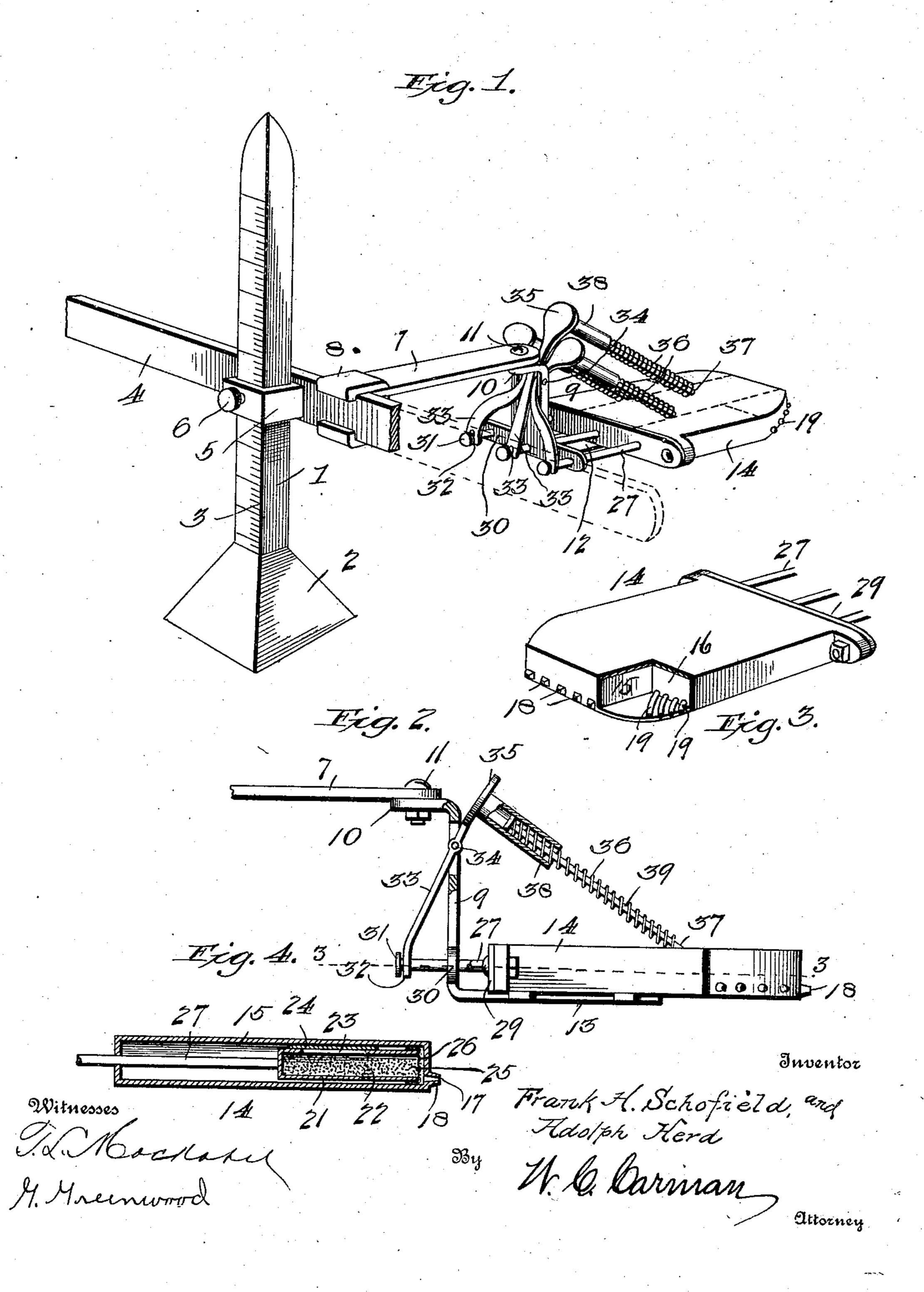
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APPLICATION FILED SEPT. 20, 1906.

2 SHEETS-SHEET 1

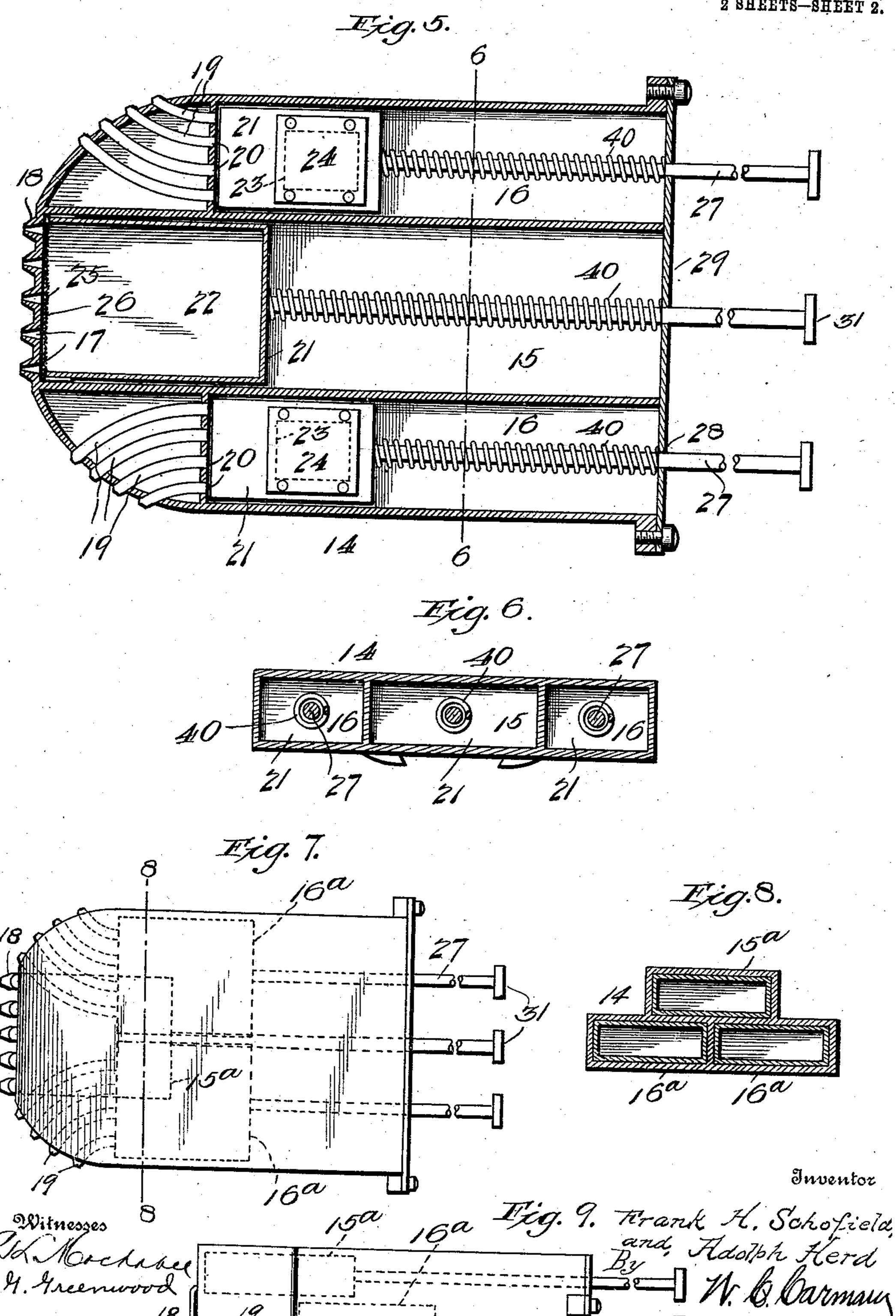


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UNITED STATES PATENT OFFICE.

FRANK H. SCHOFIELD AND ADOLPH HERD, OF YOUNGSTOWN, OHIO; SAID SCHOFIELD ASSIGNOR TO SAID HERD.

SKIRT-MARKER.

No. 842,713.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed September 20, 1906. Serial No. 335,400.

To all whom it may concern:

Be it known that we, Frank H. Schofield and Adolph Herd, citizens of the United States, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Skirt-Markers, of which the following is a specification.

This invention relates to an improvement in that type of tailoring appliances known as "garment gages and markers" and commonly termed "skirt-gages" or "skirt-markers."

The main and primary object of the invention is to provide a simple and practical form of marking device designed to be associated with any suitable supporting means or gage to provide for accurately and expeditiously marking an alteration on any garment which is to be shortened.

To this end the invention contemplates an improved marking device for tailoring-gages possessing special utility as a marker to facilitate the shortening and evening of the bettern of women's skirts

A further object of the invention is to provide a marking device so constructed that the same can be utilized for placing a well-defined mark in and around the folds of the skirt, and, furthermore, to make a mark consisting of a neat dotted line which can be easily brushed off of the goods, thereby obviating the objections attendant upon the use of the ordinary marking chalk or crayon.

With these and many other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and

The essential feature of the invention embodied in the means for ejecting a plurality of powder-jets in a straight line for marking purposes is susceptible to embodiment in a variety of mechanical forms without departing from the scope of the invention; but preferred embodiments thereof are shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a tailoring gage and marker embodying the present invention. Fig. 2 is a side elevation, partly in section, of the marking device proper shown in Fig. 1. Fig. 3 is a detail perspec-

tive view of the marker-casing shown in reversed position from that illustrated in Fig.1. Fig. 4 is an enlarged longitudinal sectional view of one of the discharge-chambers and its expelling-plunger for jetting a powder out of the said chamber in which such plunger 60 works. Fig. 5 is an enlarged horizontal sectional view on the line 3 3 of Fig. 2. Fig. 6 is a cross-sectional view on the line 6 6 of Fig. 5. Fig. 7 is a plan view showing a modified arrangement of the discharge-chambers of the marker-casing. Fig. 8 is a cross-sectional view on the line 8 8 of Fig. 7, and Fig. 9 is a side view of the same modification.

Like references designate corresponding parts in the several figures of the drawings.

The marking device proper, which constitutes the essential feature of the present invention, may be utilized in connection with any approved and practical form of support or gage to make the complete tailoring gage 75 and marker; but for convenience in describing and illustrating the construction and use of the improved marking device the same is shown in the drawings as being associated with a gage-standard 1, arising from a suit- 80 able supporting-base 2 and provided throughout its length with scale-graduations 3, which graduations provide for accurately gaging in inches and fractions thereof the exact shortening or alteration to be made in the gar- 85 ment.

In the constructions referred to the standard 1 constitutes a supporting member for the horizontal vertically-adjustable gagingbar 4, provided at one side with a slide-collar 90 5, working upon the standard and fitted with a clamping set-screw 6, impinging on the standard and adapted to hold the bar 4 stationary in any vertically-adjusted position. In this construction the gaging-bar 4 sub- 95 serves the function of determining the height at which the marking device is held for marking purposes and provides for the adjustable mounting of the horizontally-movable marker-arm 7. For the purposes of the 100 present invention the marker-arm 7 may be rigidly or otherwise suitably connected with and supported by the standard 1; but in adapting the same to a form of gage wherein the horizontal vertically-adjustable gaging- 105 bar 4 is employed the said marker-arm 7 may have a shiftable or sliding connection with the bar 4. Various forms of connections for

this purpose might be used, but a simple and practical construction consists in providing the arm 7 at its supported end with a flanged slide-cuff 8, embracing the bar 4 and slidable thereon to such position as may be desired when marking the alteration-line on the

skirt or other garment.

The marking device proper is designed to be supported and carried directly by the 10 marker-arm 7, and a practical means for securing that result resides in the employment of an angled supporting-bracket 9, the upper arm 10 of which is swiveled or pivoted at 11 to what may be termed the "outer" end of the 15 marker-arm 7, while the lower arm 12 of the said bracket is dovetailed to detachably fit in a correspondingly-shaped socket or seat 13, provided at the under side of the markercasing, (designated in its entirety by the refer-20 ence-number 14.) The marker-casing is thus supported in a horizontal position upon the bracket 12 in substantial parallelism to the arm 7 and is capable of being swung laterally on the pivot 11 to adapt the same to the out-25 line and folds of the garment being marked.

The marker-casing 14 consists of a boxing of any desired configuration, but preferably of a general rectangular form and usually constructed with a plurality of discharge-chambers from which chalk or other powdered substance is ejected in a plurality of jets in a straight line to make a mark con-

sisting of a neat line of dots. Different arrangements may be observed 35 for the several discharge-chambers of the marker-casing, but the preferred construction and arrangement of parts is shown in Figs. 1 to 6, inclusive, of the drawings. As illustrated therein, the marker-casing is so 40 partitioned as to have formed therein a main central discharge-chamber 15, and the opposite side or lateral discharge-chambers 16, located, respectively, at opposite sides of the central chamber 15, but disposed in parallel-45 ism thereto. Also, in this form of the invention the several chambers 15 and 16 are arranged in the same horizontal plane as shown in Fig. 6 of the drawings, so that the line of dots formed by the powder jetted 50 from each of the said chambers will lie in the same horizontal plane. The central discharge-chamber 15 constitutes the main chamber of the casing, and the powder-jets are designed to be thrown therefrom, pref-55 erably in a direct line. To provide for this, the chamber 15 is formed at the outer end thereof with a series of regularly-spaced jetorifices 17, preferably surrounded by individual outstanding nipples 18, which serve 60 to guide or direct the powder particles in a straight line against the goods of the skirt. The opposite side discharge-chambers 16 are illustrated as being of a shorter length than the central chamber in order to provide clear-65 ance at the ends for a series of laterally-curving jet-tubes 19, which are extended outwardly and laterally from the jet-orifices 20 at the outer ends of the said side chambers. This arrangement is best seen in Fig. 5 of the drawings, and it will be observed that the 70 tubes 19 of the opposite chambers 16 are respectively turned in opposite or reverse directions, thereby providing an arrangement which enables the tailor or dressmaker to work in and around the folds of the skirt 75 in the marking thereof for alteration or other purposes. This is especially useful, since provision is made whereby the jetting of the powder is separately controlled in each of the several chambers 15 and 16.

Each of the discharge-chambers 15 and 16 accommodates for movement therein an expelling-plunger 21. This expelling-plunger is in the form of a hollow box, having therein a powder-compartment 22, designed to be 85 filled with a quantity of powdered chalk or equivalent powdered substance that could be used for marking purposes. At one side the plunger or box 21 is provided with a fillingopening 23, designed to be covered by a re- 90 movable cover-plate 24, of metal or other material, and at its outer end the plunger is provided with an end outlet-opening 25, over which is suitably secured what may be characterized as an "impact discharge- 95 screen" 26. This impact-discharge screen consists of a foraminous cushion, pad, or covering, preferably made of one or more strips of cloth and through which the powder within the plunger is designed to be forced when the 100 said screen 26 is thrown into sharp impact with the outer end wall of the dischargechamber.

Each of the expelling-plungers 21 has connected to one end thereof the inner end of a 105 plunger-stem 27, slidably working through a guide-opening 28 in the removable end plate 29, covering the inner ends of all of the discharge-chambers and providing convenient means whereby ready access may be had to 110 such chambers for the purpose of refilling the plungers when their supply of powder has become exhausted. Also the outer end portion of each plunger-stem 27 works through a suitable guide 30, carried by the supporting- 115 bracket 9, and at its outer extremity the said plunger-stem is provided with a head or button 31, engaged at one side by the lower forked end 32 of an operating-lever 33. One of these levers 33 is associated with each 120 plunger-stem 27, and each lever is pivotally supported intermediate of its ends, as at 34, within or upon the supporting-bracket 9, and at its upper end the said lever is formed with a finger-plate 35, adapted to be engaged by 125 the thumb or finger of the hand to provide for manipulating the same. Each of the said operating-levers 33 is normally moved to and held in its inoperative position through the medium of a return-spring 36, having a 130

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suitable support at one end, as at 37, upon the marker-casing and at its other end engaging in a retaining-tube 38, projected from one side of the finger-plate portion of the op-5 erating-lever. A supporting and guiding stem 39, mounted on the marker-casing and extending into the retaining-tube 38 of each operating-lever, serves to assist in the proper support of the return-spring 36 and the guid-10 ing of the operating-lever in its movement over the spring.

As a part of the operating means for each expelling-plunger the latter has associated with the stem thereof an actuating-spring 40, 15 interposed between one end of the expellingplunger and the removable end plate 29. This spring for each plunger is of sufficient force to snap the plunger sharply against the discharging end of the chamber in which it

20 works.

From the construction described it will be obvious that when it is desired to use any one of the discharge-chambers for making a mark on the goods it is simply necessary for 25 the operator to press forward the upper end of the operating-lever for the plunger of that chamber. This movement of the operatinglever serves to draw the said plunger back against the tension of its actuating-spring 40, 30 so that when the finger is released from the operating-lever the spring 40 will move the plunger against the outer discharging end of the discharge-chamber, with the result of discharging a quantity of the powder through 35 the screen and through the individual jetorifices, thereby jetting dots of powder against the garment to make a dotted-line mark.

Mention has been made of the fact that 40 different relative arrangements of the several discharge-chambers may be observed, and as further illustrating this feature of the invention reference is made to the modification of Figs. 7 to 9 of the drawings, wherein the 45 marker-casing is illustrated as being formed with a central discharge-chamber 15^a, lying above the plane of a pair of side dischargechambers 16a, which may be arranged side by side, as shown. In this arrangement of 5c parts it is necessary to deflect the nipples 18 for the central chamber downwardly to the horizontal plane of the jet-tubes for the side chambers 16^a. This is shown in Fig. 9 of the drawings.

We claim—

1. In a garment-marker, an adjustable support, and a marking device carried by said support, said marking device having self-contained powder-ejecting mechanism 60 comprising means for jetting a plurality of powder-jets in a straight line against a garment to form a dotted-line mark thereon.

2. In a garment-marker, a support, and a marking device carried by said support and 65 comprising a casing having a plurality of

jet-orifices arranged in a line, and a powder carrying and expelling device operating within the casing.

3. In a garment-marker, a support, and a marking device comprising a casing having 7° a discharge-chamber provided with a plurality of jet-orifices, and a powder carrying expelling plunger operating within said chamber.

4. In a garment-marker, a support, and a 75 marking device comprising a casing having a plurality of jet-orifices arranged in a line, and a powder carrying expelling plunger having

an impact discharging-screen.

5. In a garment-marker, a support, and a 80 marking device comprising a casing provided with a plurality of jet-orifices, and a powder carrying expelling plunger operating within the casing and having an open end carrying an impact discharging-screen engaging the 85 wall of the casing having the jet-orifices.

6. In a garment-marker, a support, and a marking device comprising a casing provided with a plurality of jet-orifices, and a powder carrying expelling plunger operating within 90 the casing and consisting of a hollow body having a powder-compartment, a covered filling-opening, and an end outlet-opening, and an impact discharging-screen covering the end outlet of the plunger.

7. In a garment-marker, a support, a marking device comprising a casing having jetorifices, and a powder carrying expelling plunger operating within the casing, an actuating-spring for moving the plunger in one 100 direction, and an exterior operating device for moving the plunger in the opposite di-

rection. 8. In a garment-marker, a support, a marking device comprising a casing having jet- 105 orifices, and a powder carrying expelling plunger operating within the casing, and having a stem projecting outside of the latter, an actuating-spring for moving the plunger in one direction, an operating-lever pivotally 110 supported exterior to the casing and having one end engaging said plunger, and a returnspring connected with the lever at one side of its pivot for returning the same to its normal

position. 9. In a garment-marker, a support, a marking device comprising a casing having a plurality of discharge-chambers, each provided with a series of jet-orifices, and a powder carrying expelling plunger operating within 120 each chamber, and an exterior operating de-

vice for each plunger. 10. In a garment-marker, a support, a marking device comprising a casing having a central discharge-chamber provided with a 125 series of jet-orifices, and side dischargechambers having laterally-deflected jet-tubes, a powder carrying expelling device operating in each chamber, and a separate operating device for each of said expelling devices.

11. In a garment-marker, a main support, a marker-arm carried by said support, a supporting-bracket pivotally carried by the marker-arm, and a marking device mounted on said bracket and having powder-ejecting mechanism comprising means for jetting a plurality of powder-jets.

In testimony whereof we hereunto affix

our signatures in the presence of two witnesses.

F. H. SCHOFIELD. ADOLPH HERD.

Witnesses:

G. GREENWOOD,

C. M. RAMSEY.