

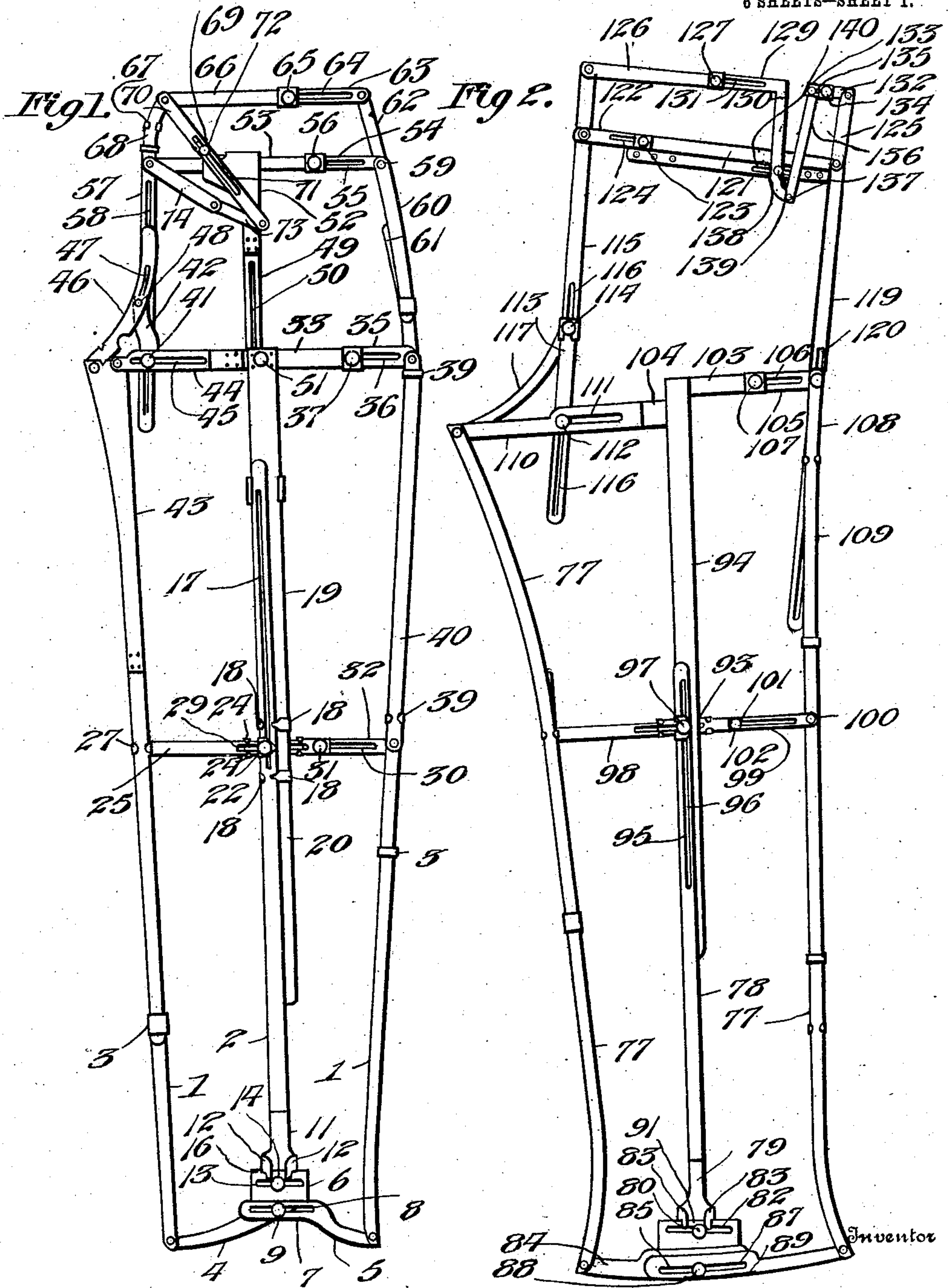
No. 849,959.

PATENTED APR. 9, 1907.

W. M. BARRY.  
ADJUSTABLE GARMENT PATTERN.

APPLICATION FILED SEPT. 9, 1906.

6 SHEETS—SHEET 1.



Witnesses

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L. T. Goodman

Walter M. Barry

By

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Attorney

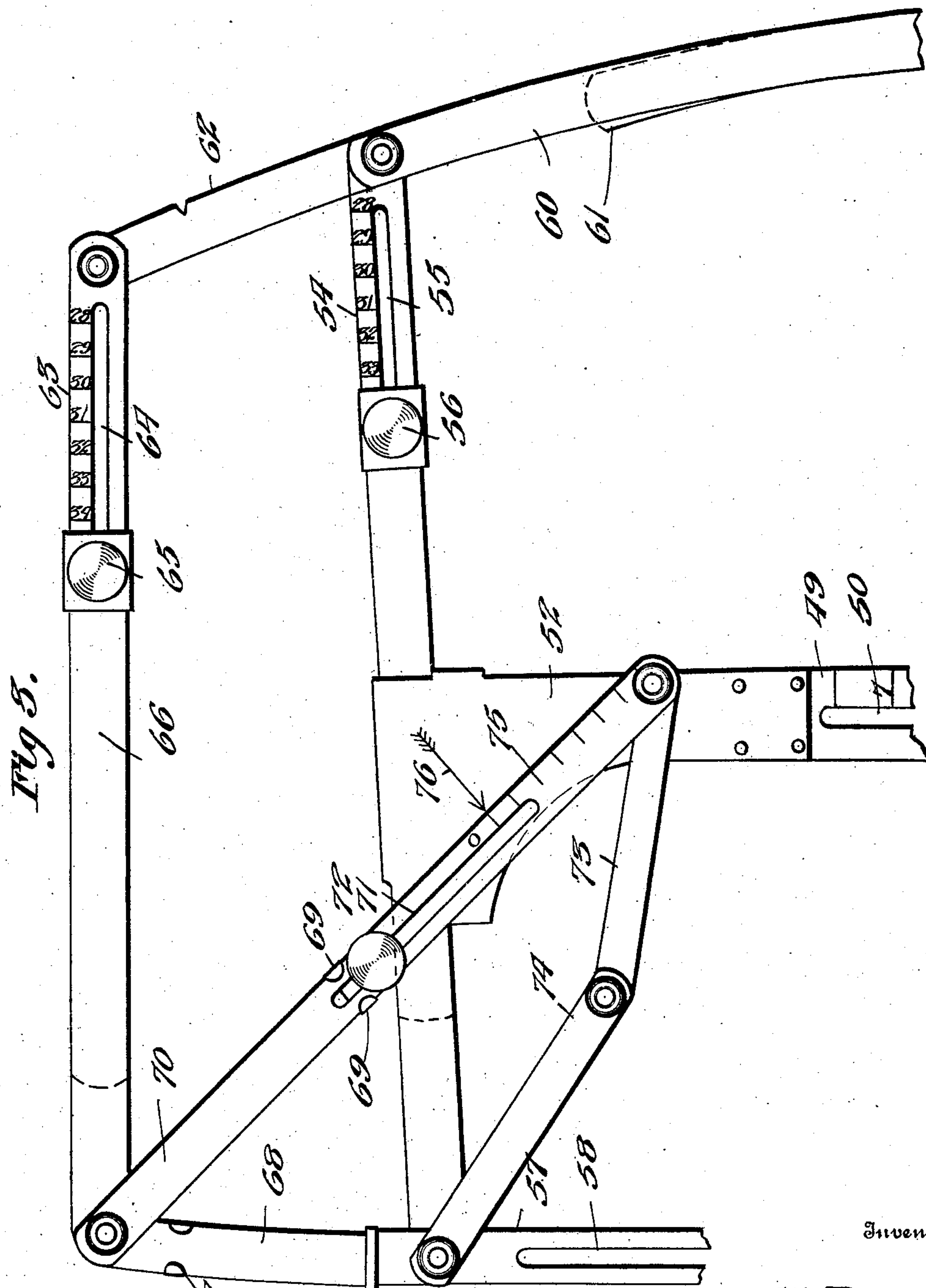
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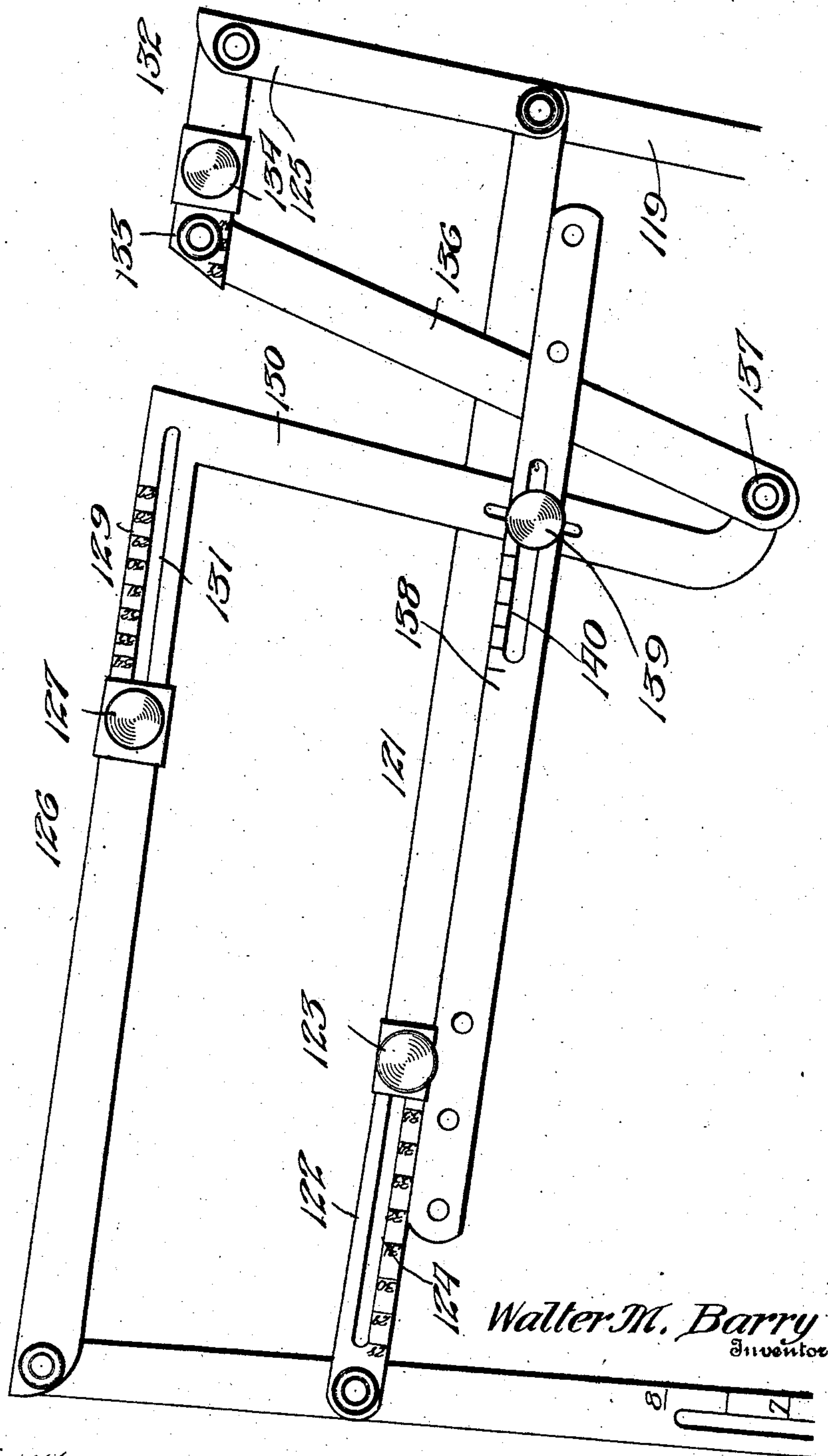
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Fig 4.



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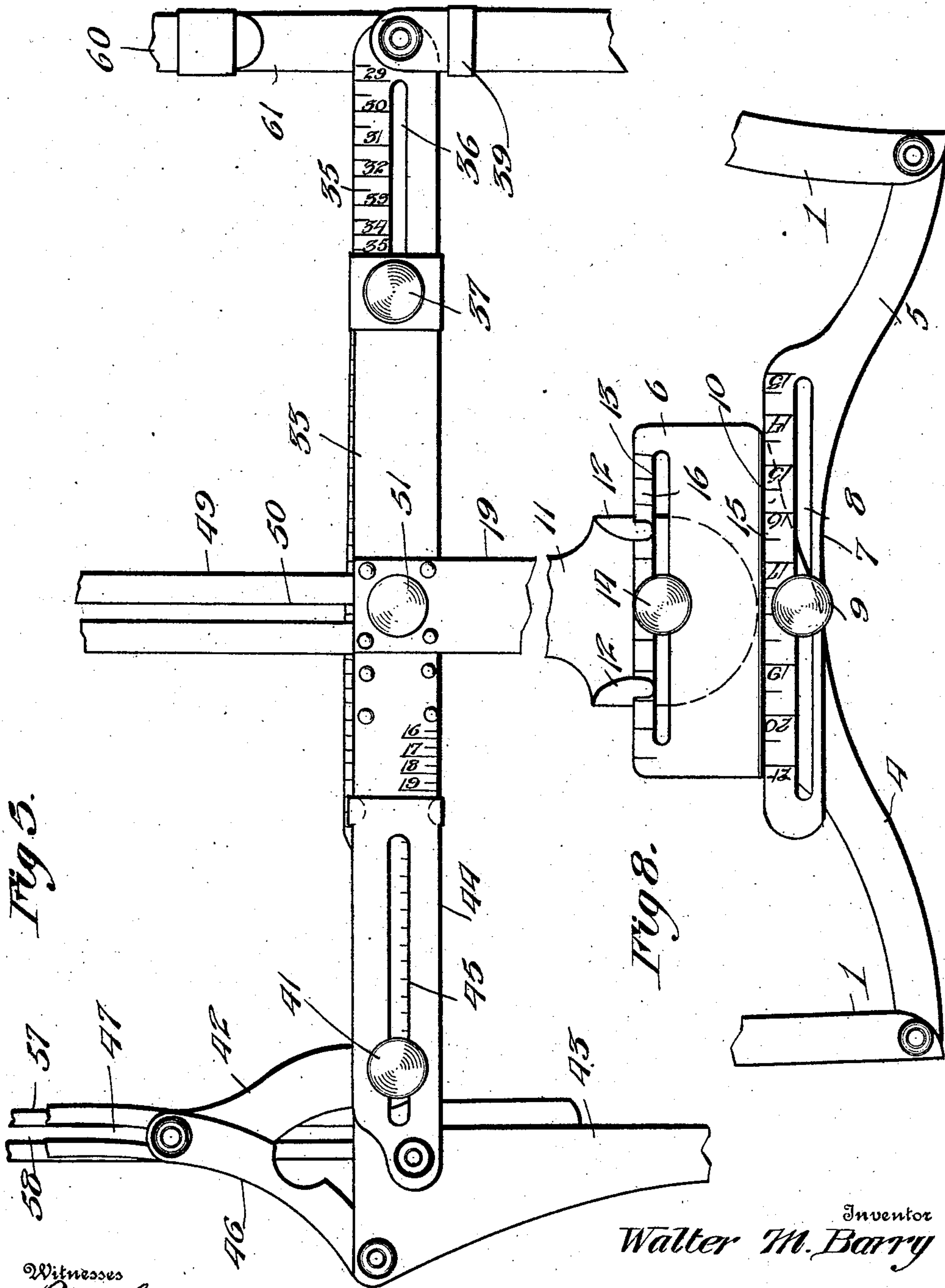


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6 SHEETS—SHEET 4.



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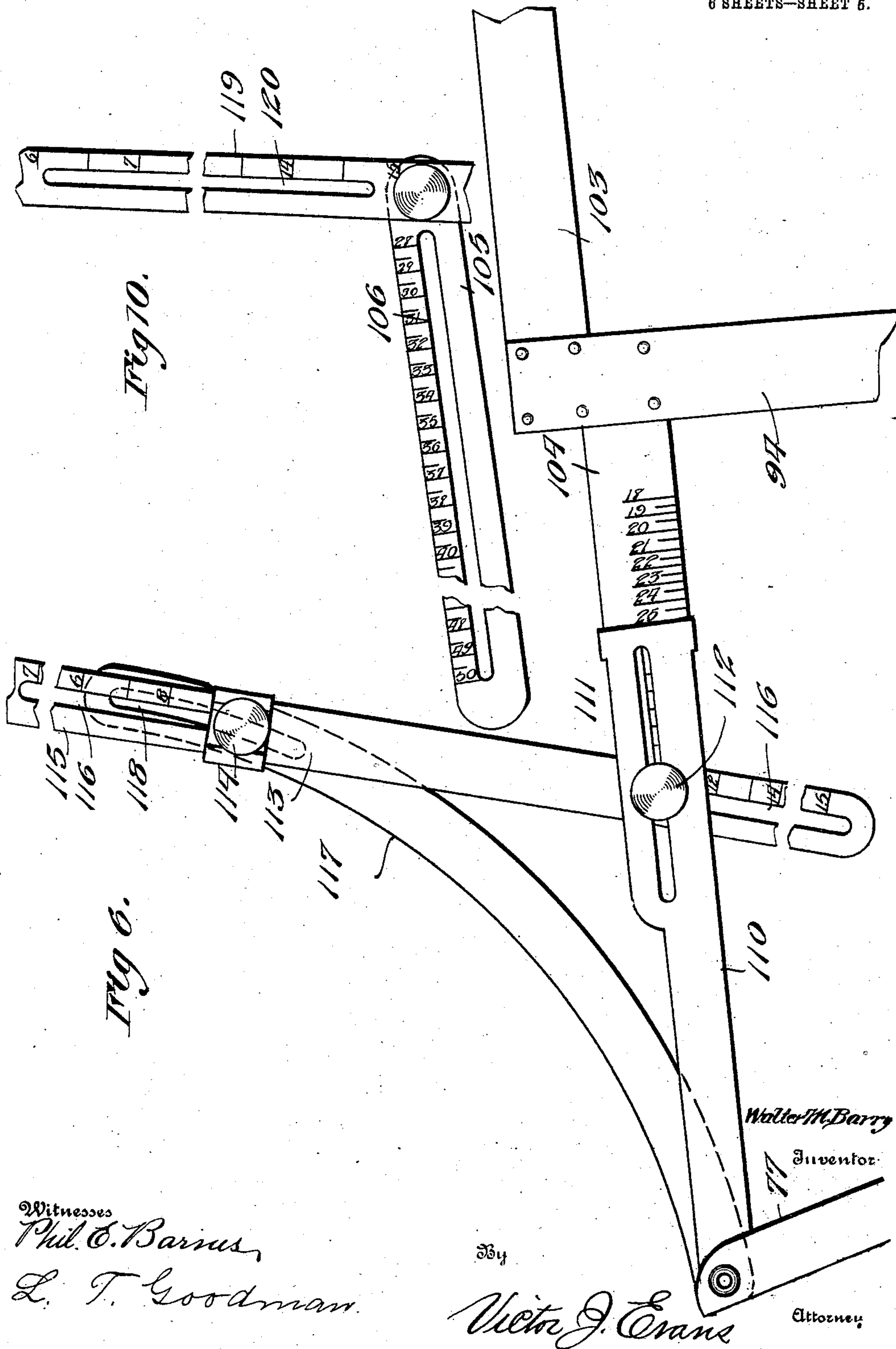
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6 SHEETS—SHEET 5.



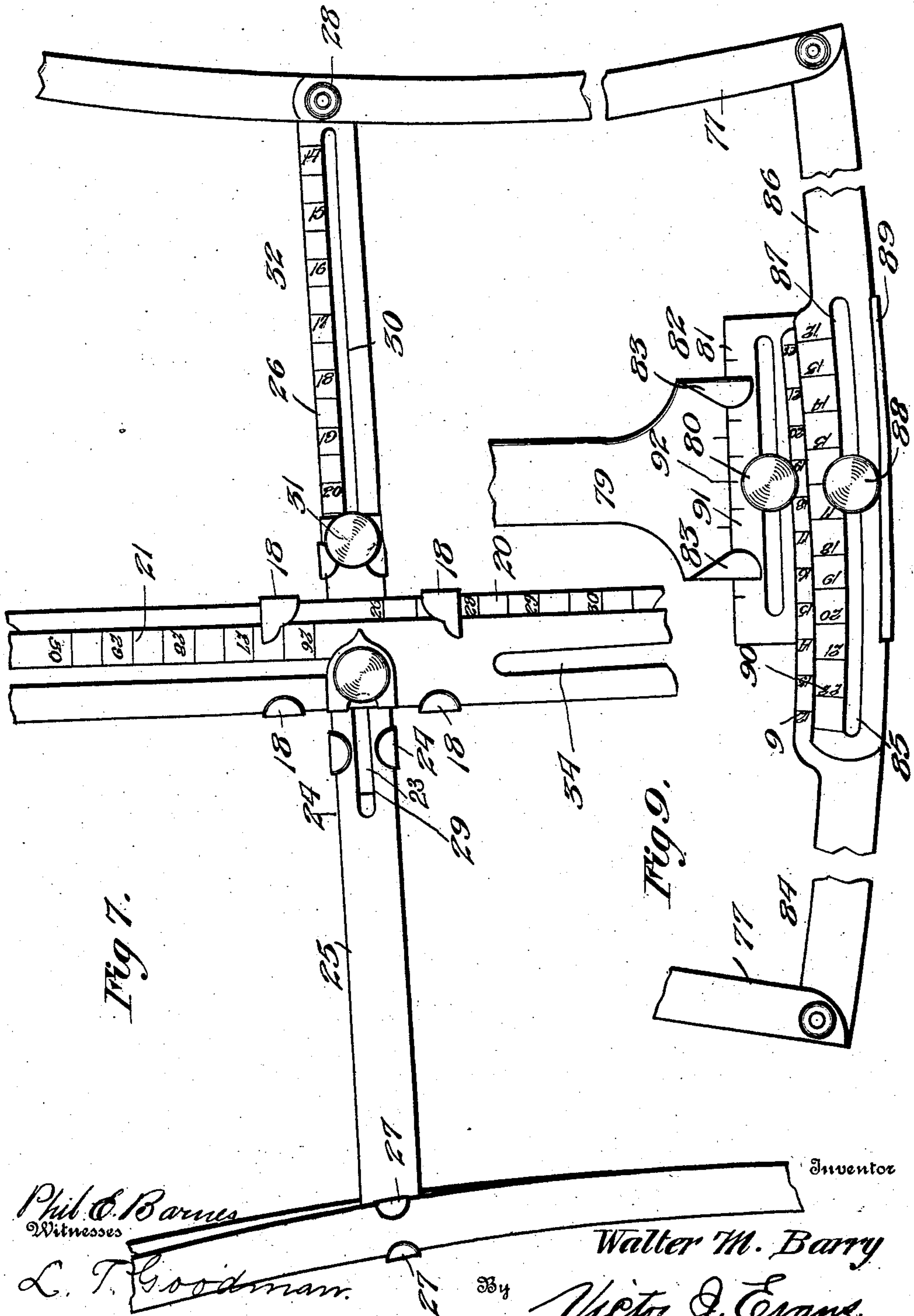
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6 SHEETS—SHEET 6.





# UNITED STATES PATENT OFFICE.

WALTER M. BARRY, OF ROCHESTER, NEW YORK.

## ADJUSTABLE GARMENT-PATTERN.

No. 849,959.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed September 9, 1905. Serial No. 277,693.

*To all whom it may concern:*

Be it known that I, WALTER M. BARRY, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Adjustable Garment-Patterns, of which the following is a specification.

The invention relates generally to an improvement in trouser-patterns, and primarily to a structure comprising a plurality of connected parts arranged for manual adjustment in accordance with specific measurements previously obtained.

The main object of the invention is the provision of a device of the class described arranged for manual adjustment and adapted when so adjusted to serve as a pattern in cutting the goods.

Another object of the invention is the provision of means to permit the ready adjustment of certain parts of a pattern to compensate for measurements other than normal—such, for instance, as in providing for hollow-back or stout models.

The invention consists in a plurality of metallic strips arranged for adjustable cooperation and connection, whereby the pattern may be adjusted in accordance with previously-obtained waist, hip, seat, knee, thigh, and bottom measurements, and in the provision of additional strips adjustably cooperating with the primary parts to provide for increasing or decreasing certain parts of the pattern, whereby to adjust the pattern to compensate for abnormal measurements or deformities of the individual.

The preferred embodiment of the details of structure of my invention will be fully described in the following specification, reference being had particularly to the accompanying drawings, in which—

Figure 1 is a view in plan of my improved adjustable pattern for the front of the trousers. Fig. 2 is a similar view of the rear pattern. Fig. 3 is an enlarged broken plan showing the connected strips for the waist and hip portions of the front pattern. Fig. 4 is a similar view of the rear pattern. Fig. 5 is a broken plan, showing, on an enlarged scale, the strips for the thigh and seat portions of the front patterns. Fig. 6 is a similar view of the rear pattern. Fig. 7 is a broken plan, on an enlarged scale, showing

the arrangements of the strips of both patterns for the knee and seam measurements. Fig. 8 is a broken plan, on an enlarged scale, showing the arrangement of the strips for the bottom measurement of the front pattern. Fig. 9 is a similar view of the rear pattern. Fig. 10 is a broken plan showing the adjustment of the pattern-strips to compensate for the rise of the seam.

On reference to the drawings, wherein like reference-numerals indicate like parts throughout the several views, it will be noted that I use two patterns, hereinafter termed a "front" pattern A, and a "rear" pattern B.

The front pattern A, illustrated particularly in Figs. 1, 3, 5, 7, and 8, comprises side bars or strips 1 and a central or intermediate strip 2. The side bars comprise a plurality of sections or short strips slidably connected by a clip 3 to permit free lengthwise extension of these sections. Strips 4 and 5 are respectively connected at the lower terminals of the strips 1 preferably by pivotal connection and centrally overlapping below the central strip 2. The strip 4 is provided at its inner end with a squared enlargement 6, while the strip 5 is provided at its inner end with an extension 7, longitudinally slotted at 8 to embrace a set-screw 9, having threaded engagement with the strip 4. The enlargement 6 is slightly offset from the plane of the strip 4 to provide an edge-guide 10, against which the edge of the projections 7 of arm 5 bears in longitudinal movement. The central strip 2 is secured at its lower end to a plate member 11, arranged to underlie the enlargement 6 of strip 4 and having side ears 12 integral with said plate member and bearing upon the upper side of said enlargement. As a medium for adjustment at this point the enlargement 6 is formed with a slot 13, arranged to embrace a set-screw 14, having threaded engagement with the plate member 11. The projection 7 and enlargement 6 are each provided with scales 15 and 16, respectively, adjacent the slots 8 and 13.

The central strip 2 is slotted near its upper end, as at 17, and slidably connected, through the medium of clips 18, to a strip 19, the latter being preferably of greater width than the central strip and provided on the portion exposed beyond the edge of said strip with a scale 20, a scale 21 being also provided on the strip 2 adjacent the slot 17. The strips 2



and 19 are held in adjusted position by a set-screw 22 passing through the slot 17 and through the strip 19, preferably seating in a four-way coupling-plate 23, on which plate the ears 18 are formed. The remaining aligned arms of this plate are formed with ears 24 to embrace transverse strips 25 and 26, the former of which is slidably connected by a clip 27 to one of the side strips 1, while the latter is pivotally connected at 28 to the upper terminal of the opposite side strip 1. Both strips 25 and 26 are formed with slots 29 and 30, respectively, to receive the set-screw 22, the slot 30 in strip 26 extending practically throughout the length of said strip and receiving an additional set-screw 31, having threaded connection with the inner terminal of strip 25, the strip 26 being also provided with a scale 32 adjacent its slot 30.

The upper end of the strip 19 is rigidly secured to a transverse connecting-strip 33, the lower end being slotted at 34 to embrace the set-screw 22. An adjusting-strip 35 is adjustably secured through the medium of a slot 36 therein and a set-screw 37 with one terminal of the connecting-strip 33, the outer end of the strip 35 being pivotally connected with a strip 38, slidably connected at 39 with a strip 40, secured on the pivotal connection 28. The opposite terminal of the strip 33 is provided with a set-screw 41 and with an upwardly-extending arm 42.

A plate 43 is rigidly secured to the upper end of the upper section of strip 1, being slightly curved on its outer edge to conform to the natural curvature at this portion of the garment. The inner upper corner of the plate 43 is adjustably connected to the terminal of the connecting-strip 33 adjacent thereto by a strip 44, slidably engaging said terminal and slotted at 45 to embrace a set-screw 41. The outer edge of the plate 43 is connected to a curve strip 46, slotted near its upper end at 47 to embrace a pivot-pin 48, projecting from the upper end of the arm 42. A strip 49 projects from the end of strip 19, being slidably connected with the latter through the medium of a slot 50, arranged to embrace a set-screw 51, passing through the strip 19 and connecting-strip 33 at their junction.

The upper end of strip 49 is provided with a plate member 52, enlarged at its end and formed with suitably-arranged ears to slidably embrace two oppositely-projecting transversely-arranged strips 53 and 54, the latter being formed with a slot 55 to embrace a set-screw 56, seating in the former to permit longitudinal adjustment of these strips. The outer terminal of strip 53 is pivotally connected with a strip 57, longitudinally slotted at 58 to embrace the pivot-pin 41, while the outer terminal of strip 54 is pivotally connected at 59 with a strip 60, projected toward and slidably connecting with a

strip 61, projected from the junction of strip 39 and strip 35.

A strip 62 is projected from the pivotal connection 59 and terminally connected with a strip 63, slotted at 64 to embrace a set-screw 65, having engagement with a strip 66, pivotally connected at its outer terminal with a strip 67, slidably connected with a strip 68, secured at its lower end on the pivot, forming a junction between strips 53 and 57. The strips 63 and 66 are arranged in alinement transverse of the pattern, as shown, being slidably connected through the medium of a suitable clip and longitudinally adjustable when desired.

The plate member 52 is provided with an angular extension 69, having suitable ears to embrace a strip 70, terminally mounted on the pivotal connection between strips 66 and 67. The strip 70 is formed with a slot 71 to embrace a set-screw 72, having engagement with the projection 69, the inner terminal of the strip 70 being connected to a strip 73, pivotally secured to the end of a strip 74, the outer terminal of which strip is secured upon the pivot joining the strips 53 and 57.

A scale 75 is arranged adjacent the slot 71, and a guide-mark 76 is formed upon the plate member 52 to coöperate with said scale.

From the foregoing it is to be understood that the strips 4 and 5 constitute the bottom measure for the trousers, the strips 25 and 26 the knee measure, the strips 35 and 44 the thigh and seat measure, the strips 53 and 54 the hip measure, and the strips 63 and 66 the waist measure, all of these measurements being for utilization under normal measurements, the seam length being secured by the adjustment of the strips 2 and 19. The adjustment of the parts at the junction of the plate 11 and the enlargement 6 of strip 4 and the adjustment of the strip 70 and coöperating parts are to adapt the pattern for abnormal condition, as hereinafter described.

*The rear pattern.*—The rear pattern is illustrated particularly in Figs. 2, 4, 6, 7, 9, and 10, it being understood that the knee adjustment shown in Fig. 7 and heretofore described in connection with the front pattern is identical with the adjusting-strip for the knee measure of the rear pattern. The rear pattern comprises side strips 77, each comprising slidably-connected sections and a central or intermediate strip 78. The lower terminal of the central strip is connected to a plate member 79, having a set-screw 80 and bearing beneath a plate 81, formed with a slot 82 to receive said set-screw, plate 79 being formed with ears 83 to overlies and secure the plate 81 in slidable relation to plate 79. One of the side strips 77 is terminally connected, through a suitable pivotal connection, to a transverse strip 84, somewhat enlarged at its inner terminal and formed with a slot 85. The other side strip 77 is pivotally connected



at its lower end to a transverse strip 86, formed with a slot 87 at its inner terminal to register with the slot 85 in the strip 84, these registering slots 85 and 87 receiving a set-screw 88, having threaded engagement with the plate 81. The plate 81 on its lower edge is formed with a lip or flange 89 to receive and guide both strips 84 and 86, the latter of which is terminally of less width than the inner terminal of strip 84, and each strip is provided with a suitable scale 90 for regulation in the adjustment. The plate 81 is provided on its upper edge with a scale 91, arranged with relation to a fixed guide-mark 92, formed on the plate 79.

93 represents a coupling-plate, having cross-arms provided with suitable ears to slidably receive the strips at the knee adjustment of this pattern. The vertical arms are arranged to slidably engage a strip 94, formed on its lower end with a slot 95, arranged to register with a slot 96, formed near the upper terminal of the central strip 78, a set-screw 97 engaging these registering slots and seating in the coupling-plate. Transverse strips 98 and 99 connect the side strips 77 with the coupling-plate, the former having slidable engagement with the side strips on one side of the pattern, while the latter is pivotally connected at 100 to the upper end of the side strip on the opposite side of the pattern.

The inner terminals of the strips 98 and 99 are both slotted, as at 101, and are slidably held in the transverse arms of the coupling-plate 93, a set-screw 102 engaging both slots of the strips 98 and 99 for locking the strips in adjusted position.

The upper terminal of the strip 94 is connected rigidly to a transverse strip 103, a similar strip 104 being rigidly secured to the strip 94, just below its connection with strip 103, said strip 104 projecting in a reverse direction from that of strip 102. A strip 105 is slidably connected with strip 103 to a slot 106, formed therein and engaged by a set-screw 107, mounted in the outer terminal of strip 103. The outer end of strip 105 is pivotally connected to the upper end of a strip 108, having a sliding connection with a strip 109, the lower end of which is mounted on the pivot-stud 100. The outer end of strip 104 is connected to a strip 110, through the medium of a groove 111, formed in said latter strip and engaging a set-screw 112, seated in the terminal of strip 104. The outer end of strip 110 is pivotally connected with the upper end of one section of the side strips 77. As the particular adjustment at this point is arranged to provide for the fullness of material in the seat of the garment, the upper section of the side strips 77 is curved outward from the center strip 78, making the rear pattern of greatest width at this point.

A strip 113 is pivotally secured at its lower

end on the set-screw 112, the upper end of this strip being connected, through the medium of a set-screw 114, with a strip 115, which extends to the top of the pattern and is formed with a slot 116 to engage said set-screw 114. The pivotal connection of the strips 77 and 110 is connected with the strip 113 by a curved strip 117, fixed on said pivot and terminally engaging the set-screw 114, through the medium of a suitable slot in said strip 117, as at 118.

A strip 119 is formed in its lower terminal with a slot 120 to slidably engage the set-screw joining the strips 105 and 108, the upper end of which strip 119 is pivotally connected to a transverse strip 121, having sliding engagement with a strip 122, pivotally connected at its outer terminal to the strip 115, below the upper end of the latter. Strip 121 is preferably provided with a set-screw 123 to engage a slot 124, formed in the strip 122, whereby to lock said strips in adjusted position. The upper end of strip 119 is pivotally connected with a short strip 125, equal in length to the distance between the connection of strip 115 and 122 and the end of said strip 115.

A strip 126 is pivotally connected to the upper end of strip 115, being arranged to normally project transversely of said strip and provided at its inner terminal with a set-screw 127.

An angle-strip having a horizontal arm 129 and a depending arm 130 is slidably connected to the strip 126 through the medium of a slot 131, formed in the horizontal arm 129 of the angle-strip arranged to engage the set-screw 127.

The upper end of strip 125 is connected to a short strip 132, having sliding connection with another short strip 133, the strips 132 and 133 being held in adjusted position by a set-screw 134 engaging registering slots in the said strips.

The inner terminal of strip 133 is connected to a depending strip 136, the lower end of which is pivotally connected at 137 to the lower end of the depending arm 130 of the angle-strip. This construction provides a V extension in the waist adjustment of the pattern, whereby to adapt this portion of the pattern for abnormal measurements, as will be hereinafter explained. A tie-strip 138 is pivotally connected to the strip 136 intermediate its ends and is adapted for sliding engagement with the strip 130 through the medium of the set-screw 139, carried by the strip 130, engaging a slot 140, formed in said tie-strip.

In this pattern it is to be understood that the strips 84 and 86 constitute the measure for the trousers-bottom, the strips 98 and 99 the knee measure, the strips 105 and 110 the seat and thigh measure, strips 121 and 122 the hip measure, and strips 126 and 129 the



waist measure. The adjustment of the strip 117 provides for abnormal measurement in the seat adjustment, while the adjustment of the V-strips 130 and 136 provide for abnormal measurements in the waist-pattern.

It is to be understood that, as illustrated, the normal outline of the patterns is coincident with the accepted outline in trousers-patterns—that is, that portion of each pattern arranged to regulate the outer seam of the garment is approximately straight, while the opposing sides of these patterns are shaped to provide for the fullness normally incident to the seat measurement and crotch measurement, the former being illustrated in the curvature of the upper section of the side strips 77 and the latter in the outwardly-curving face of the plate 43. The outline of the bottom patterns also differs, in that the outline of the front pattern is upwardly curved to provide the accepted curves in trousers-bottoms at this point, while the outline of the rear pattern is slightly rounded outwardly to provide the proper curve for the rear portion of the trousers-bottom. It is also to be understood that scales suitably marked in accordance with tailors' measurements are to be provided at each adjusting-point, so that the operator may definitely set the pattern with regard to his data.

Both patterns are to be used in connection with a single pair of trousers, each being adapted for its respective indicated use.

In use the individual to be fitted is measured in any usual or preferred way to obtain the waist, hip, seat, thigh, knee, bottom, inseam, and outseam measurements. The set-screws of the patterns are loosened with the exception of the set-screws 14, 72, 80, and 139 and the patterns adjusted to arrange the side pieces thereof a distance apart at the respective points in accordance with the data in hand. The inseam measurements being obtained by the longitudinal adjustment of the strips 2 and 19 of the rear pattern, the rise of seam, which is the difference between the inseam and outseam, is gained through the adjustment of the thumb-screws 114 and that uniting-strip 108 and strip 120, it being understood that these strips are adjusted to indicate on their scale the difference between the inseam and outseam. All these normal measurements are indicated upon the scales adjacent the adjusting-slots in the respective strips, and the respective strips are adjusted toward or from each other until the scale-marks are identical with the measurements of the individual at the particular points. The patterns are now set for the absolutely normal figure; but it frequently happens that the individual may have certain inequalities—such as a hollow back and prominent seat, a flat back and small seat, knock-knees, bow legs, or close legs—and it is to arrange the pattern for adjustment to accommodate

these irregularities that the particular parts hereinbefore referred to have been devised.

If, for example, the individual should have bow legs, the set-screws 14 and 80 are loosened and the center strips of the patterns are shifted toward the straight side of the pattern, adjusting the seam of the garment to accommodate for this irregularity. If the individual is knock-kneed, the center strips are moved in a reverse direction to provide for this irregularity. If the individual is stout, the set-screw 72 on the front pattern only is loosened and the strip 70 adjusted to shift the waist-adjustment strip laterally to provide a fullness in the material at this point, this adjustment raising the front edge of the pattern and increasing the measurement at this point. If the individual is hollow back with the prominent seat, the set-screw 139 is loosened and the V members spread apart to increase the dimension at this particular point, while in the event of a straight back and small seat the V members are drawn closer together than in normal relation to decrease the fullness at this point.

It is understood that the various adjustments described for the irregularities noted are to be made in accordance with the particular knowledge of the tailor, being adjusted to scale in accordance with the particular measurements which he may make. The patterns when so adjusted are designed to serve as cutting-outlines in shaping the cloth in an obvious manner.

It will be noted that by the use of this pattern I am enabled to cut trousers with the minimum loss of material and absolutely accurate as regards measurements, the patterns serving for normal figures or for irregular figures, the adjustment for the latter being simple and efficient. The patterns are adapted for cutting knee-pants as well, though in this use, of course, the bottom measurements are to be disregarded.

The patterns are preferably constructed of light metallic strips suitably finished, and the set-screws described may have threaded bearing in fixed parts or may engage a suitable tap, as desired.

It is to be understood that the gist of the present invention resides in the construction whereby the irregularities or deformities of the figure are provided for in the pattern adjustment, and though I have described the other features of the pattern as forming part of my invention it is to be understood that I contemplate the use of the particular irregular adjustments in connection with any pattern of this character.

From the above construction it will be noted that in the case of the front pattern the waist-gaging section, including the strips 62, 63, 66, 67, and 68, is pivotally connected at 59 to the body of the pattern and slidably connected to said body on the opposite side.



In providing for irregularities of figure at this point, as hereinbefore described, longitudinal movement of the strip 70 will slide the strip 67 upon the strip 68, distending or projecting this end of the waist-gaging section from the body of the pattern, providing for the desired increase at this point. It is to be particularly noted that this adjustment of the waist-gaging section does not alter or affect the transverse measurement of said waist-section previously adjusted by the set-screw 65.

The waist-gaging section of the rear pattern is pivotally connected with the pattern-body through the medium of the pivotal connection of strips 125 and 126, and in providing for irregular adjustment at this point, as previously described, it will be noted that separation of the arms of the V will force upward the inner ends of the strips 129 and 133, distending or projecting this particular portion of the waist-section from the pattern-body, this adjustment being also accomplished without changing the transverse adjustment between the side strips of the waist-section.

In shifting the bottom outline of the trousers to accommodate the irregularities previously mentioned it will be noted that the entire pattern outline, including the side strips and the bottom strips, with the latter secured in adjusted position according to the size, is bodily shifted with relation to the center strip without in any manner affecting or changing the measurement at this point.

Having thus described the invention, what is claimed as new is—

1. A front pattern for trousers including a frame, means for adjusting said frame to alter the pattern, and means to independently adjust the waist measurement as a whole with relation to the rest of the pattern.

2. A front pattern for trousers comprising a frame including a plurality of connected strips, means for adjusting the strips to all of the pattern, a waist-pattern gage pivotally connected in the frame, and means for adjusting said gage as a whole relative to and independently of the rest of the pattern.

3. A front pattern for trousers including adjustably-connected strips, a waist-gage comprising a plurality of adjustable strips, said latter strips being pivotally connected with the pattern-strips, and means to adjust said waist-gage by moving one end of said gage in a direction away from the body of the pattern, said adjustment being effected independently of and relative to the main pat-

tern and serving to increase one side length of said pattern.

4. A trousers-pattern including a waist-gaging section pivotally connected at one end to the body of the pattern, and slidably connected at the opposite end to the body of the pattern, and a strip adjustably connected with the body of the pattern and engaging the waist-pattern adjacent said slidable connection.

5. A trousers-pattern comprising a plurality of strips longitudinally adjustable to lengthen the pattern, means for adjusting the strips with relation to each other, a waist-gaging pattern having pivotal connection with the body of the pattern at one end, and a sliding connection therewith at the opposite end, and a strip engaging said waist-pattern and adjustably secured to the body of the pattern.

6. A trousers-pattern comprising outline-strips adjustable toward or from each other, a center strip longitudinally adjustable to increase the length of the pattern, and means for adjusting the outline-strips with relation to the center strip without disturbing the outline dimensions of the pattern.

7. A trousers-pattern comprising side strips, transverse strips joining the side strips at their lower ends, said transverse strips being adjustably connected at their inner ends, a center strip for longitudinally adjusting the side strips, and adjustable means connecting said transverse strips with the center strip.

8. A trousers-pattern comprising side strips, transverse strips joining the side strips at their lower ends, said transverse strips being adjustably connected at their inner ends, one of said transverse strips being formed with an enlargement, a center strip, adjustable means connecting said center strip and said enlargement.

9. A trousers-pattern comprising outline-strips and a center strip, and means for adjusting the center strip relative to the outline-strips without disturbing the outline dimensions of the pattern.

10. A trousers-pattern comprising side strips, bottom gage-strips, and a center strip adjustably connected with the bottom gage-strips for movement toward either of the side strips.

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

WALTER M. BARRY.

Witnesses:

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H. J. ZIMBRICH.