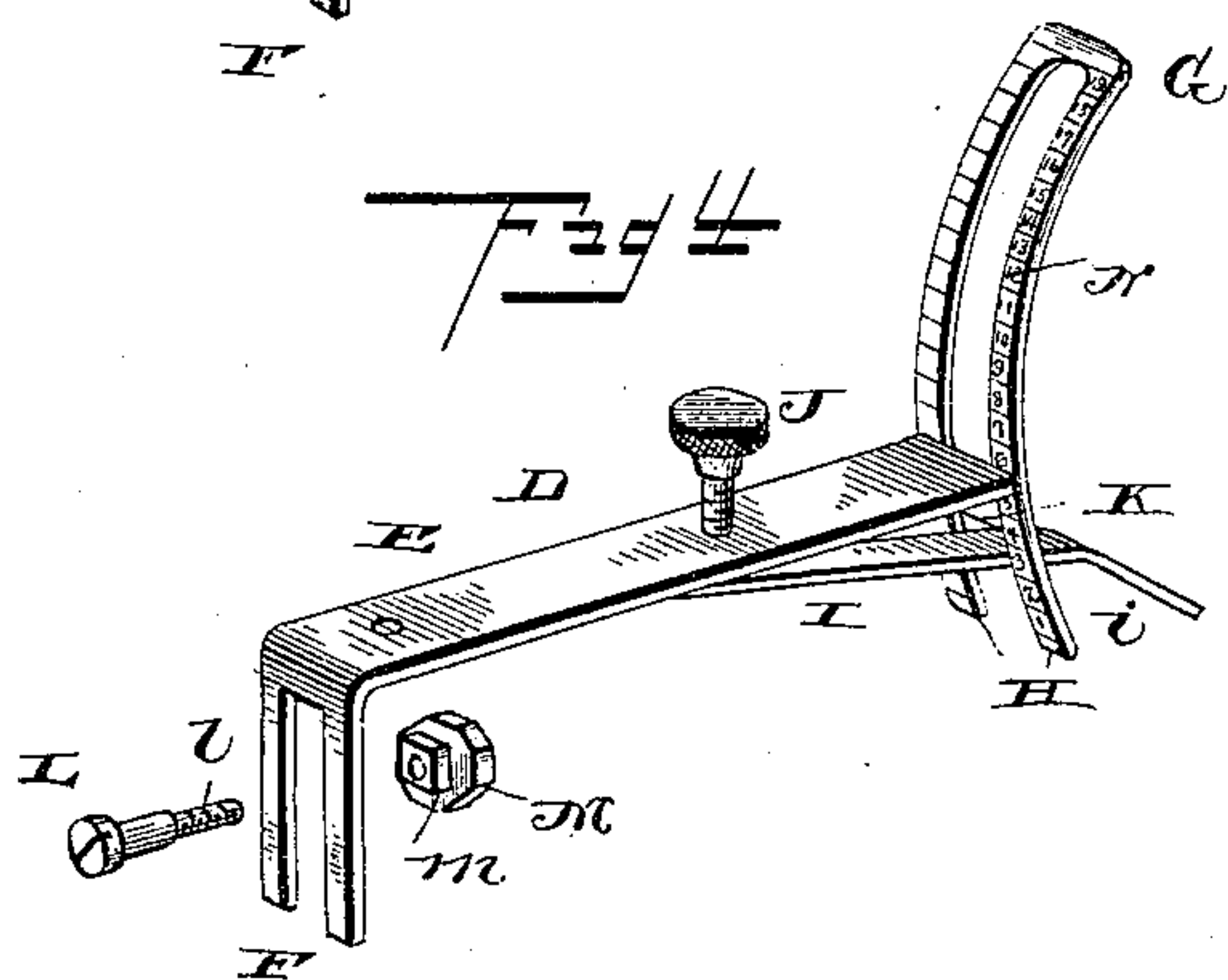
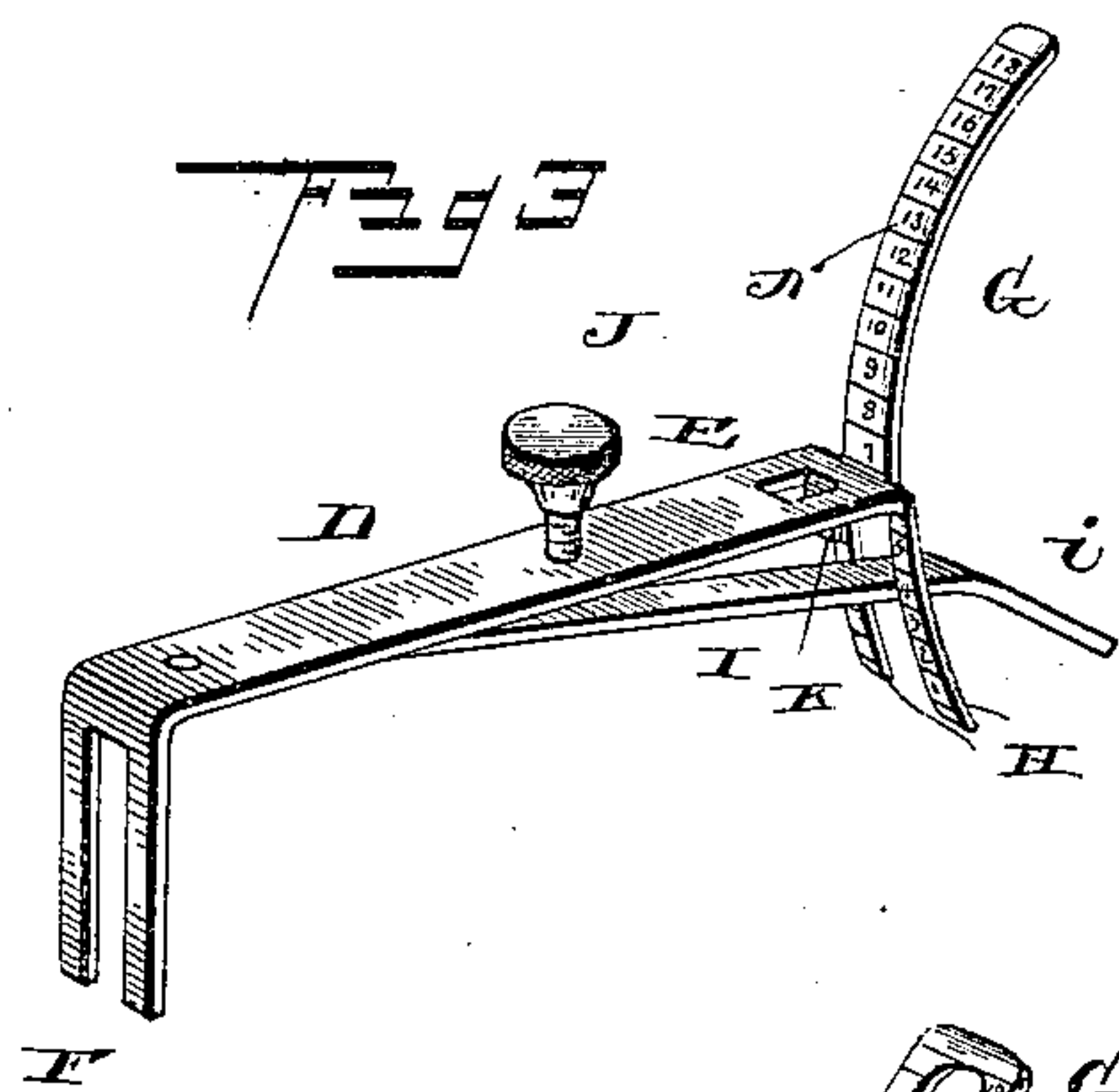
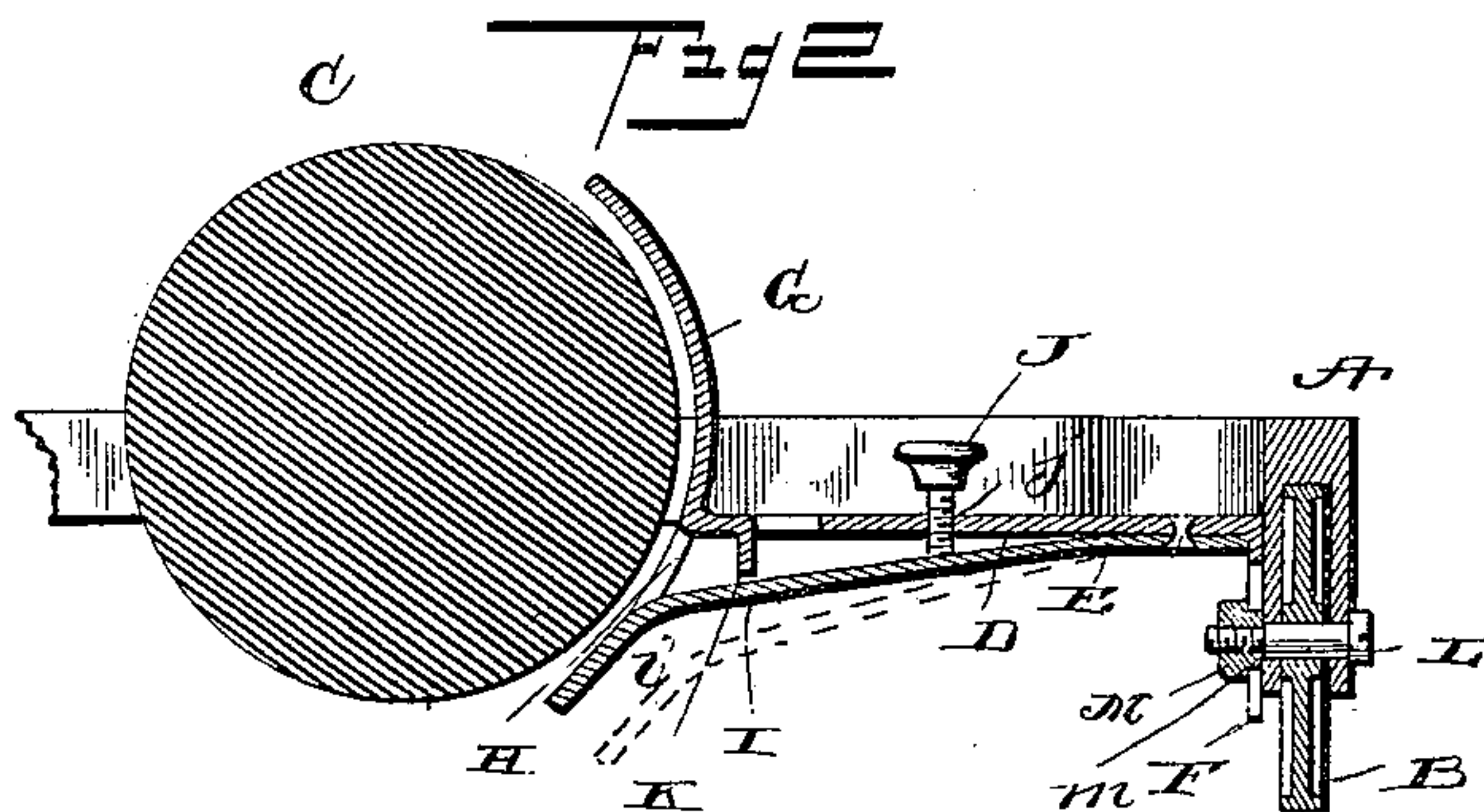
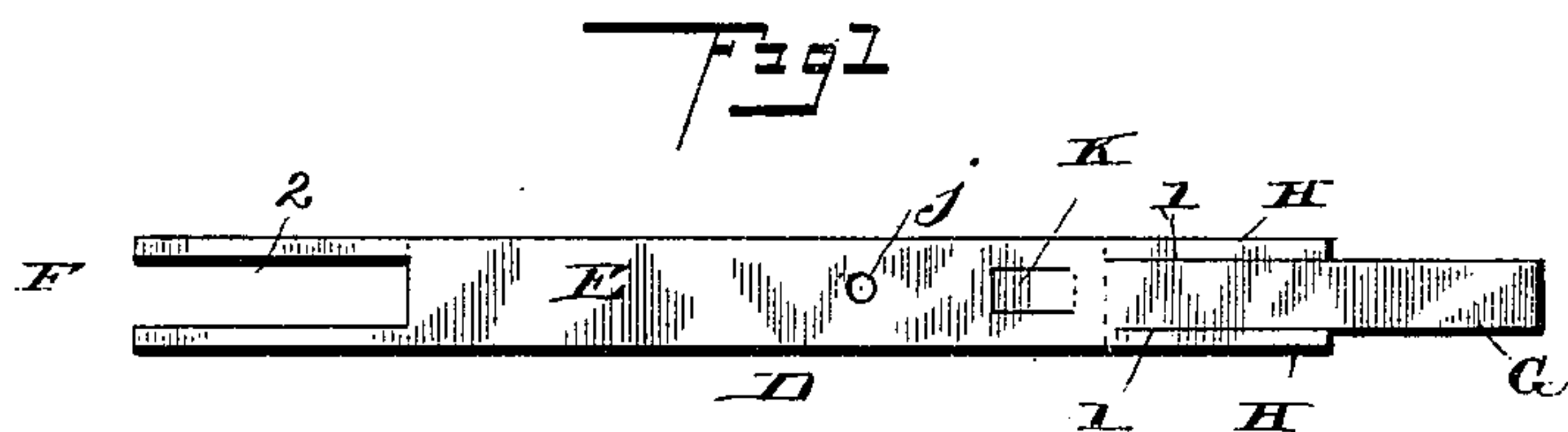


(No Model.)

J. B. ELLIOTT & R. J. MAWHINNEY.  
TYPE WRITING MACHINE ATTACHMENT.

No. 547,002.

Patented Oct. 1, 1895.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## TYPE-WRITING-MACHINE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 547,002, dated October 1, 1895.

Application filed October 15, 1891. Serial No. 408,841. (No model.)

*To all whom it may concern:*

Be it known that we, JERRE B. ELLIOTT and ROBERT J. MAWHINNEY, citizens of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Type-Writer Attachments; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to an improved attachment for type-writing machines, and has for its object to provide an adjustable paper-guide adapted to be attached to a "Remington" and similar type-writers, and when so attached to facilitate the introduction of the paper and to guide the same about the platen during the operation of printing, the guide being made adjustable to properly guide and feed either a single sheet or several sheets of paper when manifolding. In connection with the said guide is used a relatively-fixed guard, which may be provided with a suitable scale to indicate the point at which to commence the initial line of each page or sheet.

Our improvements consist in the novel features of construction and arrangement of parts hereinafter fully described and afterward definitely pointed out in the claims, due reference being had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a plan view of the blank from which the guide-carrying frame is struck up. Fig. 2 is a vertical longitudinal central section of the attachment, showing the same attached to the carriage of a type-writer. Fig. 3 is perspective view of the attachment, and Fig. 4 is a similar view of a modification.

Referring to the drawings, the letter A indicates the carriage of a type-writer; B, the friction-wheel on which it travels; C, the platen, and D our improved attachment. The attachment consists of a flat metallic bar E, bifurcated at one end, as at F, and bent downwardly at a right angle to the body of the bar E for the purpose hereinafter described. The opposite end of said bar is bent upwardly and in the arc of a circle to form a guard G, that lies substantially concentric with the platen C, and two guard-arms H H are bent

downwardly and practically form a continuation of the guard G. To the under side of the bar E is riveted the guide I, consisting of a flat strip of spring metal which at its free end is bent downwardly, as shown at *i*, and lies between the guard-arms H H. A set-screw J is tapped through the bar E and bears against the guide I, and by means of which the said guide is adjusted to or from the platen C. The bar E in rear of the guard-arms H H is provided with a downwardly-projecting lug K, which is adapted to abut against the guide I and serve as a stop to limit the extreme movement of said guide toward the platen C. The attachment is in the present instance secured to the carriage of the typewriter as follows: The screw L, upon which the friction-wheel B in machines of the nature described usually has its bearing, is provided with a screw-threaded extension *l*, which engages a nut M, provided upon its inner face with a rectangular boss *m*. The bifurcated portion F of the attachment is caused to straddle the boss *m* on the nut M, holding the nut against rotation and the screw L tightened up, clamping the attachment firmly between the nut and the inner face of the carriage. Upon the front or convex face of the guard G and the guard-arms H H is marked a scale N, for the purpose hereinafter described.

In making the attachment we prefer to strike up the bar E, its bifurcated end F, the guard G, guard-arms H H, and stop K from a single metallic blank. A blank of the form shown in Fig. 1 is slotted at one end to form the bifurcated portion F. The other end is provided with two parallel longitudinal slits *l l* to form the guard G and guard-arms H H, and a substantially-U-shaped slit is cut or punched in said blank, as at 2, and the metal bent downward to form the stop K, and the blank finally perforated and screw-threaded, as at *j*, for the reception of the screw J. When constructed and secured in position, as above described, the fixed guard G and the guard-arms H H lie substantially concentric and in proximity to the platen C, the end of the adjustable guide I resting under the guard G and between the guard-arms H H. As the paper is fed into the machine the top or leading edge of the sheet is engaged by the down-



wardly-turned end of the guide and directed between the platen and the guard G. The guide is adjusted by means of the set-screw to bear with a sufficient degree of pressure against the paper to properly hold it against the platen, the guide being depressed to accommodate several sheets, as in manifolding or where the article to be printed upon is of unusual thickness. As the paper is fed into the machine the scale N will indicate when the proper point has been reached at which to print the first line, thus insuring regularity in the copy. In introducing the paper it is not necessary to raise the carriage to enable the operator to direct the sheet under the paper-guide by hand, as is necessary in the Remington and similar machines now in use, the guide engaging the edge of the sheet and, in connection with the guard, directing and feeding the paper around the platen without any further manipulation.

In Fig. 4 we have shown a modification wherein the guard G and guard-arms H H are formed in one piece from a centrally-slotted curved piece of sheet metal and soldered, brazed, or otherwise suitably secured to the end of the bar E, the latter being bent down to form stop K. The operation is precisely similar to that before described.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a typewriting machine, the combination with the paper carriage and its cylindrical platen, of a relatively fixed guard, and an independent depressible guide arranged thereunder and in substantial continuation thereof for directing the paper between said guard and said platen, the said guide being adapted when depressed to move away from the platen to facilitate the introduction and guidance of several thicknesses of paper and of cards, &c., substantially as set forth.

2. An attachment for typewriters comprising a frame adapted to be secured to the carriage of a typewriter, said frame having a relatively fixed paper guard, and also an independent spring-pressed depressible paper guide arranged thereunder and in substantial continuation thereof and operating in the manner shown and described.

3. In an attachment for a type-writer a frame adapted to be attached to the carriage and carrying a paper guard in combination with a paper guide for automatically directing and feeding the paper between the platen and said guard and guide and means for adjusting said guide toward and away from said platen, substantially as described and for the purpose specified.

4. In combination with the frame adapted to be attached to the carriage of a type-writer and carrying a curved paper guard, the spring paper guide attached at one end to said frame and having its other end bent downwardly as shown, and an adjusting screw carried by said frame and engaging said spring paper

guide, substantially as described and for the purpose specified.

5. The combination with the frame adapted to be secured to carriage of a type-writer and carrying a curved paper guard, the spring paper guide attached at one end to said frame and having its other end bent downwardly as shown, an adjusting screw carried by said frame and engaging said spring paper guide, and a lug depending from said frame and serving as a stop for the spring paper guide, substantially as described.

6. The combination of the frame adapted to be attached to the carriage of a type-writer and carrying an upwardly curved paper guard and two downwardly curved guard arms, a spring paper guide attached at one end to said frame and at its other end bent downwardly between said guard arms, and a set screw for adjusting said spring paper guide, substantially as described and for the purpose specified.

7. The combination of the frame having the downwardly bent bifurcated end and provided at its other end with an upwardly curved guard and two downwardly curved guard arms and provided with a downwardly projecting lug, the spring paper guide attached at one end to said frame at its other end bent downwardly between said guard arms, an adjusting screw carried by said frame and engaging said spring guide, and a screw-threaded bolt and a nut having a rectangular boss carried by the carriage and adapted to engage the bifurcated end of the frame, substantially in the manner shown and described and for the purpose specified.

8. In a type-writer attachment the frame having a bent bifurcated end portion, an upwardly curved paper guard, two downwardly curved guard arms, and a depending lug, all struck up from a single blank, in combination with an adjustable paper guide and means for securing the attachment to a type-writer carriage, substantially as shown and described.

9. In a type writing machine, the combination with the paper-carriage and its cylindrical platen, of a relatively fixed paper-guard (G) rising from said carriage, and an independent adjustable paper-guide (I) thereunder having an integral spring body or shank.

10. In a typewriting machine, the combination with the paper-carriage and its cylindrical platen, of the upwardly extending relatively-fixed concentric guard (G), the independent spring-pressed paper-guide (I) thereunder, means for adjusting its position relatively to the platen, and a fixed stop to limit its movement toward the platen.

In testimony whereof we affix our signatures in presence of two witnesses.

JERRE B. ELLIOTT.

ROBERT J. MAWHINNEY.

Witnesses:

JOHN E. MITCHELL,

J. AUGUSTUS TAYLOR.