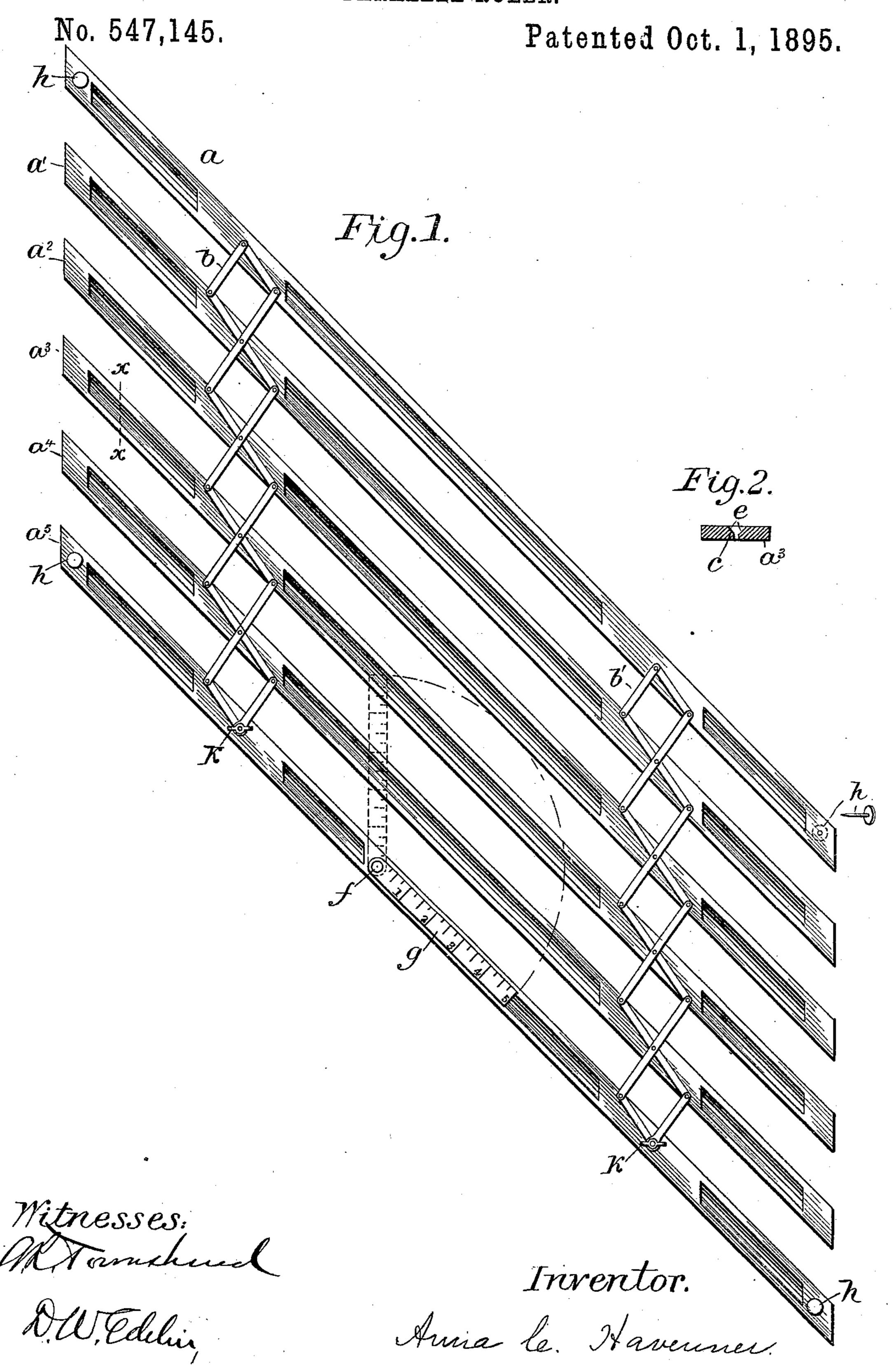
A. C. HAVENNER. PARALLEL RULER.



UNITED STATES PATENT OFFICE.

ANNA C. HAVENNER, OF WASHINGTON, DISTRICT OF COLUMBIA.

PARALLEL-RULER.

SPECIFICATION forming part of Letters Patent No. 547,145, dated October 1, 1895.

Application filed July 1, 1895. Serial No. 554,658. (No model.)

To all whom it may concern:

Be it known that I, Anna C. Havenner, a citizen of the United States, residing at Washington, District of Columbia, have invented 5 a new and useful Improvement in Parallel-Rulers, of which the following, taken with the accompanying drawings, is a complete

specification.

The object of my invention is to provide a 10 device particularly adapted for marking folds of cloth on the bias. To obtain folds properly spaced to be cut is a source of great annoyance in the art of dressmaking, and to facilitate this work and to simultaneously obtain 15 an accurate width of several bias pieces I have invented a device which consists of strips or rules, preferably six in number, placed parallel and united by strips of the wellknown toggle-form, each strip or rule being 20 slotted at intervals throughout its length for the insertion of a pencil-point or a cuttingtool, reference being had to the drawings for a better understanding of the invention, in which—

Figure 1 is a perspective view of the device complete. Fig. 2 is a cross-section of one of the rules, taken on line xx of Fig. 1, showing

the beveled slot.

In detail, A represents the parallel-rule, 30 which consists of parallel bars $a a' a^2 a^3 a^4 a^5$, of any number, six in this instance shown as the number preferred. These rules or bars are united by toggle-joints bb'. At intervals throughout the length of the bars a a' a² a³ 35 $a^4 a^5$ is a slot c, the edges of said slot being beveled at e, for the purpose hereinafter explained. Pivoted at f to one of the bars, preferably the outer, as a^5 , is a graduated rule gfor the purpose of proper spacing.

The operation is as follows: The device is laid upon a piece of goods to be marked or cut and the graduated rule g turned, as shown in dotted lines. The bars a and a^5 are now grasped and moved to or from the center, the 45 movement of the bar a^4 , under the rule g, de-

termining the width of the bias desired. It will readily be seen that by the toggle-joint |

cause the simultaneous movement of all the others the exact distance that may be de- 50 termined by the rule g between the bars a^4 and a^5 . The device is then made rigid by tightening the thumb-screws k. The device is now secured to the table by tacks h passing through the goods to be marked or cut. 55 A pencil-point is then drawn through each slot c, if the goods is to be marked on the bias only, or a suitable cutting-tool, if it is de-

sired to cut the bias pieces.

The advantage of the slot c over the usual 60 edge of the rule for marking or cutting will be readily apparent. Should the goods to be operated upon be of light textile or fabric and the edge only of the ruled to operate thereon, there would be liability of folding or 65 bunching of the goods under pressure of the marking or cutting tool, whereas where the slot is used there is a direct bearing upon the goods at either side of the slot, insuring a firm hold upon the cloth, which will prevent chok- 70 ing or bunching at different points.

The form of device shown is the one preferred; but I desire it understood that I do not wish to confine myself to the exact form shown and reserve the right to deviate there- 75 from, provided it falls within the spirit and

scope of my invention.

I am aware that it is old in the art to connect bars or rules with lazy-tongs or toggle connection; but, so far as I am aware, I am 80 the first to employ the lazy-tongs or toggle at or near either end of the rules and provide longitudinal slots in said rules for the purpose hereinbefore explained, and so much of that part admitted to be old I make no claim. 85

Having thus described the invention, what

I desire to claim is—

1. In parallel rulers the combination of a series of rulers linked together and arranged parallel with each other, said rulers having 90 a longitudinal slot extending substantially throughout the length thereof, of a set of lazytongs arranged at or near each end thereof and composed of a series of levers crossed and pivoted to each other and to the rulers at 95 connection the movement of one bar will their middle points of intersection and also

.

joined together at their ends, whereby said out the length thereof, substantially as derulers may be simultaneously moved to and scribed. from each other and be accurately spaced sub-

stantially as described.

2. In parallel rulers the combination of a series of parallel rulers linked together by lazy-tongs arranged at or near each end of said rulers, and a longitudinal slot with ta-pered edges arranged substantially through-

In witness whereof I hereunto subscribe my name.

ANNA C. HAVENNER.

Witnesses:

RUTLEDGE WILLSON, HENRY HINE.