

No. 844,574.

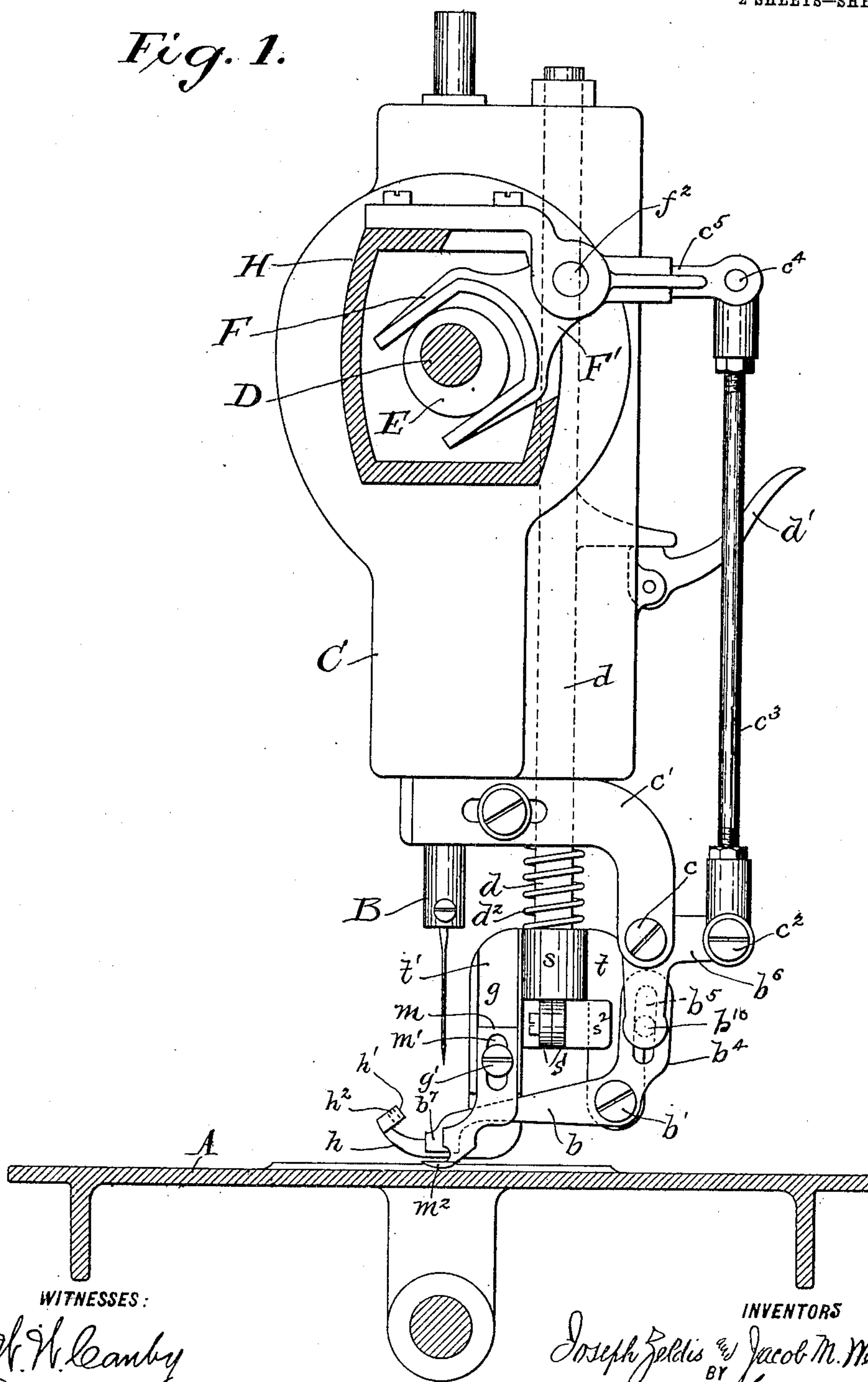
PATENTED FEB. 19, 1907.

J. ZELDIS & J. M. WEBER.  
TRIMMING ATTACHMENT FOR SEWING MACHINES.

APPLICATION FILED SEPT. 6, 1904.

2 SHEETS—SHEET 1.

*Fig. 1.*



WITNESSES:

*W. H. Canby*  
*A. M. Biddle*

INVENTORS

*Joseph Zeldis & Jacob M. Weber*  
BY

*W. H. Canby*  
ATTORNEY.

No. 844,574.

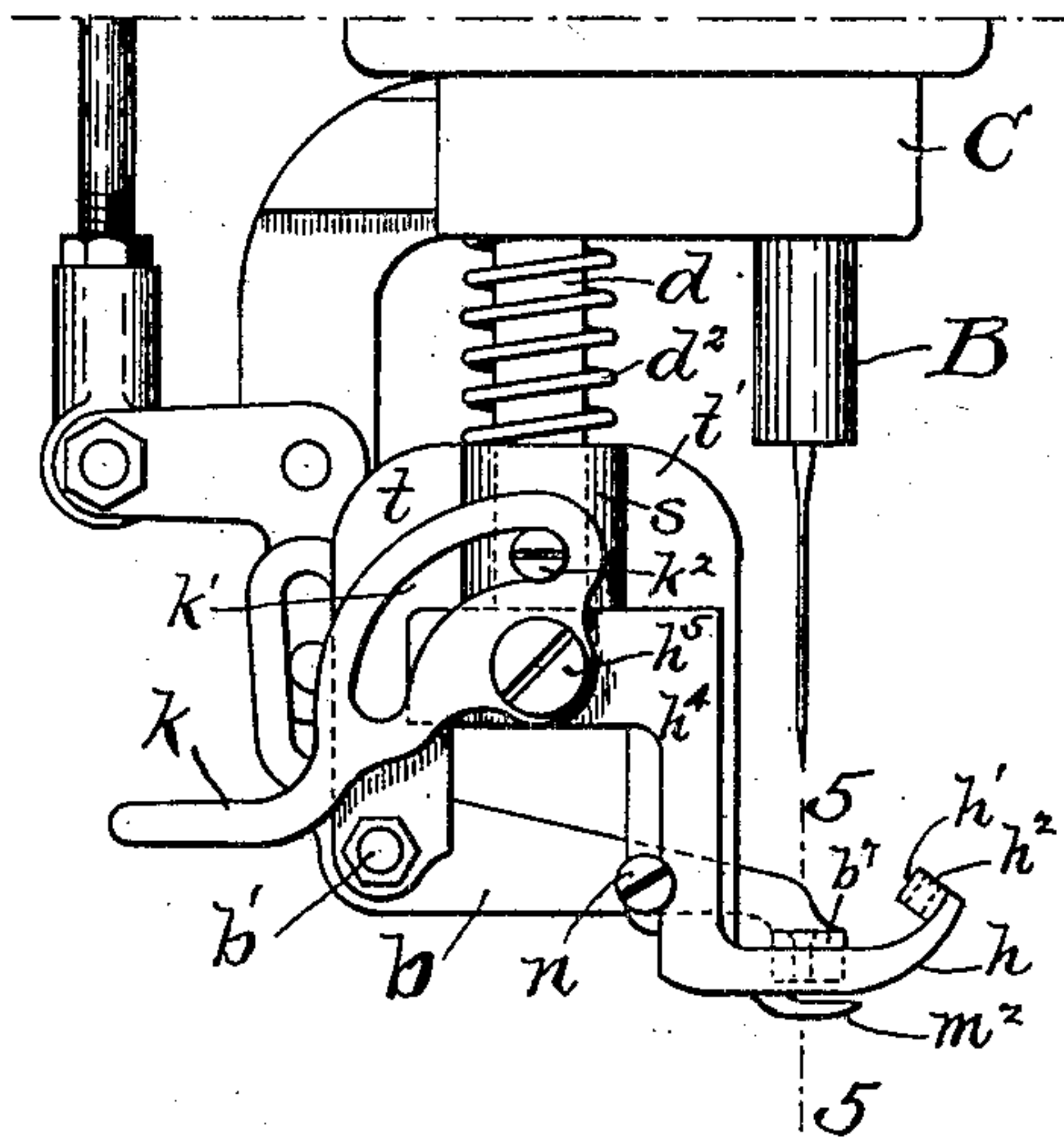
PATENTED FEB. 19, 1907.

J. ZELDIS & J. M. WEBER.  
TRIMMING ATTACHMENT FOR SEWING MACHINES.

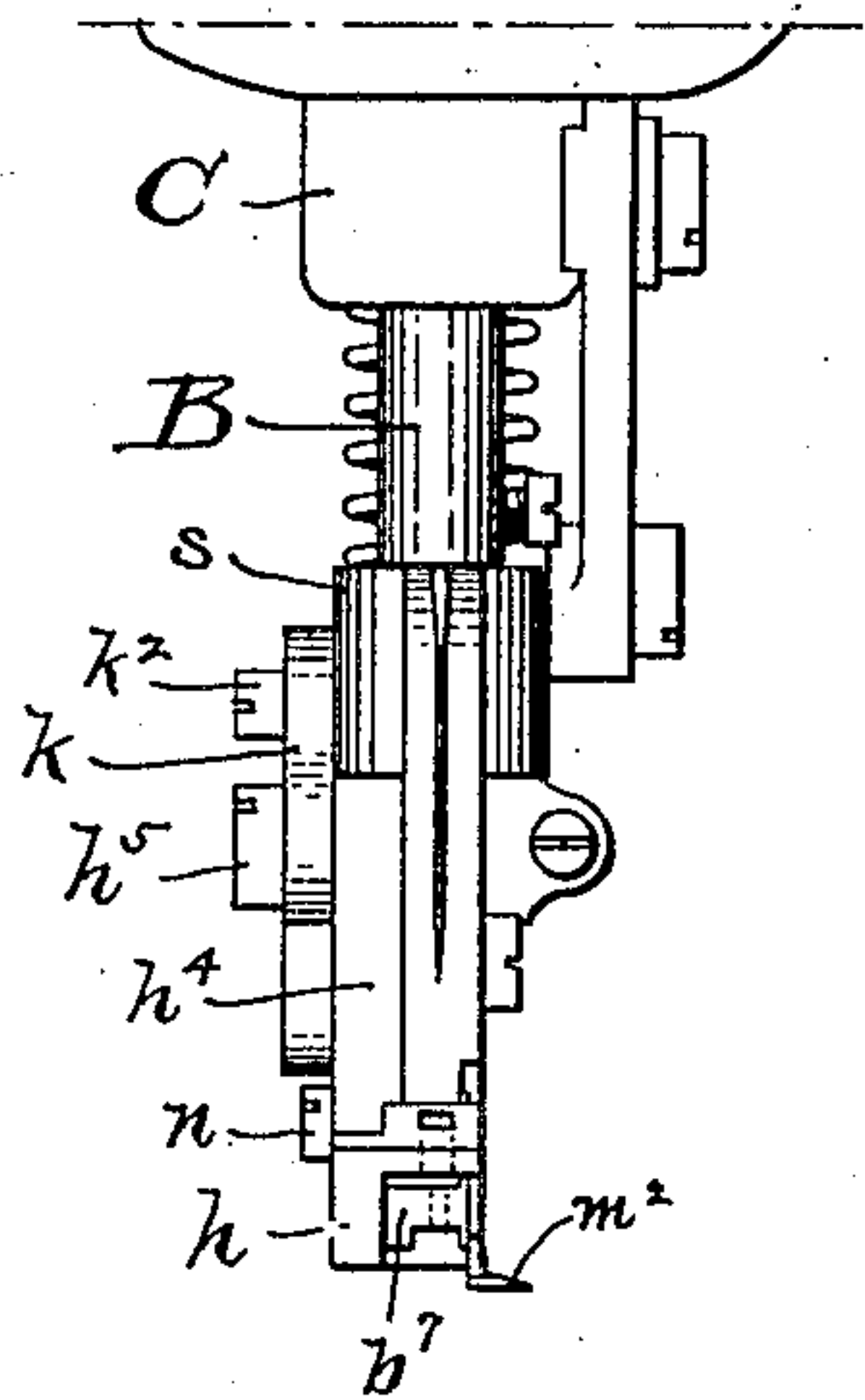
APPLICATION FILED SEPT. 6, 1904.

2 SHEETS—SHEET 2.

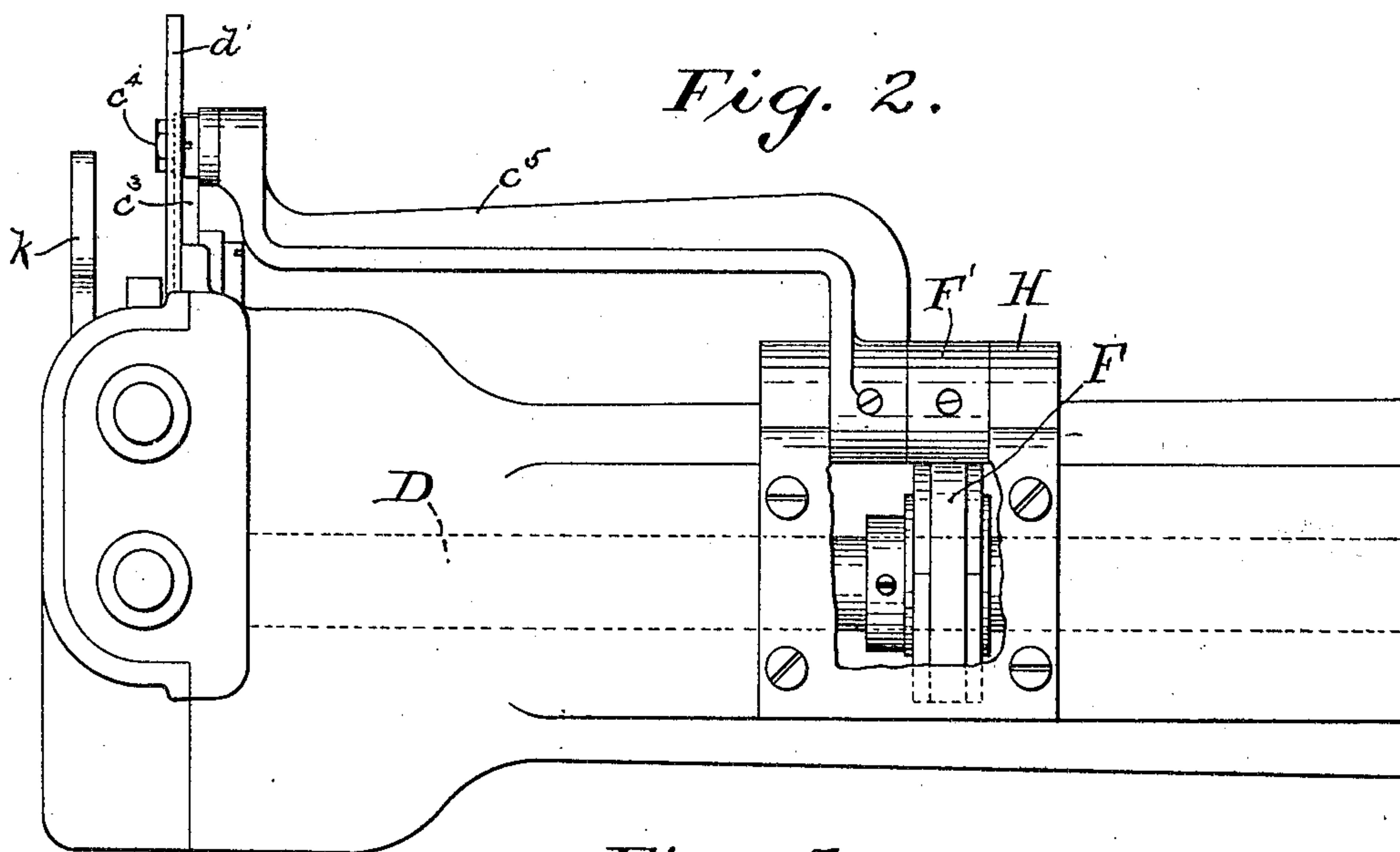
*Fig. 3.*



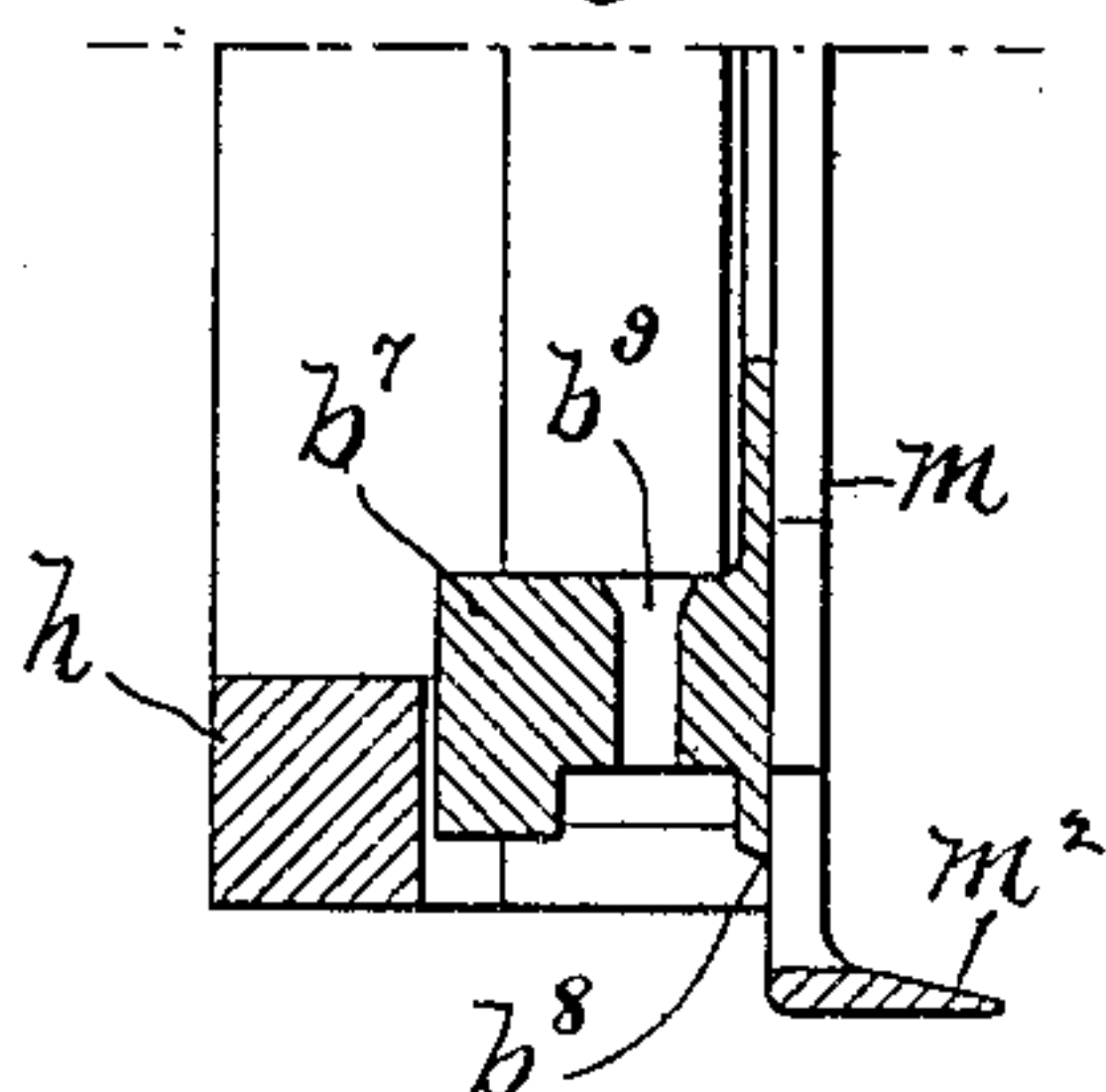
*Fig. 4.*



*Fig. 2.*



*Fig. 5.*



**WITNESSES:**

W. H. Canby  
A. M. Kidd

**INVENTOR**

INVENTOR  
Joseph Zeldis & Jacob M. Weber  
BY  
A. V. Hutton  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

JOSEPH ZELDIS AND JACOB M. WEBER, OF PHILADELPHIA, PENNSYLVANIA,  
ASSIGNORS TO LEICESTER AND CONTINENTAL MILLS COMPANY, OF GER-  
MANTOWN, PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF NEW  
JERSEY.

## TRIMMING ATTACHMENT FOR SEWING-MACHINES.

No. 844,574.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed September 6, 1904. Serial No. 223,325.

*To all whom it may concern:*

Be it known that we, JOSEPH ZELDIS, a sub-  
ject of the Czar of Russia, and JACOB M. WE-  
BER, a citizen of the United States, both re-  
siding in the city of Philadelphia, State of  
Pennsylvania, have jointly invented certain  
new and useful Improvements in Trimming  
Attachments for Sewing-Machines, of which  
the following is a full, clear, and exact de-  
scription, reference being had to the accom-  
panying drawings, forming a part of this  
specification.

Our invention relates to sewing-machines  
of the class adapted for the production of ap-  
pliqué work—that is to say, an ornamental  
superposed ply of other fabric cut or trimmed  
to a pattern while being stitched to and upon  
the surface of the main or body fabric; and  
our invention has for its objects the provi-  
sion of improved cutting or trimming devices  
and means for mounting and operating the  
same; also, in improved means for mounting  
and operating the presser-foot device in coac-  
tion with the cutting mechanism; also, in  
means for feeding a braid to the surface of  
the upper ply and along the trimmed edge  
thereof as it is being trimmed and stitched to  
the lower or body fabric.

To these ends our invention consists of the  
elements and their combination hereinafter-  
described and claimed.

Figure 1 is an end elevation of the machine,  
partly in section as respects the cam mechan-  
ism on the power-shaft of the machine to op-  
erate the cutting device and in side elevation  
as to the needle-bar, the presser-foot and its  
supporting devices, the cutting mechanism,  
and the means for supporting and operating  
it. Fig. 2 is a plan view from the top of the  
machine of a portion of the power-shaft, the  
cam mechanism thereon, and the connecting  
actuating devices for the upper cutting-  
blade which is actuated by the main power-  
shaft of the machine through said cam. Fig.  
3 is a side elevation (from the other side of  
that shown in Fig. 1) of the cutting device  
and its supporting and actuating mechan-  
ism, showing also the needle-bar and its rela-  
tion to the braid feed and guide, the presser-  
foot, and its supporting devices. Fig. 4 is a  
front view of the parts shown in Fig. 3; and

Fig. 5 is an enlarged section, detached, on the  
line 5 5 of Fig. 3.

In the several figures the presser-foot is  
shown in elevated position and the cutting  
mechanism in downward position in order  
that the several parts may be seen in the sev-  
eral side elevations.

The principle of construction involved in  
the mechanism described will be seen from  
the drawings and said description to be, first,  
the provision and mounting of a pair of cut-  
ting-blades like a pair of shears, with this  
modification, that the lower cutting member  
is operatively stationary over the lower ply  
of fabric, is suspended over it, and passes be-  
neath the upper ply, while the upper cutting  
member consists of a blade on the end of a  
lever which is rocked to produce a shear-like  
movement of the blade relatively to the  
lower and operatively-stationary blade and  
relatively to the upper ply of fabric drawn  
between the two by the feed mechanism,  
means being provided to guide the upper cut-  
ting-blade relatively to the lower blade and  
to the presser-foot in its rocking shear-like  
movements; next, the provision of cam  
mechanism directly on the main power-shaft  
of the machine, which, through appropriate  
connecting devices, rocks a bell-crank lever  
carrying on its end the upper cutting shear-  
blade in unison of time with the stitch-form-  
ing and feeding devices; next, the provision  
of means as part of the presser-foot device  
and also as part of the cutting device to feed  
and guide, respectively, a narrow braid to  
the sewing mechanism and to the upper sur-  
face of the upper ply and along the trimmed  
edge thereof as it is being trimmed, whereby  
it is simultaneously stitched in such super-  
posed edge position over the upper ply of  
fabric, the mechanism effecting that function  
being the braid-feed on the end of the presser-  
foot and a coacting specific form of head end  
on the upper cutting-blade, which takes the  
braid from the presser-foot feed-head and  
guides it to the trimmed edge of the upper  
ply of fabric and in the path of the descend-  
ing needle; next, and finally, the provision  
of a single supporting means for the two  
blades of the cutting device, which is slid-  
ingly mounted on the same bar which resili-



ently carries the presser-foot, so that these elements are always held and guided in operative alinement, not only as respects the two blades relatively to each other, but both of them relatively to the presser-foot, and so that the cutting mechanism can be thrown out of action (for ordinary sewing, for example) without lifting the presser-foot into inoperative position and so as also that both devices may be lifted simultaneously from the work by a single lever when desired.

We will now describe the mechanism by reference to the drawings. The main portions of the machine proper are well known in the art and need not be described nor referred to except in so far as they form connecting elements to which our improvements are attached.

Referring to the drawings, A is the bed-plate or work-support; B, the needle-bar and needle; C, the overhanging arm, in which the needle-bar and the presser-foot bar  $d$  are supported and reciprocated, the needle-bar being reciprocated by the usual power-arm and the presser-foot being lifted and lowered by the lever  $d'$  against a spring  $d^2$ , which tends to keep the presser-foot  $h$  normally down upon the work-support.

The upper-ply-trimming mechanism consists, essentially, of a lower blade  $m$ , (see Fig. 1,) which is adjustably mounted on an arm  $t'$  of the housing or frame hereinafter described. It is lifted and lowered to the work by two independent means—namely, by raising or lowering of the housing (through the presser-foot-supporting bar  $d$ ) by means of the presser-foot lever  $d'$  actuating the bar  $d$ ; but it is independently raised and lowered from the work by the slotted lever  $k$  (see Fig. 3) hereinafter described. Normally it is suspended immediately over the lower ply of fabric when the presser-foot is down, and therefore passes under the upper ply of fabric. It is operatively stationary during the trimming operation and forms one member of a shear-like cutting device. The upper cutting member consists of a blade edge  $b^3$ , Fig. 5, formed on the end of the bell-crank lever  $b$ , Fig. 1, which said lever is pivotally mounted on the opposite arm  $t$  of said housing or frame and actuated in such manner, hereinafter described, as to rock the lever  $b$  and give an up-and-down shearing-blade action to this upper cutting member on the upper surface of the upper ply and relatively to the lower and operatively-stationary lower member, which is suspended over the lower ply and beneath the upper ply.

The rocking movement of the lever  $b$  is guided in parallelism with the lower cutting member and with the presser-foot by means such as screw  $n$ , (Fig. 3,) let into the lever  $b$ , a segmental edge of the screw-head overlapping the presser-foot arm  $h^4$ . The means for mounting these cutting members whereby

this mode of operation is effected is as follows: The cutting mechanism and the presser-foot are respectively mounted in a housing or frame and on the end of a bar  $d$  on which said frame is slidably supported independently of each other, but are mounted so far independently of each other that both together may be lifted and lowered vertically from and to the work-support by raising and lowering said bar  $d$ , actuated by the lever  $d'$ , and the cutting mechanism alone may be raised and lowered by means of the segmentally-slotted lever  $k$ , pivotally mounted on said bar  $d$ , and a pin  $k^2$  on said frame, whereby the latter is slidably raised on said bar. This housing or frame consists of a pair of plate-like arms  $t t'$ , united to and on each side of a centrally-disposed tubular journal-head  $s$ , through which the presser-foot bar  $d$  passes and upon the upper end of which the spring  $d^2$ , encircling the foot-bar  $d$ , rests. The lower end of the bar  $d$  projects through the tubular journal-head  $s$ , and upon said projecting end the upper part of the arm  $h^4$  of the presser-foot  $h$  is fastened by the screw  $h^5$  (see Fig. 3) upon one side and on the other side by the clamps  $s' s'$ . (See Fig. 1.) One of these clamps has a projecting portion  $s^2$ , which overlaps the arm  $t$  of the housing and acts more or less to guide the housing when the latter is raised and lowered slidably on the presser-foot-supporting bar  $d$ . The frame  $t t'$  is to have a vertical reciprocatory movement on the presser-foot bar  $d$  independent of a like movement of the presser-foot with the said frame, and to effect this independent vertical reciprocatory movement of the frame  $t t'$  on the presser-foot bar  $d$  (see Fig. 3) the slotted lever  $k$  is pivotally mounted by the screw  $h^5$  on the projecting end of the bar  $d$  and has a curved slot  $k'$  co-acting with the set-screw  $k^2$  in the wall of the tubular journal-head  $s$ . The frame  $t t'$  may therefore be slidably raised and lowered on the presser-foot-supporting bar  $d$  independently of the raising and lowering of the presser-foot bar, and both it and the cutting device may be raised and lowered together by the lifting of said rod  $d$  through the lever  $d'$ , Fig. 1. The independent movement of the frame  $t t'$  through the slotted lever  $k$  is provided in order to independently raise and lower the cutting mechanism. The cutting mechanism itself—namely, the cutting-blades, both upper and lower—are mounted upon the opposite side of the said frame, (see Fig. 1,) as will now be described. The arm  $t'$  of said frame is grooved at  $g$  in order to adjustably support therein the lower member  $m$  of the cutting mechanism. That member at its lower end is provided with a sharpened upwardly-facing cutting edge on a horizontally-projecting portion  $m^2$  and at its other end is slotted at  $m'$  and secured, through the slot, by a set-screw  $g'$  passing



into the arm  $t'$  of the aforesaid housing or frame. The other arm  $t$  of said frame supports the upper member  $b$  of the cutting mechanism. Said member  $b$  is essentially a rocking lever, shown as a bell-crank lever, pivotally mounted by screw  $b'$  on the lower end of the arm  $t$ , and has a rocking motion imparted to it, through its upwardly-extending end  $b^4$ , by means of the rocking mechanism presently to be described. In order to enable this upper cutting member to be raised and lowered when the raising-and-lowering lever  $k$ , Fig. 3, acts on the housing or frame, the arm  $b^4$  is slotted at  $b^5$ , Fig. 1, to receive a connecting actuating-pin  $b^{10}$ , carried by the link  $b^6$  of the rocking mechanism.

At its extreme forward end the upper blade member  $b$  is provided at its blade end with a head  $b^7$ . (Shown in Figs. 3 and 4 and in enlarged section in Fig. 5.) It has a downwardly-facing cutting edge  $b^8$ . For the purpose of trimming the upper ply nothing of the head end  $b^7$  but its cutting edge  $b^8$ , Fig. 5, is essential; but for the purpose of guiding a braid to the trimmed edge of the upper ply, as hereinafter fully described, it is formed with said enlarged head  $b^7$ , which is slotted on the under face for the passage of the braid and is vertically bored at  $b^9$  to form a needle-throat for the needle to reciprocate through.

The mechanism to rock the lever  $b$ , carrying on its end the cutting-head  $b^7$  and constituting the upper cutting member, will now be described.

The actuating-link  $b^6$  of the lever  $b$  is pivotally hung centrally by the screw-pin  $c$  on the end of curved arm  $c'$ , which is secured upon the end of the overhanging arm C. The lower end of the link  $b^6$  carries an actuating-pin  $b^{10}$ , playing in slot  $b^5$  in the portion  $b^4$  of the lever  $b$ , while the free end of the link  $b^6$  is pivotally connected at  $c^2$  to the lower end of the lever-actuating rod  $c^3$ , and the upper end of the latter is connected in like manner at  $c^4$  to the actuating-arm  $c^5$ , which is driven by the cam mechanism, to be described, mounted on the power-shaft D of the machine. (See plan view, Fig. 2.) These latter means for imparting a rocking motion to the upper cutting member  $b$  through the medium of a cam, we consider a most important part of the improvement, as the motion is imparted positively and directly from the power-shaft of the machine and necessarily in unison of time with the motions of the switch-forming and cloth-feeding elements. In the plan view, Fig. 2, it will be seen that the cam E, Fig. 1, is mounted fast upon the power-shaft D, and surrounding said cam is the forked lever F, having its shank  $F'$  journaled on a rod  $f^2$  in a housing H, fast on the machine-frame and surrounding the power-shaft D. On the same rod  $f^2$  is journaled the hub end of an actuating-arm  $c^5$ . A reciprocating rotary mo-

tion of the rod  $f^2$  through the cam will impart the required like motion to the hub end of the actuating-arm  $c^5$ . The opposite and lower end of this arm  $c^5$  is fastened by a pivot-pin  $c^4$  to the upper end of the upright actuating-arm  $c^3$ , which latter, being pivotally connected at  $c^2$ , as aforesaid, with slotted link  $b^6$ , rocks the pivotally-mounted bell-crank lever  $b$ , carrying the upper cutting-blade, as before described.

In these devices it is frequently desirable to feed a narrow braid to be superposed upon and along the trimmed edge of the upper ply of material which is to be trimmed and stitched to the under fabric. Usually such narrow braid, first mentioned, is fed to the work by a guide-arm depending from the overhanging arm C; but such feed or guide is inefficient for the purpose, and practically so without other means to guide the braid, because it is usually essential that the braid be fed to the trimmed edge, and not elsewhere, of the upper ply and in the path of the stitch-forming needle. Our means for effecting this result consists of two coacting elements, namely: We dispense with the usual guide-arm aforesaid, depending from the overhanging arm of the machine, heretofore employed for this purpose, and in its place we provide a small projection  $h'$ , upwardly and inwardly inclined on the extreme end of the presser-foot  $h$ , and bore through this projection an opening  $h^2$ , (indicated by the dotted lines in Figs. 1 and 3,) said opening performing the function of the narrow braid-guide referred to. It feeds the braid toward and in parallelism with the stitch-forming needle, from whence it is led to the second and coacting element, which guides it with absolute certainty to the needle and along the edge of the trimmed upper ply. This element is as follows, namely: On the end of the upper cutting-blade  $b$  there is an enlarged head  $b^7$ , (see Fig. 5,) which is recessed on its under face to provide a guiding passage-way for the braid delivered from the presser-foot head  $h$  before mentioned, and the inner wall of this recess is sharpened to form a downwardly-facing cutting-blade  $b^8$ . The head  $b^7$  of this cutting member is perforated vertically, as at  $b^9$ , to provide a needle throat or passage for the reciprocating needle. Hence, as is obvious, the braid is necessarily fed truly and with certainty, not only along the trimmed edge of the upper ply, as the trimming proceeds, but delivered with equal accuracy in alinement to and with the needle of the stitch-forming mechanism.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a machine for stitching together layers of material and trimming the upper ply in pattern, comprising stitch-forming mechanism and a vertically-adjustable and spring-



controlled presser-foot bar, of a frame slid-  
 ingly mounted on said bar, a trimming  
 mechanism mounted on said sliding frame,  
 and operating shear like on the upper ply of  
 5 fabric fed between its blades, with means to  
 vertically adjust said frame to bring the  
 trimming mechanism into and out of oper-  
 ative position, said trimming mechanism  
 consisting of an operatively-stationary  
 10 lower cutting-blade, and a cooperating upper  
 cutting member consisting of a bell-crank  
 lever pivotally mounted on said sliding frame  
 and carrying a blade edge, actuating means  
 independent of the stitch-forming mechan-  
 15 ism to rock said lever-blade directly from the  
 main shaft of the machine, and guiding de-  
 vices to prevent lateral movement of said  
 lever during its rocking movements and  
 maintain said blades in operative shear-like  
 20 relation.

2. In a machine of the class described, a  
 cutting mechanism for trimming an upper  
 ply lying on an under ply, consisting of a  
 lower blade member sharpened on its upper  
 25 side and having a sidewise-projecting portion  
 and adapted to run in the space between the  
 plies, means to yieldingly support said mem-  
 ber operatively stationary, and an upper  
 blade member mounted on the same support  
 30 and adapted to cooperate as a shear-blade  
 relatively to said lower member, a pivotally-  
 mounted lever carrying said upper blade,  
 means independent of the stitch-forming  
 mechanism to rock said lever, and means be-  
 35 tween the two blade members operating to  
 maintain the rocking member in a vertical  
 plane parallel with the lower blade member.

3. In a machine of the class described, a  
 trimming mechanism comprising, in combi-  
 40 nation, a vertically-disposed rod depending  
 from the overhanging arm of the machine, a  
 housing or frame mounted slidingly on said  
 rod, a presser-foot mounted on the end of  
 said rod which projects through the housing,  
 45 a spring encircling the rod above the housing,  
 a lever fulcrumed on said overhanging arm,  
 operating to simultaneously raise and lower  
 both the presser-foot and said housing or  
 frame, a lower cutting member fixedly  
 50 mounted on said housing and resting oper-  
 atively stationary on the lower ply of mate-  
 rial when the presser-foot is down, an upper  
 cutting member consisting of a lever pivot-  
 ally mounted on said housing and carrying  
 55 on one end a blade edge in cooperating shear-  
 like relation to the lower blade, with means  
 to rock the opposite end of said lever.

4. In a machine of the class described, a  
 trimming device consisting essentially of a  
 60 housing or frame slidingly mounted on a rod  
 depending from the overhanging arm of the  
 machine, a presser-foot mounted on the end  
 of said rod which projects through the hous-  
 ing, a spring encircling the rod above the  
 65 housing, a lever fulcrumed on said over-

hanging arm, operating to simultaneously  
 raise and lower both the presser-foot and  
 said housing or frame, a lower cutting mem-  
 ber fixedly mounted on said housing and sus-  
 70 pended operatively stationary over the lower  
 ply of material when the presser-foot is down,  
 an upper cutting member consisting of a  
 lever pivotally mounted on said housing and  
 carrying on one end a blade edge in co-  
 operating shear-like relation to the lower 75  
 blade, means to rock the opposite end of said  
 lever, and means to raise and lower both  
 cutting members independently of the presser-  
 foot.

5. In a machine of the class described, a 80  
 cutting mechanism for trimming an upper  
 ply lying on an under ply, consisting of a  
 lower blade member with means to suspend  
 it over the lower ply and in the space be-  
 85 tween the plies, means to support said mem-  
 ber operatively stationary during the cutting  
 action, an upper blade member mounted on  
 the same support and adapted to cooperate  
 as a shear-blade relatively to said lower  
 90 member, a pivotally-mounted bell-crank le-  
 ver carrying said upper blade, with means to  
 rock said lever, a presser-foot mounted on  
 the end of a rod depending from the over-  
 hanging arm of the machine and passing  
 95 through said frame supporting the cutting  
 members, and a segmentally-slotted lever-  
 arm fulcrumed on the shank of the presser-  
 foot and coacting with a pin on the frame  
 which supports both cutting members, said  
 100 slotted lever operating to raise and lower  
 the two cutting members independently of  
 the presser-foot and independently of the  
 means to raise and lower the presser-foot.

6. In a machine of the class described, the  
 combination with a vertically-movable rod 105  
 supporting a presser-foot, a spring-controlled  
 frame mounted slidingly on said rod and car-  
 rying both members of a cutting mechanism,  
 means to raise and lower the presser-foot and  
 the cutting mechanism, as one, through the 110  
 medium of said rod, and devices upon the  
 said sliding frame whereby the cutting mech-  
 anism may be raised and lowered independ-  
 ently of the presser-foot.

7. In a machine of the class described the 115  
 combination with stitch-forming mechanism,  
 of a vertically-movable bar supporting a  
 presser-foot, a spring-controlled frame slid-  
 ingly mounted on said presser-foot bar, a  
 pair of cutting members independently 120  
 mounted in said sliding-frame, means to sup-  
 port the lower of said cutting members in  
 operatively-fixed position relatively to the  
 work-support, means to give a rocking mo-  
 125 tion to the upper of said cutting means, and  
 means to throw the cutting device into inop-  
 erative position consisting of devices to slide  
 the frame on the presser-foot bar and into  
 temporarily-fixed position thereon.

8. In a machine of the class described, the 130



combination with stitch-forming mechanism, of a vertically-movable presser-foot mounted on a depending rod, a spring-controlled frame mounted slidingly on said rod and carrying both members of a shear-like cutting mechanism, means to raise and lower the presser-foot and cutting mechanism as one through the medium of said rod, means to raise and lower both members of the cutting mechanism, as one, independently of the presser-foot, through the medium of said sliding frame, and means to vertically adjust the lower member of the cutting mechanism, on said supporting-frame and relatively to the upper cutting member.

9. In a machine of the class described comprising stitch-forming devices, a work-support, and a vertically-adjustable presser-foot bar carrying a presser-foot, of a frame mounted slidingly on said bar, above the presser-foot, and independently supporting each of the two members of a cutting mechanism, means to vertically adjust said frame to throw said cutting members into and out of operative position, independently of the presser-foot, said cutting mechanism consisting of a lower cutting-blade supported operatively stationary relatively to the work-support, and an upper cutting-blade whose actuating-arm is a bell-crank lever pivotally mounted upon said frame, with means to impart a rocking motion thereto in unison of time with the operation of the stitch-forming mechanism, said means comprising the power-shaft from which the stitch-forming mechanism is primarily actuated, a cam mounted on said shaft, a forked lever actuated by said cam, and connecting actuating means between said forked lever and the short arm of the pivotally-mounted bell-crank lever carrying said upper cutting-blade, and operating to rock said last-mentioned lever.

10. In a machine of the class described, in combination with stitch-forming devices, of a presser-foot having a shank or arm mounted on the end of a rod depending from the overhanging arm of the machine, a frame slidingly mounted on the lower portion of said rod, a lower cutting member mounted on said frame, an upper cutting-blade on the end of a pivotally-mounted lever fulcrumed on said frame, a pivoted link with pin-and-slot connection between it and the lever, a cam on the power-shaft of the machine, and connecting actuating mechanism between said link-arm and cam, operating to rock the upper cutting-blade from said power-shaft and in unison of time with the stitch-forming elements.

11. In a machine of the class described,

the combination with stitch-forming devices, and of mechanism coacting in unison of time with the stitch-forming devices to trim the upper-ply fabric to a pattern, of a presser-foot operating not only to hold the fabric to the feed but to guide a braid to the surface of the upper ply, said presser-foot having a perforated braid-guiding head, and said trimming mechanism comprising an upper cutting member perforated to provide a needle-throat and recessed on its under face to provide a braid-guide, whereby the braid is guided with certainty to the needle and to and along the trimmed edge of the fabric.

12. In a machine of the class described, a trimming mechanism consisting of a lower cutting member suspended operatively stationary beneath the upper ply, and having on its free end an upwardly-facing cutting-blade, means to yieldingly support said cutting-blade in substantially the same plane with the presser-foot in operative position, and an upper cutting member consisting of a pivotally-mounted lever coöperating shear like with the lower blade member, with means to impart a rocking movement thereto, said upper cutting member having on its free end an enlarged head vertically perforated for the passage of the sewing-needle and on its under face a recess for the passage of the braid, one wall of said recess being sharpened to form a downwardly-facing blade edge.

13. In a machine of the class described, the combination with stitch-forming devices, and of mechanism coacting in unison of time with the stitch-forming devices to trim the upper-ply fabric to a pattern, of mechanisms to guide a braid to the edge of the trimmed upper ply, said mechanisms consisting of a presser-foot provided with a perforated head end operating to guide a braid therethrough to the surface of the upper ply, and a cutting device the lower member of which is operatively stationary beneath the upper ply and the upper member of which is a rocking lever having an enlarged end vertically recessed to provide a needle-throat and with a longitudinal recess on its under face providing a passage for the braid delivered from the presser-foot head, one wall of said longitudinal recess being sharpened to form a blade edge.

In testimony whereof we have hereunto affixed our signatures this 30th day of August, A. D. 1904.

JOSEPH ZELDIS.  
JACOB M. WEBER.

Witnesses:

HENRY T. GULLMANN,  
A. M. BIDDLE.