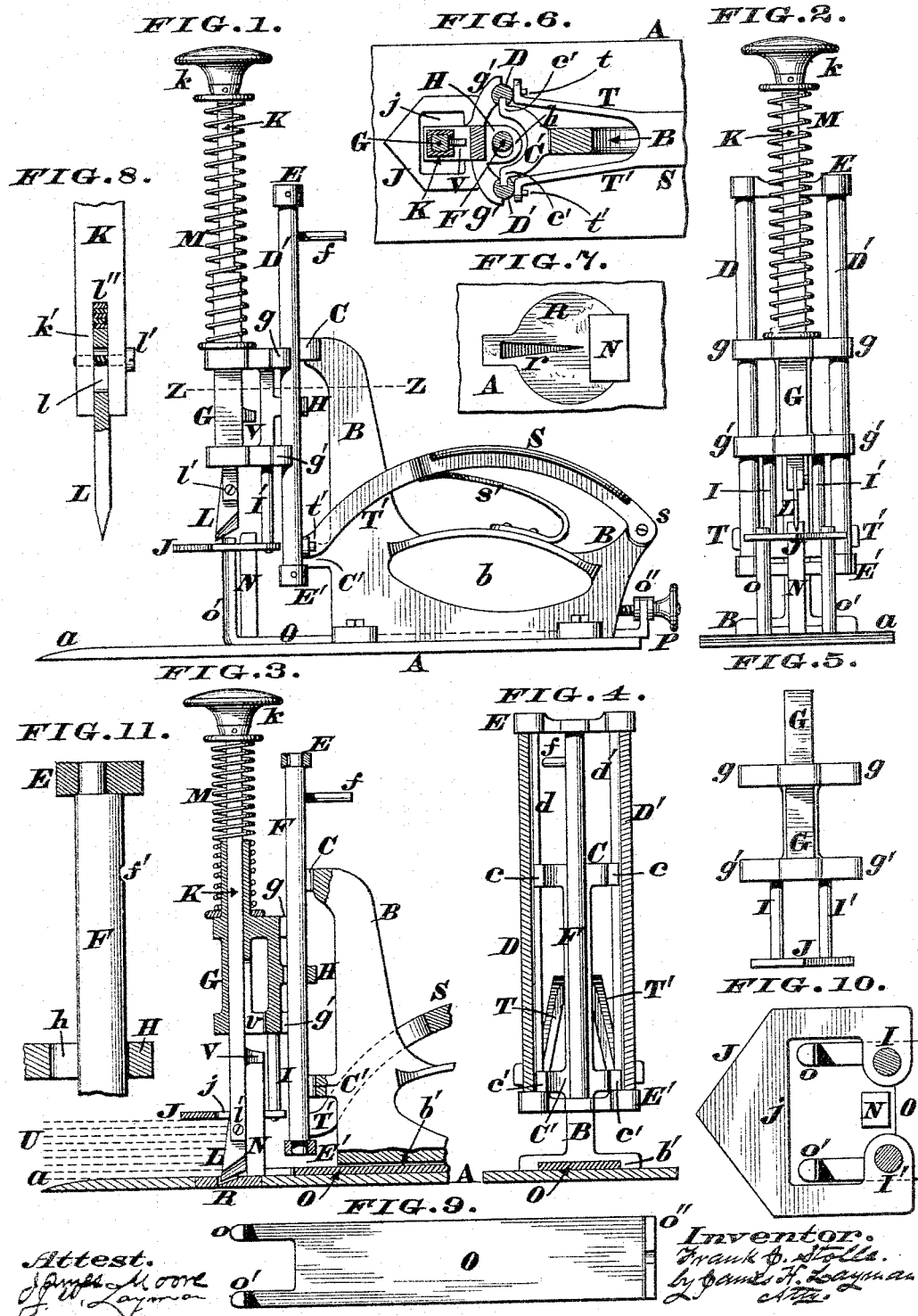


(No Model.)

F. J. STOLLE.
CLOTH NOTCHER.

No. 491,253.

Patented Feb. 7, 1893.



UNITED STATES PATENT OFFICE.

FRANK J. STOLLE, OF CINCINNATI, OHIO.

CLOTH-NOTCHER.

SPECIFICATION forming part of Letters Patent No. 491,253, dated February 7, 1893.

Application filed September 5, 1892. Serial No. 445,095. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. STOLLE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Cloth-Notchers; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the annexed drawings, which form part of this specification.

My invention comprises a cheap, simple and handy implement wherewith a number of pieces or "cuts" of garments can be readily notched at suitable intervals to enable the various parts being finally put together exactly as intended by the designer, the peculiar construction of said implement and the method of operating it being hereinafter more fully described.

In the annexed drawings,—Figure 1—is a side elevation of a cloth notcher, embodying my invention. Fig. 2—is a front elevation of the same. Fig. 3—is a vertical section of the operative parts of the implement taken in the plane of the knife. Fig. 4—is a vertical section of the reciprocating frame and its accessories. Fig. 5—is a front elevation of the presser foot carrier detached from said frame. Fig. 6—is a horizontal section of the implement taken at the line Z—Z of Fig. 1. Fig. 7—is a plan of a soft metal disk that admits the point of the knife. Fig. 8—shows the devices for adjusting said knife. Fig. 9—is a plan of the cloth-gage detached from the implement. Fig. 10—is an enlarged plan of the presser-foot and its accessories. Fig. 11—is an enlarged elevation of the upper portion of the locking bar of the vertically-reciprocating frame.

A.—represents a cloth-plate, the front end of which, *a*, is chamfered off so as to readily slip under the goods or "cuts" to be notched. B.—is a standard projecting vertically from this cloth-plate and having a longitudinal slot *b*, of such a size and shape as to readily admit the operator's fingers. C. C',—are brackets projecting laterally from the front of this standard, and provided at their ends with guides *c. c. c'. c'*, that enter longitudinal grooves *d. d'*, in the inner edges of vertical side-bars D. D', the ends of these bars being

rigidly secured to cross pieces E. E', as more clearly seen in Fig. 4. Situated between these bars, and parallel therewith is a locking bar F, having either a lever *f*, as seen in Figs. 1, 3 and 4, or provided with a hole *f'*, as represented in Fig. 11, to admit a pointed tool capable of turning said bar either to the right or left. Furthermore this bar is journaled eccentrically in the cross pieces E. E', for a purpose that will presently appear (see Fig. 11). These parts, D. D', E. E', and F, constitute what I term the vertically-reciprocating frame, because it travels up and down every time the implement is operated.

G.—is a tubular attachment having a pair of upper bearings *g. g.* and a pair of lower bearings *g'. g'*, which devices are adapted to travel along the side bars D. D', as seen in Fig. 2. Projecting rearwardly from this attachment is a lug H. perforated at *h*, as seen in Fig. 11, to admit the locking-bar F. I. I'.—are rods extending down from said attachment and having the presser-foot J. secured to them, the latter having an opening *j*, made in it, as seen in Fig. 10. These devices G. H. I. I', will hereinafter be designated as the presser-foot carrier. The tubular part G. of this presser-foot carrier is traversed by a vertically reciprocating plunger K, having at top a button *k*, and at bottom a slot *k'*, to admit a pointed knife or cutter L. *l*.—is a slot in this knife to permit its vertical adjustment, after which act said knife is clamped in place by a tightening screw *l'*.

l''.—are filling pieces that may be inserted between the knife and the upper end of slot *k'*, to prevent said knife working up by constant use.

M.—is a spring coiled around the plunger K, and serving to retain it in a normal or elevated position.

N.—is a vertical post against which the back of the knife bears, while the pieces of goods are being notched.

O. O', are stop pins projecting vertically from the front of a gage-plate O, that slides within a longitudinal slot *b'*, at the base of standard B, as seen in Fig. 3, the rear end of said plate being turned up at *o''*, and adapted to receive a set screw P.

R.—is a soft metal disk let into the plate A,

and having a pit *r*, to receive the point of the knife.

S.—is a handle pivoted at its rear end *s*, to the standard B, and maintained in a normal or elevated position by a spring *s'*, the front portion of said handle being forked at T. T', to clear the sides of said standard. *t. t'*—are pins or screws that couple said forks to the lower ends of side-bars D. D'.

10 The dotted lines, U in Fig. 3 represent a "cut" of patterns or garments resting upon the cloth-plate and notched by the knife.

V.—is a stop projecting from the back of plunger L, and *v*, is a vertical slot in the presser-foot carrier for this stop to traverse when said plunger is elevated.

The method of using my notching implement is as follows: The bar F, is first turned in its bearings E. E', so as to liberate the presser-foot carrier G, and thus allow the latter to be adjusted either up or down to enable the "cut" or pack of pieces U, to readily enter between the plate A. and foot J, after which act, said bar is turned back, thereby locking said carrier to the frame D. D'. E. E', it being understood that the latter is now elevated by the spring *s'* and the bar E', brought in contact with the lower bracket C', as seen in Fig. 1. The next step consists in properly adjusting the stops *o. o'*, which adjustment is accomplished by turning the screw P, the gage-plate O, being advanced for a shallow notch, while a retraction of said plate affords a deeper notch in the goods. The implement is now presented to the edge of the "cut," which readily slides upon the cloth-plate A, because its advancing end is chamfered off at *a*, and then the handle S. is grasped and pressed down with some degree of firmness. Consequently the reciprocating frame D. D' E. E', is forced down, and with it the carrier G. and its attachments, the result being to tightly clamp the "cut" between the presser-foot and cloth-plate, as indicated by dotted lines in Fig. 3. A quick blow with the hand is then given to the button or knob *k*, so as to drive down the plunger K, until it is arrested by the stop V. coming in contact with the post N. This act causes the knife L, to notch the entire "cut" from top to bottom at a single stroke, the plunger being immediately restored to its normal position by the spring M. The operator then quits his grasp of the handle S, thereby permitting the spring *s'* to elevate the frame D. D' E. E', carrier G. and presser-foot J. The implement is now withdrawn from the "cut," reapplied to it in another place, and the above described operations are repeated as often as may be necessary.

From this description it is evident my implement will cut through any reasonable thickness of cloth or other similar material, and will hold it immovably in place while the notch is being made. It is also evident that by providing the plate A, with a sharpened or

beveled end *a*, the device can be readily slipped in under the cut, thereby preventing any derangement of the various pieces of cloth.

By making the tube G. and plunger K. square in transverse section, as seen in Fig. 6, there is no danger of said plunger twisting around and throwing the knife out of line with the pit *r*.

Finally, in this specification where the word "cut" appears, it is to be understood as referring to a number of pieces of cloth, or other pliable materials, which have first been temporarily fastened together and then reduced to a proper shape to form certain parts of garments, &c.

I claim as my invention:

1. The combination in a cloth-notcher, of a cloth-plate, a standard projecting therefrom, a vertically reciprocating frame applied to said standard, a handle coupled at its opposite ends to said standard and frame, a spring for restoring said frame to its normal position, a vertically adjustable carrier applied to said frame and provided with a presser-foot, a reciprocating plunger traversing said carrier, and a knife secured to this plunger, for the purpose described.

2. The combination in a cloth-notcher of a vertically reciprocating frame, an adjustable presser-foot carrier capable of being locked to said frame, a plunger traversing said carrier, and a knife secured to this plunger, for the purpose described.

3. The combination, in a cloth-notcher, of a vertically reciprocating frame having a locking-bar journaled eccentrically therein, a presser-foot carrier having a perforated lug traversed by said locking-bar a plunger traversing said carrier, and a knife secured to said plunger, for the purpose described.

4. The combination, in a cloth-notcher, of a cloth-plate, a standard projecting therefrom, and carrying the cutting appliances, a longitudinal groove in the base of said standard, and a shiftable gage-plate inserted within said groove, the front end of said plate being provided with a pair of stops, and its rear end being turned up and having an adjusting screw applied to it, all as herein described, and for the purpose set forth.

5. The combination, in a cloth-notcher, of a standard, carrying the cutting appliances and a plunger, and a guiding post in front of and independent of said standard, which post serves as a bearing for the back of said plunger only when the latter is depressed, all as herein described, and for the purpose set forth.

6. The combination, in a cloth-notcher, of a standard B. having a pair of brackets C. C', with guides *c. c. c' c'* at their ends, the side-bars D. D', united at top and bottom and provided with longitudinal grooves *d. d'*, traversed by said guides *c. c. c' c'*, a handle S pivoted to said standard at *s*, a pair of forks T. T', branching from said handle and coupled

to said side-bars at t , t' , and a spring s' , that elevates said handle and bars, substantially as described.

7. The combination, in a cloth-notcher, of
5 the vertically-adjustable carrier G provided with a presser-foot J having an opening j in it, a fixed post N projecting upwardly from the cloth-plate of the implement and traversing the rear of this opening j , and a gage-plate
10 O, capable of being shifted longitudinally of said cloth-plate and having at its front end a pair of vertical stops o , o' , that traverse the sides of said opening j , all as herein described, and for the purpose stated.

15 8. The combination, in a cloth-notcher, of a

cloth-plate, a standard projecting therefrom, a reciprocating frame applied to said standard, an adjustable carrier applied to said frame, and provided with a presser foot, a reciprocating plunger traversing said carrier, 20 and a knife secured to this plunger, substantially as herein described, and for the purpose set forth.

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

FRANK J. STOLLE.

Witnesses:

JAMES H. LAYMAN,
ARTHUR MOORE.