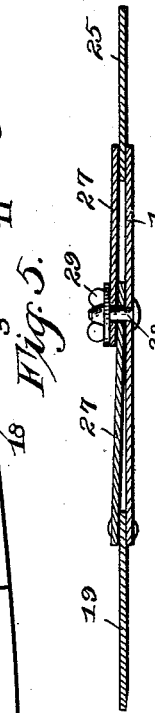
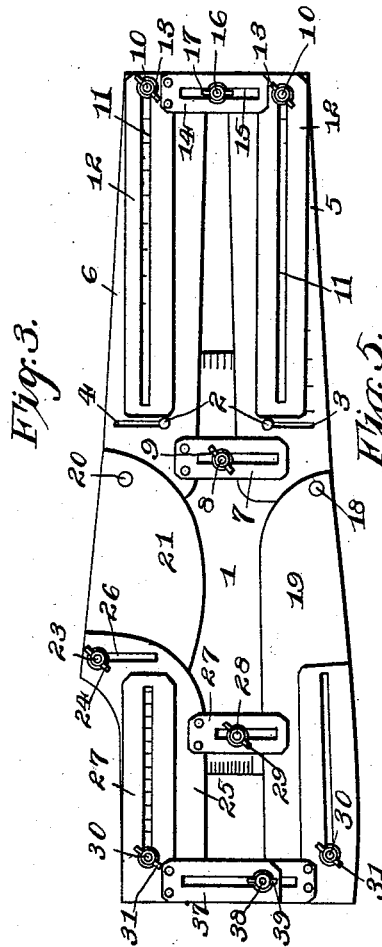
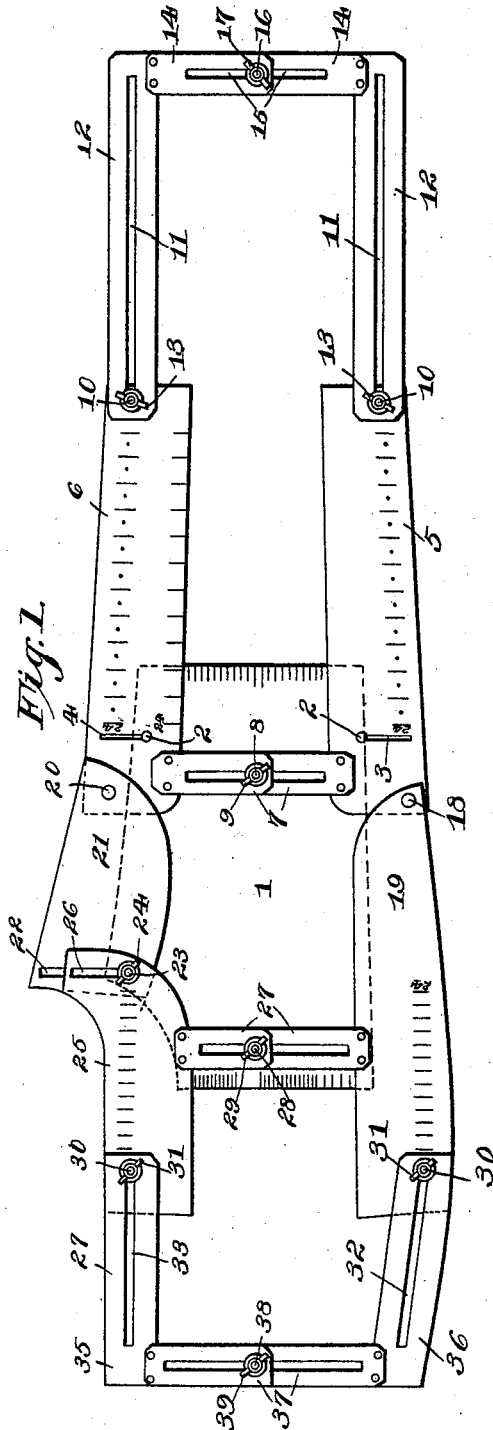


J. G. NIEKAMP.
TROUSERS PATTERN.

No. 523,590.

Patented July 24, 1894.



Inventor

John G. Niekamp,

Witnesses

C. Ford.

By his Attorneys,

W. S. Duwall.

C. A. Snow & Co.

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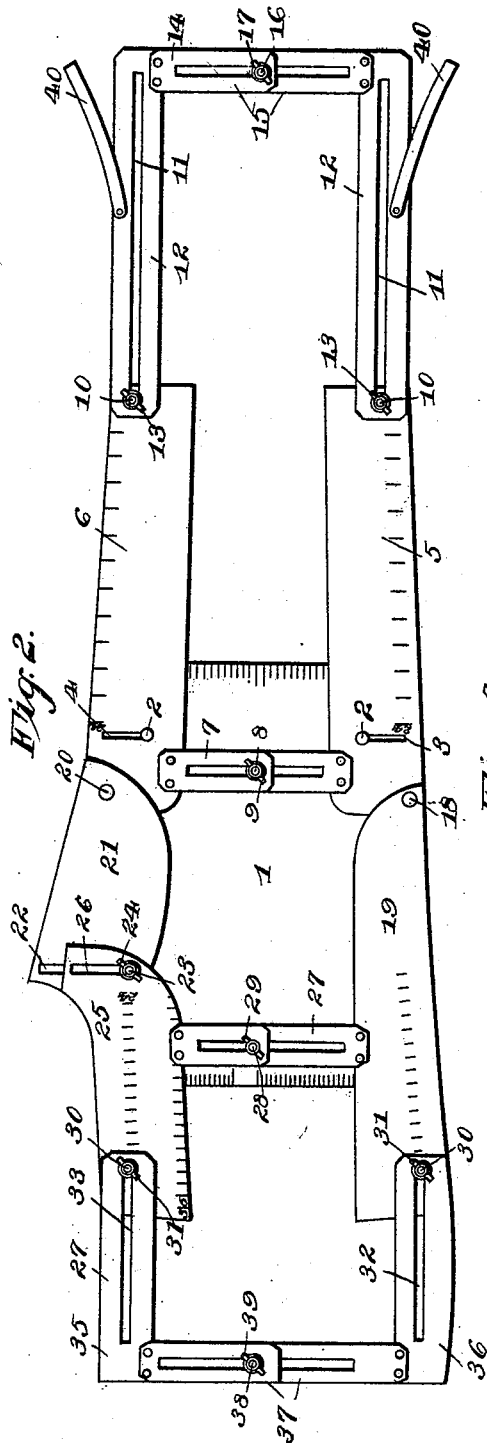


Fig. 4.

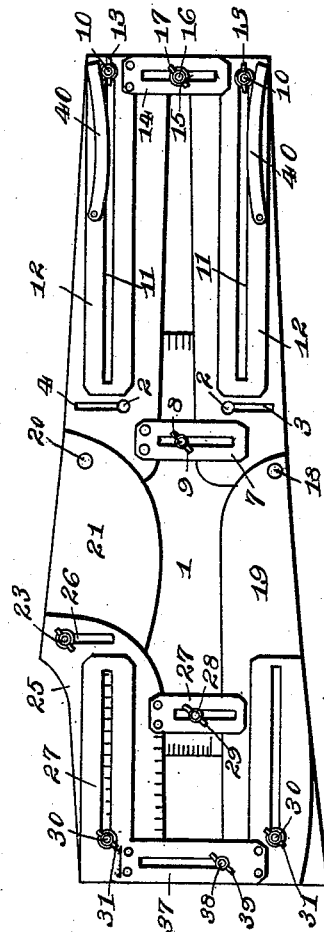


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN GERHARD NIEKAMP, OF FORT RECOVERY, OHIO.

TROUSERS-PATTERN.

SPECIFICATION forming part of Letters Patent No. 523,590, dated July 24, 1894.

Application filed September 21, 1893. Serial No. 486,106. (No model.)

To all whom it may concern:

Be it known that I, JOHN GERHARD NIEKAMP, a citizen of the United States, residing at Fort Recovery, in the county of Mercer and State of Ohio, have invented a new and useful Pants-Pattern, of which the following is a specification.

My invention relates to improvements in pants patterns; the objects in view being to provide a durable pattern that is adapted to be accurately and readily adjusted and to constitute a pattern to be followed in cutting trousers, and to be capable of producing when followed trousers of any desired proportions and size.

Various other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a plan view of the front section of a trousers pattern embodying my invention. Fig. 2 is a similar view of the rear section, in both instances the patterns being extended to their utmost limit for producing a large size of trousers. Fig. 3 is a view similar to Fig. 1. Fig. 4 is a view similar to Fig. 2, the pattern being constructed so as to produce the smallest size of trousers. Fig. 5 is a transverse sectional view through the hip adjusting-strips. Fig. 6 is a similar view through the leg-adjusting strips.

Like numerals of reference indicate like parts in all the figures of the drawings.

Inasmuch as the front and back patterns are substantially the same, a description of one will suffice for that of the other.

Referring therefore to Figs. 1 and 3 more particularly, wherein I have illustrated the pattern for the front, 1 designates the body-portion or base of the pattern, the same preferably being formed of sheet-iron as is also the remainder of the pattern, and of somewhat oblong shape. Adjacent to the lower corners of this base-portion headed rivets or studs 2 are located, and the same pass through transverse slots 3 and 4 which are formed in the outer and inner side-plates 5 and 6 respectively, which project from the lower end of the aforesaid blank. These plates are narrower than the blank, and each has attached in any suitable manner to its upper inner

corner an inwardly disposed strip 7, the said strips being slotted longitudinally. The inner ends of the strips 7 overlap, and the slots register and receive a bolt 8, upon which is mounted a thumb-nut 9. The edge of the inner side-plate 6 is preferably provided with a scale.

Projecting from the side plates 5 and 6 near the lower ends of the latter and adjacent to their outer edges is a pair of threaded bolts 10, and the same pass through longitudinal slots 11 formed in a pair of extension-plates 12. These bolts are provided with thumb-nuts 13 by which the extension-plates may be adjusted on the side-plates 5 and 6 for the purpose of lengthening the leg of the pattern. The lower ends of these plates have attached by any suitable means and disposed thereto at right angles, inwardly disposed extensions or adjusting-strips 14, which are longitudinally slotted at 15 and overlap each other and are adjustably connected by means of a bolt 16 and its thumb-nut 17.

It will thus be seen that I am enabled to lengthen the leg by extending the extension-plates 12, and that I am enabled to widen the leg by spreading the side-plates 5 and 6, and likewise may the bottom of the trousers leg be widened through the medium of the adjustable-strips 14, the parts being secured rigidly in any of their positions by means of set-bolts and nuts.

Pivoted by a rivet 18 to the outer upper corner of the side-plate 5 is a hip-plate 19, the same having its outer edge slightly curved so as to correspond with the hips of the wearer and extending above the base-plate 1. The inner side-plate 6 has pivoted to its outer upper corner, by a rivet 20, a crotch-plate 21, which at its outer edge forms a continuation of the outer edge of the side plate 6, and terminates below the upper end of the base-plate 1. This crotch-plate is provided with a transverse slot 22 and upwardly through the same passes the threaded bolt 23 which has upon its upper end a clamping thumb-nut 24. It will be seen that this crotch-plate may move in or out with the inner side plate 6, and the same may swing upon its pivot 20 so as to increase the width of the trousers-leg at the hip and crotch.

25 designates the back-plate and the same

has its outer edge curved, as shown, and forms an abrupt continuation of the plate 21. At its lower end it is provided with a slot 26 and is adjustable in and out upon the same bolt 23 as is the crotch-plate 21. This plate 25 is also provided with a scale, as shown.

The inner edges of the hip-plate 19 and the back-plate 25 are near the upper end of the base-plate 1 provided with inwardly disposed slotted adjusting-strips 27, and a bolt 28 passes upwardly through the base-plate and the aforesaid slots, and has mounted thereon a thumb-nut 29.

Extending through the hip-plate 19 and the back-plate 25 near the outer corners thereof are bolts 30 which have applied to their upper ends thumb-nuts 31. These plates pass through longitudinal slots 32 and 33 respectively that are formed in extension-plates 35 and 36 respectively, of the hip and back-plates. The upper ends of these plates are provided with inwardly disposed longitudinally slotted strips 37 which are connected by a bolt 38 and secured in position by its nut 39. The back-section is precisely the same as that described, and only differs in one respect, and that is that its lower extension-plates 12 are provided at their outer edges with spring-forming strips 40, which are pivoted as at 41 at their upper ends to such extensions. These spring-forming strips may be swung outward from the bottom of the leg and thus produce more or less spring to the bottom of the trousers produced from the pattern.

By my invention it will be seen that by loosening the several nuts of the several bolts all of the parts may be extended or contracted from or toward the base and thus the pattern for cutting trousers of any size produced, the scale of inches arranged upon the different parts will serve to give accurate measurements and the pattern, it will be observed, may be varied in its proportions at any point whatever regardless of the proportions of the person for whom the trousers are to be cut.

It will be observed that the waist measure may be increased or diminished through the medium of the bolt 38 and its nut that is by adjusting said bolt in the slots of the strips 37. Furthermore, that the hip measure may be increased or diminished through the medium of the strips 29 and their adjustments; that the thigh and knee may be increased or diminished through the adjustment of the hip-plates and crotch-plates 21; that the width of the trousers leg may be determined by an adjustment of the side-plates; and finally that the length of the leg together with the width

at the bottom may be secured by an adjustment of the extension-strips 12 and 14.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the details of this invention.

Having described my invention, what I claim is—

1. The herein described trousers pattern, the same consisting of the base-plate 1, the side plates 5 and 6 arranged at the opposite side edges of the base-plate and laterally adjustable upon and extending below the lower end of the same, the extension-plates 12 adjustably secured to the side-plates, the hip-plate 19 pivoted to the upper end of the outer side-plate, the crotch-plate 21 pivoted to the upper end of the inner side-plate, the longitudinally disposed back-plate having its lower end attached to the crotch-plate and laterally adjustable thereon, adjusting devices between the hip and back plates, the extension plates 32 and 33 provided with an adjusting-strip at their upper ends, and the adjusting strips connecting the outer ends of the extension plates 12, substantially as specified.

2. The herein described trousers pattern, the same consisting of the base 1 having headed studs at its lower corners, the laterally slotted side plates 5 and 6 arranged adjustably upon the studs, the slotted extension-plates 12 at the lower ends of the side plates and having at their lower ends the inwardly disposed slotted strips 14, the adjusting-bolts passed through the lower ends of the side-plates and the slots of the extension-plates and the slots in the strips, the adjusting-strips 7 at the upper ends of the side plates and their bolt, the hip-plate 19 pivoted at the upper end of the outer side-plate, the crotch-plate pivoted to the upper end of the inner side-plate and having a transverse slot at its upper end, a bolt passed therethrough, a curved back-plate transversely slotted to receive the bolt, extension-plates at the upper ends of the back and hip-plates and provided with slots, adjusting-bolts passed through the slots and said back and hip-plates, transversely disposed slotted strips at the upper ends of the extension-plates, and the adjusting-bolts through said slots, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN GERHARD NIEKAMP.

Witnesses:

ANTON BAEHMER,
J. PASSMAN.