

W. R. PARSONS.

COMBINED TUCK MARKER AND FOLDER.

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920,081.

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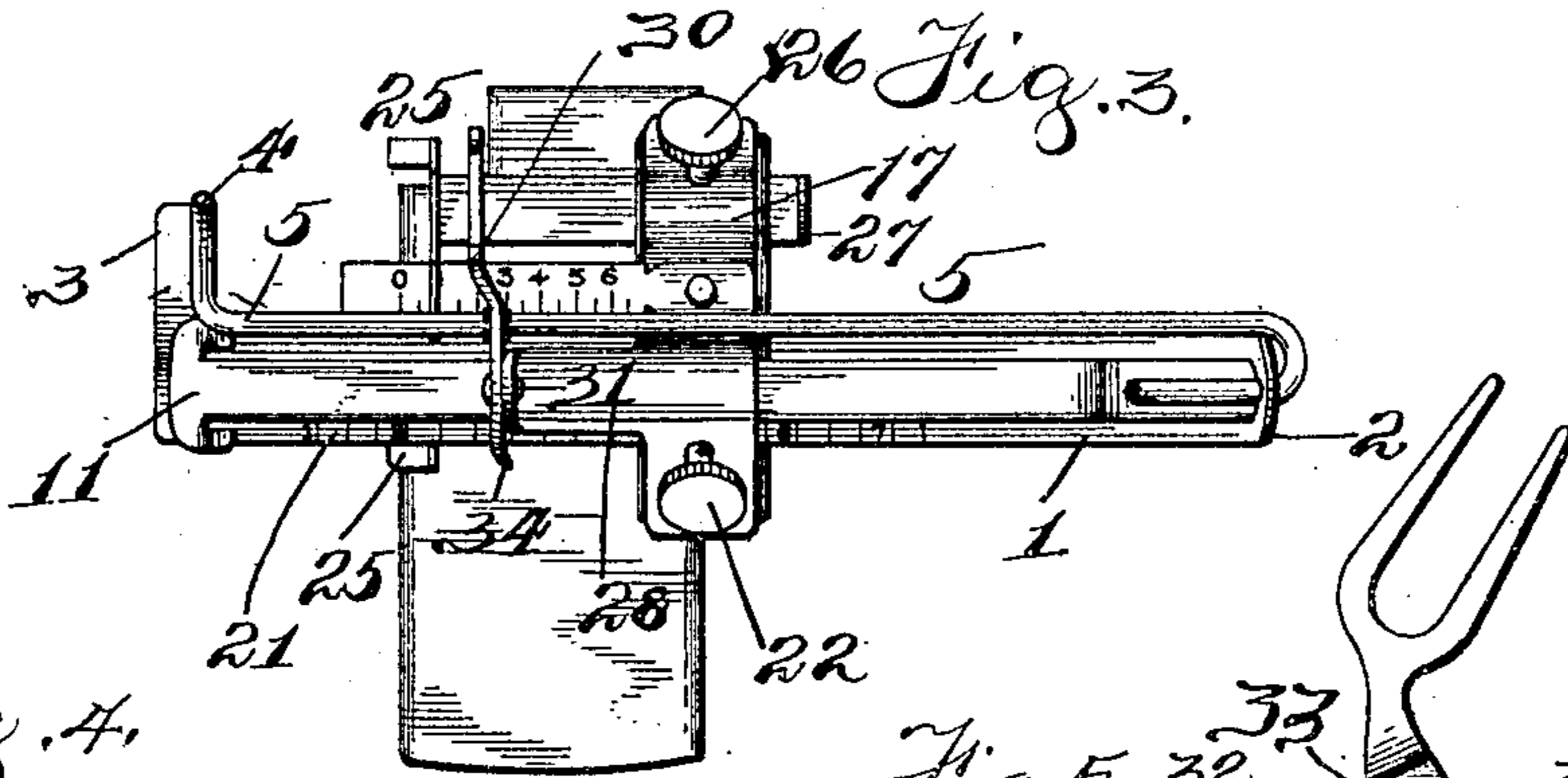
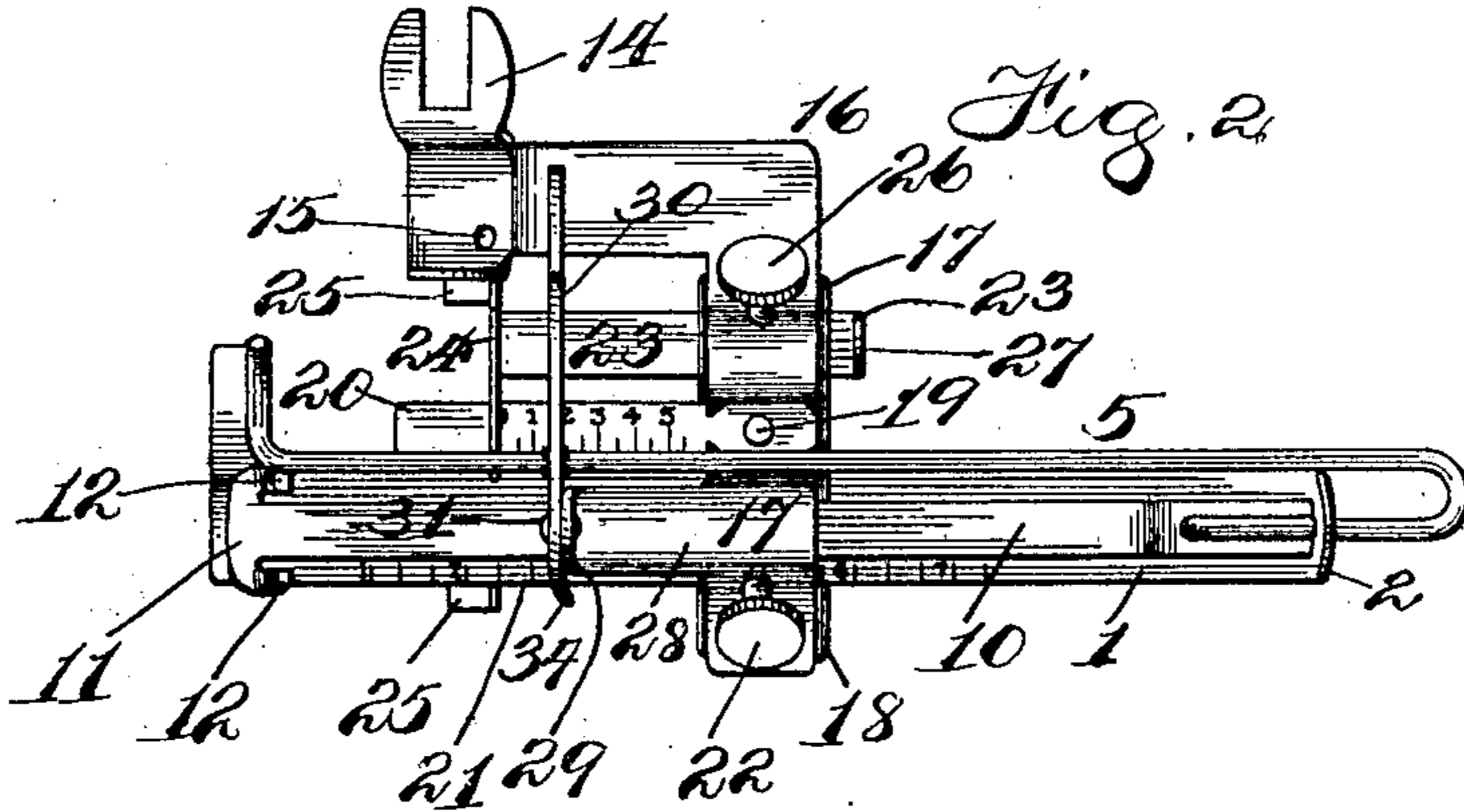
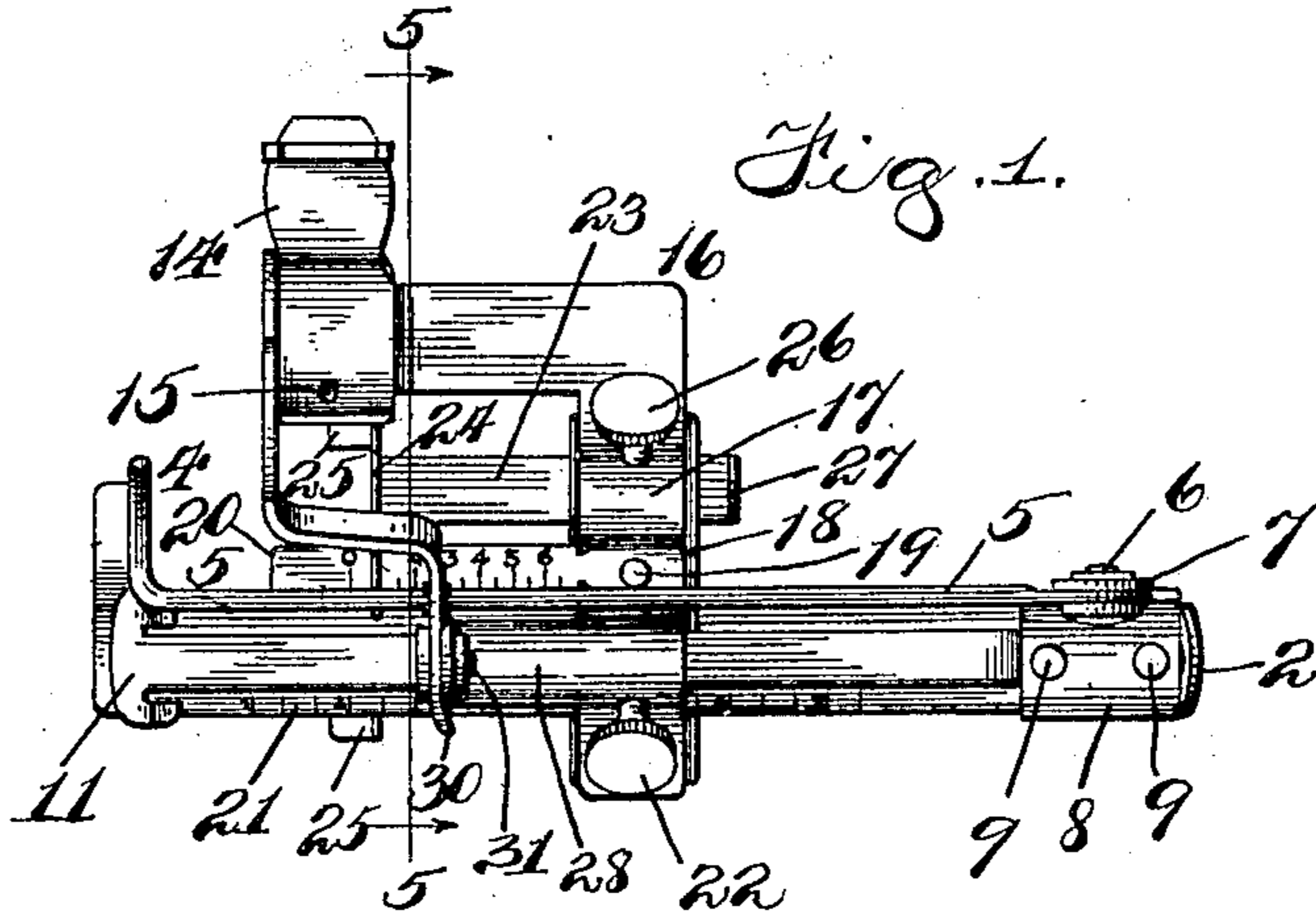
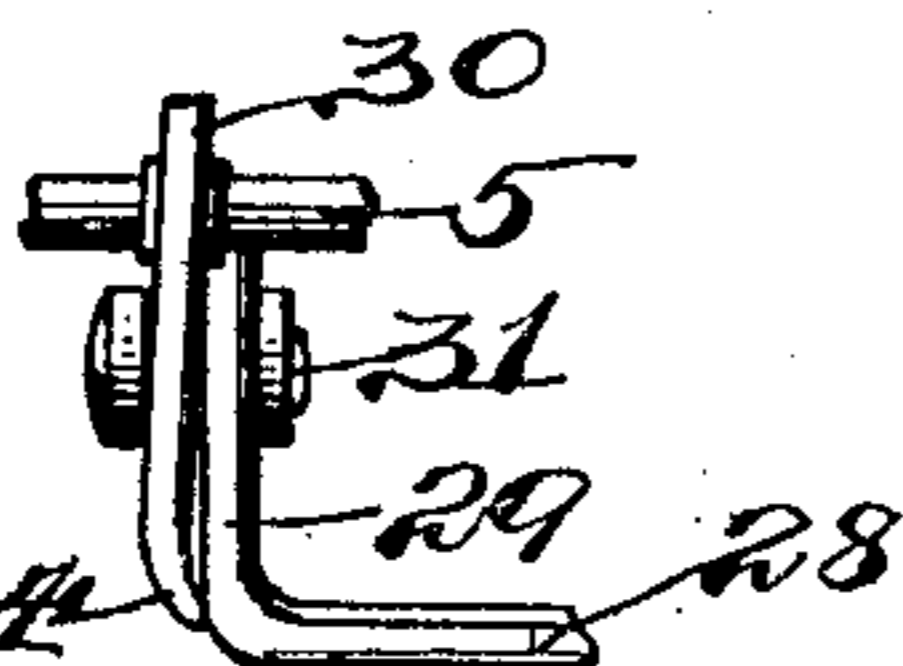


Fig. 4.



Witnesses:
J. B. Weir
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Fig. 5. A perspective view of the combined tuck marker and folder in its open position, showing the internal mechanism and the folding arm (2). Various components are labeled with numbers: 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

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UNITED STATES PATENT OFFICE.

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COMBINED TUCK MARKER AND FOLDER.

No. 920,081.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WINSLOW R. PARSONS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Combined Tuck Markers and Folders, of which the following is a full, clear, and exact specification.

My invention generally relates to improvements in combined tuck markers and folders in which heretofore the depressible arm or bar cooperating with the knife for marking the tuck, has been depressed by a striking blow from the needle bar lever thereof connecting it with the needle bar of a sewing machine, and elevated by the operation of a spring, and my invention particularly relates to improvements in tuck markers such as are shown and described in Letters Patent #766,840 granted me August 9, 1904.

The employment of springs for elevating tuck marker arms from their depressed position to make the mark, is objectionable, because in time the spring inevitably loses its tension and becomes so worn that the retraction of the marker arm from the knife edge becomes so irregular and uncertain, that it is practically impossible to produce perfect tuck marking, especially in the presence of a rapid operation of the device.

The object of this invention is to actuate a tuck marker arm positively in both directions and thereby entirely avoid the objectionable use of any spring for its actuation.

The still further object is to actuate a tuck marker arm by such a connection with the needle bar lever, that both up and down movement of the arm shall be in consonance therewith.

Another object is not only to have such connection between a tuck marker arm and its needle bar lever that the latter shall positively actuate said arm in all of its movements, but that a convenient means may be provided for locking the tuck marker arm in an elevated position above the knife edge and by a device removably securing the needle bar lever with a standard upon which it is pivoted.

With these ends in view, my invention consists in certain features of novelty and construction, and combination and arrangement of parts, by which the said objects and certain other objects hereinafter appearing are attained, all as fully described with refer-

ence to the accompanying drawing and more particularly pointed out in the claims.

In said drawing, Figure 1 represents a top plan view of a tuck marker and folder, embodying my invention, adapted for a Wheeler and Wilson sewing machine. Fig. 2, a similar view of such a tuck marker, adapted for New Home, Singer and other sewing machines. Fig. 3, a similar view, showing the adaption of a tuck marker and folder to a slide plate which may be substituted for the ordinary slide plate of a sewing machine instead of attaching it to the presser foot support thereof, as in the structures above shown. Fig. 4, a detail enlarged rear elevation showing the means employed for locking the marker arm in an elevated position and out of the way when using the folder. Fig. 5, a vertical cross section on the line 5, 5 of Fig. 1.

Similar numerals of reference indicate the same parts in the several figures of the drawings.

1 indicates a flat and may be slightly upwardly curved strip or bar provided at one end with an upturned lug 2, and at its opposite and creasing end, with a lateral extension 3, having an upturned end not shown, constituting a sharp member or knife, and with which a notched marker 4, carried by an arm 5 and forming a laterally extending member thereof, cooperates to produce a tucking mark or crease on goods passed between the knife and the marker 4 in the usual manner, the construction and cooperation of both of these devices being as shown in my patent before referred to. The marker arm 5 consists of a bar or rod which, as shown in Fig. 1, is secured by a pivot 6 to a lug 7, having a right angular extension secured by rivets 9, 9 to the bar 1. My invention however includes a marker arm such as is shown in Fig. 2, wherein it is provided with a loop passing through the upturned lug 2 and, if desired, downwardly through a perforation in a folder, consisting of a bar 10 mounted upon the plate 1 and held in place either by the rivets 9, 9 or by projecting the bent end of the arm 5 downwardly through a perforation therethrough and if desired, also through the plate 1 and then upsetting the end of arm 5 to clench it to the plate.

Instead of the U-shaped bend in the marker bar 5, said bar may be formed in a coil and secured to the bar 1, as shown in my

former patent. The folder bar 10 terminates at its other and free end in a T-shaped portion 11, the prongs 12 of which on each side of said bar, being bent so as to depress them slightly below the under surface of the bar 10.

The device as a whole is secured to the presser foot bar of a sewing machine in the usual manner, by means of a foot-piece 14, having as usual in its horizontal portion, a needle hole 15, which said foot-piece is secured to a right angular plate or bar 16, the arm 17 of which projects over the folder bar 10 and is bent downwardly on each side of the bar 1 and secured to a parallel bearing-plate on the under side of the bar 1 (see Fig. 5) by rivets 19, 19, one of which also secures in position upon the arm 17, a gage-plate 20, opposing a corresponding gage 21 on the arm 1, whereby the desired adjustment of the marker for wide and narrow tucks is determined and indicated, the bar 1 being held in this adjustment by a thumb-screw 22 passing through the arm 17 and impinging against the bar 1, which, in turn is impinged against the plate 18, which is the bearing and support for the bar 1. Also confined between the arm 17 and the plate 18 is a bar 23 provided with a right angular portion 24, which, together with lugs 25 at each end thereof, serves as an adjustable guide for the cloth, the said bar 23 being held in its adjustment by a thumb-screw 26 passing through the bar 17 and may be conveniently manipulated by a lug 27 projected upwardly therefrom.

The plate 17 has a right angular projection 28 terminating at its free end in an upturned lug 29, to which is pivoted the needle bar lever 30 by a pivot 31. The needle bar lever is provided with a perforation 32, through which passes the marker arm 5, which perforation is preferably made large enough in order to enable the marker arm, after being bent to form, to be passed therethrough when assembling parts together in a complete device, and to which end as the marker arm is shown constructed, the perforation is necessarily of a diameter so much greater than that of the marker arm at this point of bearing, in the needle bar lever, that I preferably employ a bushing 33 slipped on to said arm, in order to prevent noise otherwise due to the striking of the opposing walls of the needle bar lever against the marker arm when in operation, which absence of noise is one of the results and I may say, objects of my invention.

By the connection of the marker arm with the needle bar lever in the above described manner, is secured a positive movement of the marker arm in both directions throughout that movement, and as a result of which springs and other devices with all their objec-

tionable features, are entirely dispensed with in the tuck marker.

Noise necessarily attending the unavoidable striking together of the needle bar lever and tuck marker, is also avoided by my connection of the needle bar lever and marker arm, while at the same time is provided means whereby perfect tuck marking may be continuously secured, and the durability of the tuck marker increased without adding thereto and on the contrary reducing its cost, as is apparent when compared in the cost of producing and securing a spring in place for retracting the marker arm, with the cost of a perforation in the needle bar lever and the passing of the marker-arm therethrough.

When it is desirable to use the folder, it is necessary to maintain the marker in an elevated position and to this end and by reason of the direct connection of the marker arm with the needle bar lever, I am enabled to provide a very simple and effective means (see Fig. 4) by projecting the needle bar lever rearwardly beyond its pivot and forming a slight bend 34 therein, as shown in Fig. 4, adapted to frictionally impinge against the lug 29, to which the needle bar lever is pivoted sufficiently to maintain the lever and the marker arm in the desired elevated position above referred to, but it will be no departure from my invention in this respect in this particular sense, to substitute a set-screw therefor passing through the lever projection and impinging against the lug upright 29.

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

1. A tuck marker comprising in combination a marker arm, a pivotal support therefor, a needle bar lever permanently connected with said arm, and positively oscillating said marker arm throughout its movements, and a folder and means for locking said marker arm in an elevated position out of the way of said folder, substantially as described.

2. A tuck marker, comprising in combination, a folder, a needle-bar lever and marker-arm passing through said lever, a support to which said arm is pivoted, and means whereby the needle-bar lever and marker-arm may both be elevated to a position out of the way of the folder, substantially as described.

3. A tuck marker comprising in combination a folder, a forked needle bar lever, a marker arm passing through said lever, a support to which said arm is pivoted, and means whereby the needle bar lever and marker may both be swung to a position out of the way of the folder, substantially as described.

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Witnesses:

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