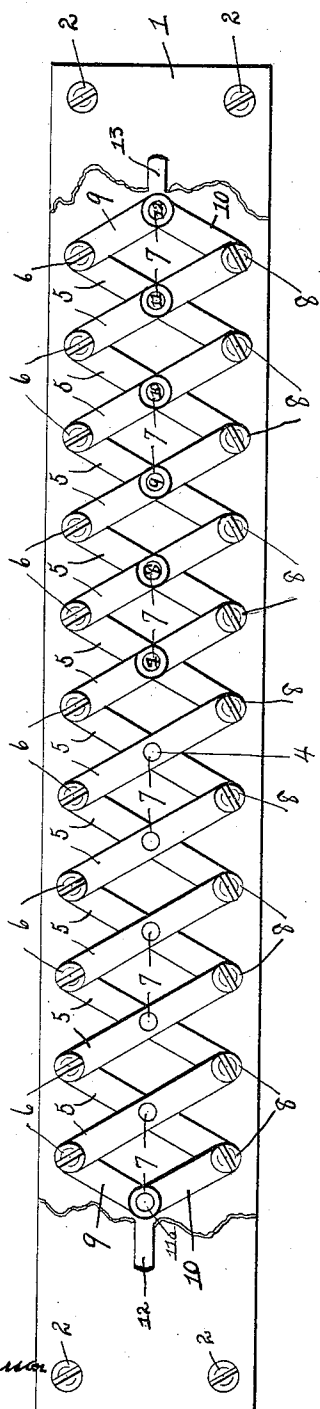


1,050,890.

L. H. WILD.
EXTENSIBLE SPACER.
APPLICATION FILED MAR. 23, 1910.

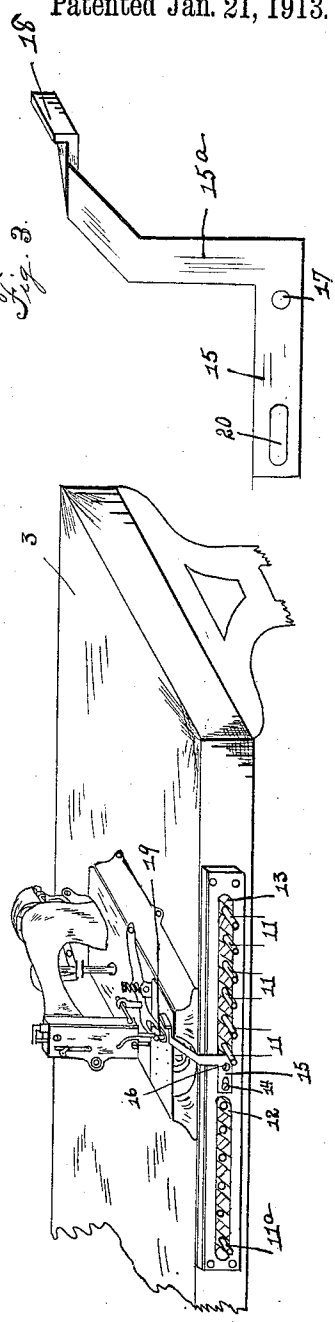
Patented Jan. 21, 1913.

Fig. 1.



WITNESSES:
Arthur Emmerson
Andrew Frey

Fig. 2.



INVENTOR
Laurent H. Wild
BY *Riley Rose*
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UNITED STATES PATENT OFFICE.

LAURENT H. WILD, OF UTICA, NEW YORK, ASSIGNOR OF ONE-HALF TO CHARLES A. LOOMIS, OF UTICA, NEW YORK.

EXTENSIBLE SPACER.

1,050,890.

Specification of Letters Patent.

Patented Jan. 21, 1913.

Application filed March 23, 1910. Serial No. 551,205.

To all whom it may concern:

Be it known that I, LAURENT H. WILD, citizen of the United States, residing at Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Extensible Spacers, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to an extensible spacer and I declare the following to be a full, clear, concise and exact description thereof sufficient to enable any one skilled in the art to which it appertains, to make and use the same reference being had to the accompanying drawings, in which like reference characters refer to like parts throughout the specification.

The object of the invention is to provide a simple, efficient device whereby the accurate placing at equal intervals of a given number of button holes along the proper edges of garments such as underwear, union suits and the like may be accomplished by a simple manual operation. Heretofore in the art it has been necessary in order to ascertain the proper places for button holes on garments to lay the same upon some graduated scale and indicate the proper places by pencil marks or the like. The device in question contemplates a much simpler method whereby the lead pencil marks, which tend to disfigure the garment are obviated as well as the extra employee whose duty it is to mark the garments. These several functions mentioned may be accomplished by the same operator that works the button hole machine in a much shorter time than it would take under the old method of gaging the spaces on the garment by a graduated scale.

The objects of the invention will more fully appear by reference to the drawings in which—

Figure 1 is a detail view of the actuating mechanism, certain parts broken away that the mechanism may be better seen; Fig. 2 is a perspective view of my improved device placed with reference to a button hole machine; Fig. 3 is a detail enlarged of a bracket employed on the device.

Referring to the drawings more particularly, I represent the casing in which the mechanism is suitably housed by 1. Said

casing is properly held together by bolts or screws 2 which may be elongated sufficiently to hold said part to a work table, as 3 or any other suitable method may be employed. There is centrally disposed having bearings in the opposite sides of casing 1, what I choose to term master pivot 4 elongated preferably into a screw whereby to aid in holding the casing to the wall or table 3. Upon master pivot 4 there is pivotally mounted lazy tongs, consisting of a plurality of crossed levers 5 fulcrumed, as at 6, 7 and 8 in the manner substantially as shown in Fig. 1. The end levers 9 and 10 terminate on a central pivot as there shown. The center pivots to the right of master pivot 4 are formed with extensions or projections 11 in order that the operator may readily move the required pivot in accordance with the number of buttons to be placed upon the garment. The outer ends may be tipped with numerals marked consecutively thereon, having the first pivot, extended, to the right of master pivot 4 to correspond in number with its proper consecutive number counting from the farthest pivot to the left of said master pivot 4. Obviously the amount of rectilinear motion of the tongs will be increased proportionally with the number of sections in the tongs. This fact being the principle upon which my invention resides. The pivots to the left of master pivot 4 are not so extended as those to the right thereof but terminate flush with the surface of the respective levers adjacent thereto in order to be suitably housed in casing 1, whereby to avoid interference with the hand of the operator, with the single exception, however, of the extreme pivot to the left which is provided with an extended or projected portion 11^a whereby it may be manipulated in conjunction with any of the extended pivots to the right of master pivot 4 to move the lazy tongs in a rectilinear manner. The outer lateral face or surface of casing 1 has longitudinal slots as 12 and 13 with an intermediate surface apertured or bored to form a bearing for master pivot 4 whose outer end projects a little beyond the surface of casing 1 and is provided with a thread adapted for the screw mounting thereon of nut 14 which slidably retains bracket 15 provided with slot 20 upon said pivot. Slot 20 is as

long as the distance either pivot adjacent pivot 4 can be moved away from 4. Bracket 15 is rigidly held to the first pivot 16, Fig. 2, to the right of master pivot 4 by means of bore or hole 17 in said bracket adapted for the insertion of extended portion 11 of pivot 16 and said bracket is held to said extended portion 11. Bracket 15 comprises an upwardly, inwardly projecting arm 15^a terminating at its upper end in a horizontal surface upon one edge of which is indicator 18 and is so mounted with reference to cutter 19 of the button hole machine, shown in Fig. 2, which machine forms no part of the present invention, that when the lazy tongs are pushed to their inmost or contracted position indicator 18 will register with cutter 19 of the button hole machine. Obviously by pulling outwardly on any two of the pivots, say the one 11^a to the extreme left of the master pivot 4 and any one to the right thereof will remove indicator 18 from cutter 19 the distance between any consecutive two of the pivots between 11^a, to the extreme left of the master pivot 4, and the one thus manipulated, to the right of pivot 4.

In actual operation having a given length of garment along which it is desired to place a certain number of button holes, for instance eleven, at equal distances apart, the operator holds one extreme end of such part of the garment up opposite pivot 11^a and holds the remaining part up parallel with the surface of casing 1 so that pivot number 11 may be adjusted to lie opposite the remote end of said garment. Obviously indicator 18 will be moved the required distance away from cutter 19 which would be one eleventh the whole distance between the pivots thus manipulated. By now holding one end of the garment at indicator 18, which is held stationary because of sufficient frictional contact of crossed levers 5, the first button hole in the garment may be made by the machine. Using the first button hole as a guide and drawing same up to the indicator 18 the second button hole may be made at the proper interval of space and so on until all the button holes in that garment are finished.

I have described the lazy tongs as having only twelve sections; however, I do not wish to limit myself to twelve but anticipate the use of any number of sections, suitable for the work to be accomplished. There are other similar features that may be modified without departing from the spirit of my invention.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A device of the character described comprising a case, a lazy tongs mounted between its ends on a pivot in a given row

fixed in the case, a bracket mounted on the adjacent pivot of the same row and having a slotted arm engaging an adjacent pivot in said slot, the slot being of a length and position to allow for the contraction and expansion of the tongs and whereby the bracket is held in operative position, the bracket also having an arm extended in an indicator, whereby the adjustment of the tongs moves the indicator an aliquot part of the space by which the distance between any two pivots is increased or decreased by the extension or contraction of the tongs.

2. In a device of the character described, a lazy tongs mounted between its ends, certain of the pivots at one side of the point of mounting being extended and provided with indicator characters, the pivot at the remote end being also extended thereby providing for the selection of any one of various measurements when the tongs are opened, and a bracket having an indicator registering with a given fixed point when the tongs are closed and movable from the said point a distance equal to an aliquot part of the selected measurement when the tongs are opened.

3. In an extensible spacer of the character described, the combination of a casing, a lazy tongs mounted on a pivot fixed therein, and an indicator, said lazy tongs provided with pivot pins extended for manipulation of the tongs and measuring lengths along the tongs and said indicator slidably mounted relatively to the tongs pivot whereby to measure from a fixed point a fractional portion of the distance between any given two of the pivot pins.

4. In a device of the character described, a lazy tongs supported on a pivot between its ends, an indicator bracket mounted on the pivot adjacent to the said supporting pivot and engaging it by engagement of the same in a slot in the bracket, the slot being of a length to permit opening and closing the tongs, substantially as described.

5. In a device of the character described, the combination of a casing, a lazy tongs, a bracket, and an indicator integral with said bracket, said casing being adapted for the manipulation of the tongs therein, said lazy tongs comprising a plurality of crossed levers pivoted together at their central and extreme portions and pivoted in the casing between the ends of the tongs, said bracket slidably mounted upon the pivotal support of the tongs and having a slot whereby said bracket may be moved a distance as long as the distance either pivot adjacent the supporting pivot may be moved therefrom, and said bracket rigidly secured to the first pivot to the right of the supporting pivot.

6. In an apparatus for spacing a series of like operations in an article, the combination with the appliances requisite for the doing

of said operation, of a lazy tongs mounted by one of the pivots of the tongs, a bracket mounted on the next pivot in the same set and extended to the point where such operation is performed whereby the bracket will, when the tongs are opened, measure from such point such a proportion of the distance between any two pivots of one set of pivots as there are spaces between such pivots.

7. In an apparatus for spacing a series of like operations in an article, the combination with the appliances requisite for the doing of said operation, of a lazy tongs mounted by one of the pivots of the tongs, a bracket mounted on the next pivot in the same set and extended to the point where such operation is performed whereby the bracket will, when the tongs are opened, measure from such point such a proportion of the distance between any two pivots of one set of pivots as there are spaces between such pivots, certain of said pivots being ex-

tended for manipulation of the tongs and certain provided with indicating characters.

8. An extensible spacer comprising a casing, lazy tongs mounted by one of its pivots in said casing, a bracket extended in an indicator and secured to an extended pivot adjacent the first mentioned pivot of said lazy tongs, and said casing secured to a table so that said indicator may be opposite the point where a given operation is to be performed when said tongs are collapsed, and moved one of the equal spacings indicated by the tongs when said tongs are extended thereby indicating the point where a successive like operation is to be performed.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

LAURENT H. WILD.

Witnesses:

HENRY M. LOVE,
ELEANOR T. DE GIORGI.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."