

E. F. LITTLEFIELD & H. A. DRINKWATER.
MARKING GAGE FOR BUTTONHOLE MACHINES.
APPLICATION FILED MAR. 31, 1910.

1,009,324.

Patented Nov. 21, 1911.

Fig. 1.

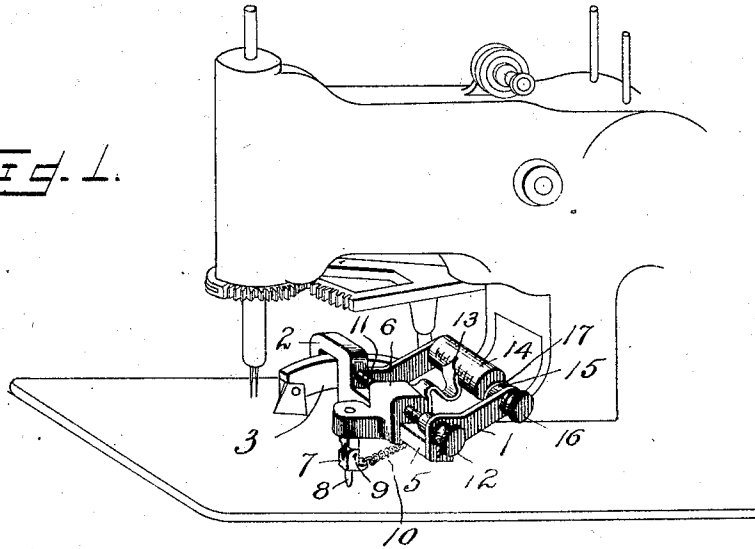


Fig. 2.

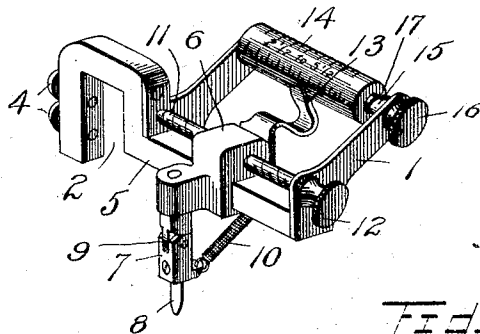
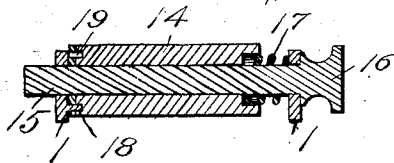


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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ORS TO THE REECE BUTTON HOLE MACHINE COMPANY, OF BOSTON, MASSACHU-
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MARKING-GAGE FOR BUTTONHOLE-MACHINES.

1,009,324.

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Application filed March 31, 1910. Serial No. 552,643.

To all whom it may concern:

Be it known that we, EDWARD F. LITTLE-
FIELD and HERBERT A. DRINKWATER, citizens
of the United States, residing at Belfast, in
the county of Waldo and State of Maine,
have invented certain new and useful Im-
provements in Marking-Gages for Button-
hole-Machines; and we do declare the fol-
lowing to be a full, clear, and exact descrip-
tion of the invention, such as will enable
others skilled in the art to which it apper-
tains to make and use the same.

This invention relates to improvements in
marking gages for button hole machines.

One object of the invention is to provide
an attachment of this character adapted to
be applied to the cutter lever of a button
hole sewing machine whereby the point for
cutting the next hole will be automatically
marked as each of the holes is cut.

Another object is to provide a gage of
this character adapted to be adjusted for
marking holes at different distances apart.

With the foregoing and other objects in
view, the invention consists of certain novel
features of construction, combination and
arrangement of parts as will be more fully
described and particularly pointed out in
the appended claims.

In the accompanying drawings, Figure 1
is a perspective view of so much of the but-
ton hole stitching machine as is necessary to
illustrate the application of the invention;
Fig. 2 is a perspective view of the device
removed from the machine; Fig. 3 is a verti-
cal sectional view taken on a line with the
center of the adjustable cylinder containing
the gage scale.

In the embodiment of the invention we
provide a supporting frame 1 having on
one end a clamping member 2, which is
adapted to be engaged with the cutter lever
3 of the button hole sewing machine. The
clamping member 2 is here shown and is
preferably of substantially inverted U-form
and is hooked over the upper edge of the
lever 3 and is secured thereto by clamping
screws 4. Slidably mounted on the base 5
of the gage is a carriage 6, to which is
pivotally attached the holder 7 of the mark-
ing point 8. The holder 7 is pivotally con-
nected to the carriage by a knuckle joint 9,
and said holder is yieldingly held in opera-
tive position by a coiled spring 10, one end

of which is connected to the holder and the
opposite end to the carriage, as shown.

The carriage 6 is provided with a threaded
passage with which is engaged an adjusting
screw 11 revolubly mounted in the frame of
the gage, and which is provided on one end
with a milled operating head 12. By turn-
ing the screw in one direction or the other,
the carriage may be adjusted back and forth
across the frame to bring the marking point
to the desired position. On the carriage is
secured an upwardly projecting indicating
finger 13 which is adapted to coact with a
series of gage scales to indicate the position
to which the marking point is to be adjusted.

The gage scales are preferably arranged in
longitudinal series on the outer surface of
the scale cylinder 14, which is fixedly
mounted on a shaft 15, which is revolubly
mounted in the arms of the frame 1 and has
on one end a milled operating head 16,
whereby the shaft may be turned to bring
the desired series of gage marks opposite to
the finger 13. On the shaft 15 between one
end of the cylinder 14 and the adjacent side
of the frame is arranged a coiled spring 17,
the tension of which is applied to the roller
whereby the opposite end of the same is
yieldingly held in locked engagement with
a stop pin 18 formed on the adjacent arm of
the frame 1, said pin being adapted to en-
gage one of an annular series of sockets or
recesses 19 formed in the adjacent end of the
cylinder as shown. By thus fastening the
cylinder in place, the latter may be held at
any adjusted position with the desired series
of scale marks opposite to the pointer 13.

In the operation of the device after the
cylinder has been adjusted to bring the de-
sired series of scale marks opposite to the
indicating finger, the latter is adjusted to
the proper division on said scale by the screw
11, thus bringing the marking point to the
desired position for spacing off the button
holes.

From the foregoing description taken in
connection with the accompanying draw-
ings, the construction and operation of the
invention will be readily understood with-
out requiring a more extended explanation.

Various changes in the form, proportion
and the minor details of construction may be
resorted to without departing from the prin-
ciple or sacrificing any of the advantages

of this invention as defined in the appended claims.

Having thus described our invention, what we claim is:—

- 5 1. In a marking gage for button hole sewing machines, a supporting frame, means to secure said frame to the machine, a carriage slidably mounted in said frame, a marking point having a yielding pivotal
10 connection with said carriage, an adjusting screw arranged in said frame and having a threaded engagement with the carriage whereby the latter may be adjusted to bring the marking point to the desired po-
15 sition, a gaging scale cylinder revolubly mounted in the frame, said cylinder having arranged thereon series of division marks, and means to lock said cylinder in its adjusted position.
- 20 2. In a marking gage for button hole sewing machines, a supporting frame, a carriage slidably mounted in said frame, an adjusting screw connected with said carriage whereby the latter may be shifted back and
25 forth across the frame, a marking point holder having a knuckle joint connection with said carriage, a spring to yieldingly hold said holder in operative position, a marking point arranged in said holder, a
30 pointer arranged on said carriage, a cylin-

der revolubly mounted in said frame, said cylinder having arranged thereon series of graduated gage divisions or scale marks, and means to hold said cylinder in its adjusted position with one of said series of gradua- 35 tion marks opposite to said pointer.

3. In a marking gage for button hole sewing machines, a supporting frame, means to secure said frame to the button hole machine, a carriage slidably mounted on said 40 frame, means to adjust said carriage, a marking point pivotally secured to the carriage, a spring to yieldingly hold said point in position, a pointer arranged on said carriage, a cylinder having arranged thereon 45 series of division marks, said cylinder having in one end a series of recesses or sockets, a locking pin adapted to engage said sockets and thereby hold said cylinder in its adjusted position, and a spring engaged with 50 said cylinder to hold the latter in locked engagement with said stop pin.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

EDWARD F. LITTLEFIELD.
HERBERT A. DRINKWATER.

Witnesses:

WALTER C. SHAW,
BENJ. L. TUTTLE.