

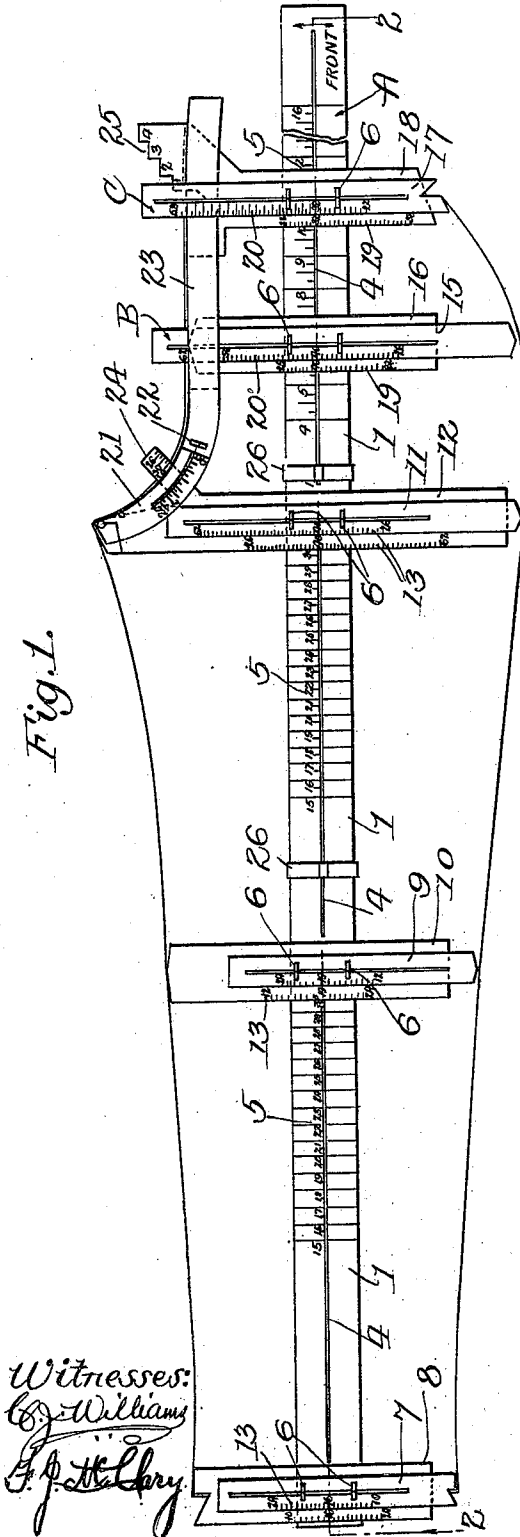
H. MATTINGER.
DRAFTING INSTRUMENT.
APPLICATION FILED DEC. 31, 1909.

979,872.

Patented Dec. 27, 1910.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses:
E. J. Williams
J. P. McHenry

Fig. 2.

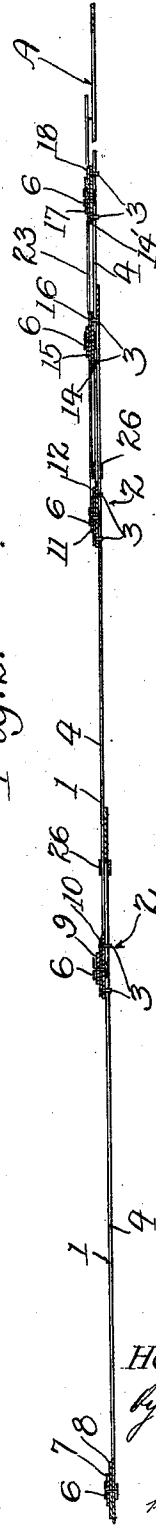
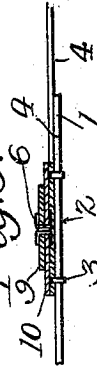


Fig. 3.



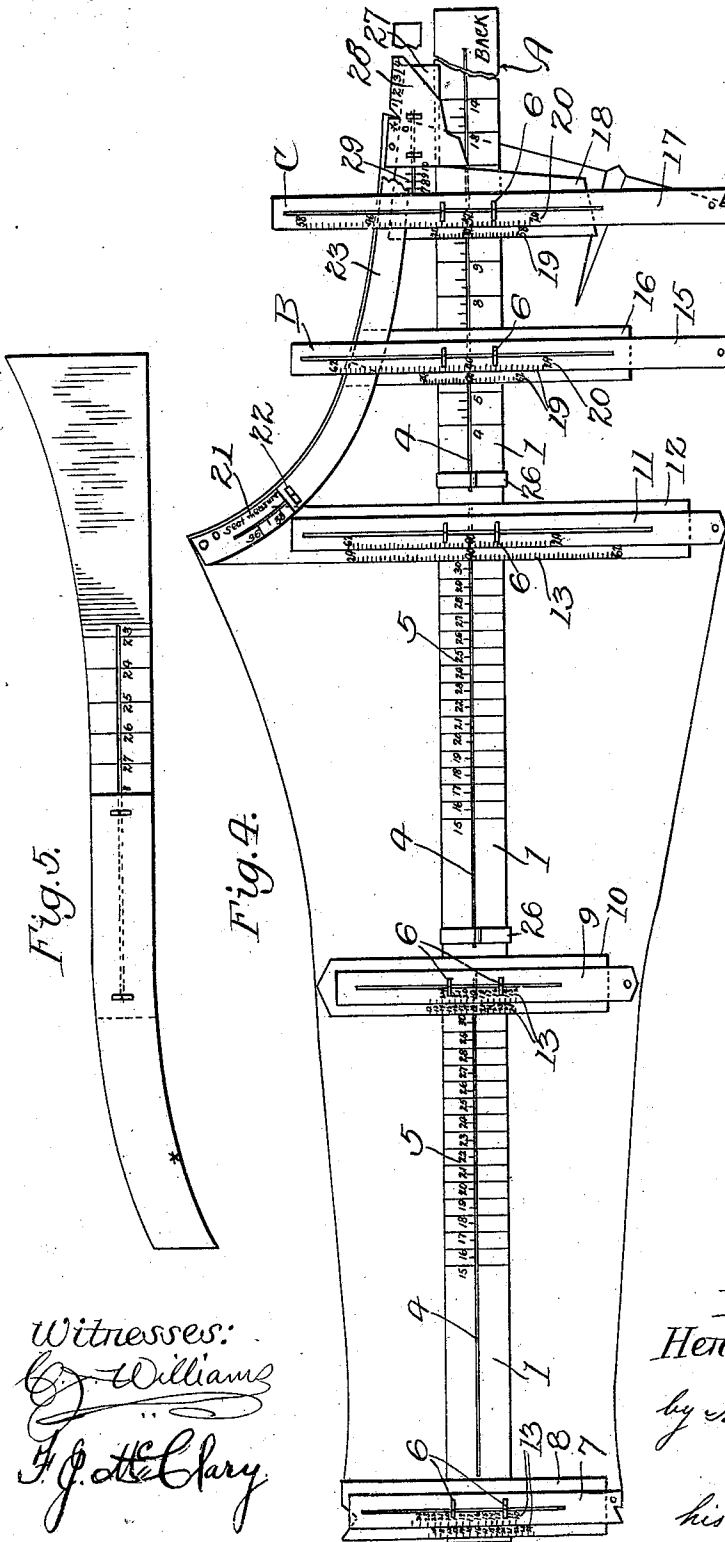
Inventor,
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2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

HENRY MATTINGER, OF LOS ANGELES, CALIFORNIA.

DRAFTING INSTRUMENT.

979,872.

Specification of Letters Patent.

Patented Dec. 27, 1910.

Application filed December 31, 1909. Serial No. 535,768.

To all whom it may concern:

Be it known that I, HENRY MATTINGER, a citizen of Germany, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a certain new and useful Drafting Instrument, of which the following is a specification.

This invention relates to a drafting device, and has especial reference to an appliance for use by tailors and others particularly in the cutting out and designing of trousers.

One of the objects of this invention is to provide a device of the character which eliminates the necessity for calculating measurements as must now be commonly done, and thereby to avoid the occurrence of errors and the cutting of the trouser goods in accordance with such incorrect calculations.

Another object of this invention is to provide a device for drafting trouser designs that may readily supplant any of the various systems in vogue in the tailoring establishments, and one that is light, compact, and simple, and universally usable for all makes and styles of trousers.

Finally a further object of this invention is to provide a device by means of which the design of the trousers may be accurately drafted on the goods from which the trousers are to be cut, and with these and other objects in view, this invention consists of the features, details of construction and combination of parts, described in connection with the accompanying drawings, and then more particularly pointed out in the claims.

In the drawings, Figure 1, is a plan view of my invention adapted for drafting the front of the trousers. Fig. 2, is a longitudinal section on lines 2—2 Fig. 1. Fig. 3, is an enlarged fragmentary section showing the mode of joining the strips. Fig. 4, is a plan view of my invention adapted for drafting the back of the trousers, and Fig. 5, is a plan view of the ruler used to assist in the accurate drawing of the curves.

The invention consists of a plurality of strips 1, conjoined at 2, by fasteners 3, which are secured in the end of each strip 1, and which are arranged to operate in the slots 4, provided centrally of each strip 1, whereby the said strips may be extended longitudinally according to the measurement from the bottom to the top taken from the individual to whom the trousers are to be fitted, and which measurements are indicated in the scale 5, provided on the faces of each of

the strips. At right angles to said strips 1, and fastened thereon in any suitable manner, as by staples 6, are cross-pieces 7 and 8, 9 and 10, and 11 and 12, these cross-pieces being severally provided with scales 13, and capable of movement relatively to each other, to measure the bottom, knee, and the seat of the trousers, respectively. Slides 14 and 14' Fig. 2 are also movably mounted or fastened to the upper strip A and on these slides are secured cross-pieces 15 and 16, and 17 and 18, designed to measure the circumference of the stomach and the waist line, respectively. These cross-pieces are movable relatively to each other and to the strip A, and are provided on the faces thereof with measuring indications 19 and 20, inversely arranged relatively to each other. In adapting the appliance to the pattern from which the trousers are to be cut, and on which the drafting or outline of the trouser design is to appear, the scale indications of all of the cross-pieces 7 and 8, 9 and 10, 11 and 12, 15 and 16, and 17 and 18 must be in register with the slots 4 provided centrally of the strips 1, that is to say, when for instance, the cutting of the outline of a waist measuring 32 inches is to be made on the cloth the cross-piece 17, is drawn from one side of the strip A until the number 32 is in line with the central slot 4, and the cross-piece 18, in the opposite direction until the corresponding number on the scale thereof is in register with said slot, in which position the numbers 32 of the respective cross-pieces are in alinement with each other and also with the central slot.

Pivottally fastened on one end of the cross-piece 12 of the series 11 and 12, is a curved member 21, to which is slidably connected by a staple 22 or in any other suitable manner, an extension 23 which is adapted to be moved relatively to said curved member 21, until the end of the same is on a line indicating the scale measurement which corresponds with the scale number provided on the angular tang 24, made contiguous with the seat-measure indicating strips 11 and 12. As shown in Fig. 1, the seat strips 11 and 12, indicate 40 inches, the numbers 40 on both strips being on a line with the central slot 4. In order therefore, to obtain the correct measurement and proper curvature of the line from the crotch to the waist line, the curved member 21, must also be moved to that number on the tang 24, which corre-

sponds with the size of the seat, viz., 40; so also must the extension 23 be moved to show the measurement previously determined, namely 40. When thus ascertained, the said extension 23, is alined with the ends B and C of the cross-pieces 16 and 18, and the outline thereof traced with chalk or a pencil. Where the stomach measurement varies, that is to say, where it is larger than accounted for the said extension 23, is moved to a line parallel with one of the offsets 25, indicated in Fig. 1, by the numerals 1, 2, 3, 4. In this manner the variation is compensated for without changing the balance of the measurement, except that the amount added in front must be deducted from the back.

The measure from the crotch to the waist line is substantially the difference between the whole outside length and the inside length. Thus if the outside length measure 45 inches, and the inside length 32, the line from the crotch to the waist line will be 13 inches, and this is the only calculation necessary in connection with the employment of this device. The strips 1, for measuring the length of the trouser pattern are provided with reinforcing bands 26, to normally keep them in a straight line.

The structure shown in Fig. 1, and just described is designed for the front part of the pattern of the trousers.

Fig. 4 illustrates a form to be used for the back pattern.

The structural details here shown are substantially the same in all particulars except that the cross-strips or pieces are somewhat longer.

The cross-piece 18 of the set 17 and 18 is provided with a contiguous portion 27 on which is fastened a slide 28, arranged to be moved relatively to the scale 29 provided on said contiguous portion 27, thereby to obtain the height of the trouser pattern on the back. In practice, the extension 23, slidably attached to the curved member 21 is brought on a line with the outside edge of the slide 28, and the marking of the goods made at that point indicated by the star. The curve obtained by tracing the outline of the said extension is the correct curve for the back seam. Where the goods or patterns are to be fitted to a stooping form, the marking of the same is made in accordance with the numbers 1, 2, 3, 4, etc. appearing on the face of the slide 28.

What I claim, is:—

1. A device of the character described comprising a plurality of conjoined strips extensible longitudinally according to the measurement of the length of the trouser garment, a plurality of cross pieces on said strips to measure the bottom, knee, seat and waist respectively, said waist measuring cross pieces and one of said seat measuring cross pieces being adjustable relatively to

each other and to said strips and said bottom, knee and other of said seat cross pieces being adjustable relatively to each other, and a curved member pivotally attached to one of said cross pieces and adapted to be moved relatively to said cross pieces to obtain the curves necessary in a garment pattern.

2. A device of the character described comprising a plurality of conjoined strips adjustable in respect to each other in accordance with the length required for a garment, said strips being provided on the faces thereof with scale indications, a plurality of sets of cross pieces on said strips to obtain the measurement of the bottom, knee, seat and waist of a trouser garment, the bottom, knee and one of the seat sets being adjustable relatively to each other and the waist and the other of said seat sets being adjustable relatively to each other and to said longitudinally adjustable strips, each of said cross pieces being provided with inversely arranged scale indications and a member pivotally and adjustably attached to one of said cross pieces to obtain the correct curve of a garment from the crotch to the waist-line.

3. A device of the character described comprising a plurality of conjoined strips adjustable in respect to each other in accordance with the length required for a trouser garment, said strips being provided on the faces thereof with scale indications, a plurality of sets of cross pieces on said strips to measure the bottom, knee, seat and waist of a trouser garment, the bottom, knee and one of the seat sets being fastened to said strips and adjustable in respect to each other, and said waist set and one of said seat sets being adjustable relatively to each other and to said strips, and a curved member pivotally fastened to one of said seat sets to obtain the curves necessary in a trouser garment from the crotch to the waist line.

4. A device of the character described, comprising a plurality of conjoined strips relatively movable in accordance with the length desired for a garment, said strips being provided on the faces thereof with scale indications, a plurality of cross-pieces on said strips, three of which are movable relatively to each other and with said strips, and two of which are movable relatively to each other and independently of said strips, said cross pieces being provided on the faces thereof with scale indications inversely arranged, pivotal means on one of said cross-pieces adapted to be moved relatively to said strips and a curved member attached to said pivotal means to obtain the curves necessary in a garment pattern.

5. A drafting instrument for trousers, comprising a plurality of strips extensible longitudinally relatively to each other and

having on the face thereof scale indications,
reinforcing bands to normally hold said
strips in a true line, a plurality of sets of
cross pieces on and at right angles to said
5 strips and provided with scale indications
on the faces thereof, said cross pieces sever-
ally consisting of two cross pieces movable
relatively to each other and to the right and
left of said strips to measure the bottom,
10 knee, seat and waist for a trouser garment,
said bottom, knee and one of said seat sets
being fastened on said strips and movable

therewith and the other of said seat sets
and said waist set being adjustable rela-
tively to said strip and to each other, and 15
a plurality of curved members pivoted to
one of said seat sets to obtain the curve
necessary from the crotch to the waist line.

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

HENRY MATTINGER.

Witnesses:

F. J. McCLARY,
ANTON GLOETZNER, Jr.