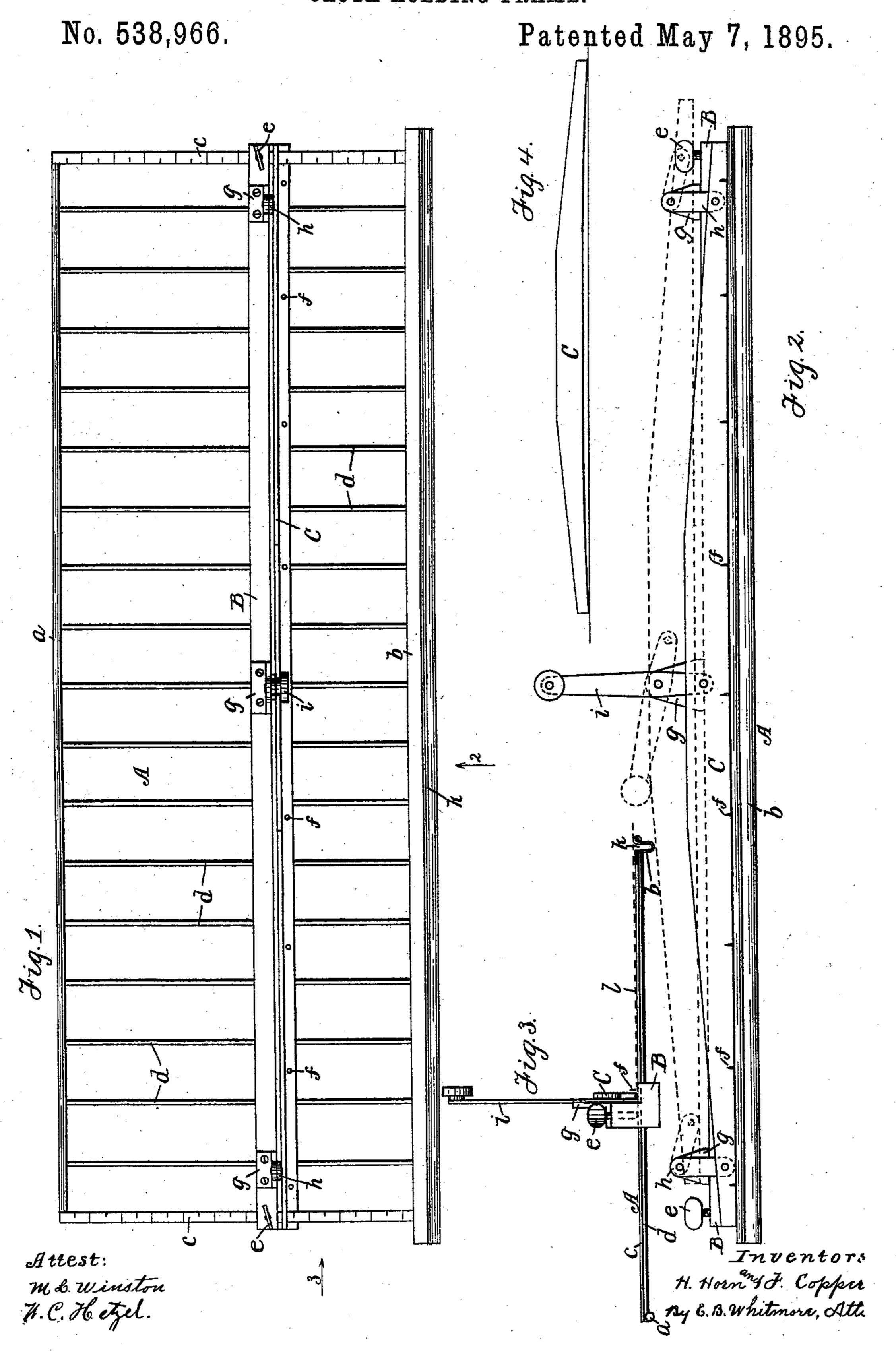
H. HORN & F. COPPER.

CLOTH HOLDING FRAME.



## United States Patent Office.

HENRIETTA HORN AND FRANK COPPER, OF NEWARK, NEW YORK.

## CLOTH-HOLDING FRAME.

SPECIFICATION forming part of Letters Patent No. 538,966, dated May 7, 1895.

Application filed September 14, 1894. Serial No. 523,002. (No model.)

To all whom it may concern:

Be it known that we, HENRIETTA HORN and FRANK COPPER, of Newark, in the county of Wayne and State of New York, have invented 5 a new and useful Improvement in Frames to Aid in Cutting Cloth, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

The object of our invention is to produce a ro frame to aid in cutting cloth, more particularly for cutting cloth into strips on the bias. This frame is designed to be used more particularly upon a table or a counter and it is provided with means for holding the cloth per-15 manently in place while being cut, and with other means to regulate and gage the width of the bias strips cut.

The invention comprises other important features all of which are hereinafter fully de-20 scribed and more particularly pointed out.

Referring to the drawings, Figure 1 is a plan of the improved frame. Fig. 2 is a front elevation seen as indicated by arrow 2 in Fig. 1, parts being shown in two positions by full 25 and dotted lines. Fig. 3 is an end view of the device seen as indicated by arrow 3 in Fig. 1. Fig. 4 shows the normal form (exaggerated) of the clamping-bar.

Referring to the parts shown, the frame, A, 30 is rectangular in form preferably one yard in length and about twelve inches in width. This frame, which is rigid, is composed of a metallic main rod a (which, if desirable, may be made large in diameter and tubular), a front 35 channel bar b of sheet metal and end-bars c c of metal, preferably of brass, joined rigidly to the main rod and the channeled bar. To the main rod and channeled bar are rigidly secured numerous cross wires d equally spaced 40 and parallel with the end bars c. These end bars are graduated and constitute scales for the device.

Resting upon the cross wires is a movable wooden holding bar B having its ends extend-45 ing across the scale bars c so that its relative position upon the frame may be determined by means of the graduation marks upon them.

The scale bars are usually divided into inches and fractions thereof; but the unit of

decimeter for example, zero being next the channeled bar.

The construction of the device is such that the cross wires pass transversely through the holding bar B, as shown. Simple fasteners e 55 are provided to secure the holding bar rigidly upon the scale bars in any of its positions of lateral adjustment. The holding bar is Lshape in cross section, as shown in Fig. 3, that is to say, it is formed with a longitudinal rect- 60 angular space or rabbet n, Figs. 1 and 3, along one corner in which space the folded edge of the cloth to be cut is held. Upwardly projecting short pins f are employed, rigid in the bar, to pierce the cloth and assist in holding 65 the latter in place while being operated upon.

A clamping bar or keeper C is secured to the holding bar by means of standards g rigid with said holding bar. This keeper is a metal bar parallel with and over the holding bar, 70 occupying a vertical plane and in position to have its lower edge bear upon the cloth, (dotted line l, Fig. 3) just back of the row of pins f. The clamping bar or keeper is connected with the standards by short links h so as to 75 move through a short distance in a vertical plane, and an operating lever i at the middle of the bar enables the person using the frame to depress or raise the keeper as the cloth needs to be held or freed in using the device. 80

For the purpose of giving the clamping bar stiffness without adding weight of metal it is usually formed wider at the middle than at the ends; and also slightly concave at its lower edge, as appears in exaggerated form in Fig. 85 4, so that when pressed upon the cloth by means of the lever it will become temporarily straight at its bearing edge and so press the cloth with substantially a uniform pressure throughout its length. This results from the 90 fact that the action of the lever tends to slightly spring the bar downward at the middle. This clamping bar may be, however, made straight and with parallel edges instead of in the form shown in said figure, the exact 95 form of the bar being mainly a matter of judgment.

The channel k in the bar b is formed to allow the lower blade of the shears to pass un-50 measure may be other than the inch, as the I der the cloth in the act of cutting the latter, 100

the cloth being always cut along said channel. The holding bar in its various adjustments is made parallel with the channel so that the bias strips when cut shall be of uni-

5 form width.

The first graduation marks on the scale bars, that is to say, the marks numbered "1," are one inch from the channel so that if the holding bar be adjusted to said marks the 10 strip of cloth cut, if folded once, will be two inches wide; and by setting the holding bar at the marks "2" the strip will be four inches wide; and so on with the other marks.

What we claim as our invention is-

1. A rectangular frame used in cutting cloth, having its longer sides composed respectively of a main rod and a channel bar, and its minor sides consisting of scale bars, and cross wires parallel with the scale bars 20 connecting the main rod and channel bar, in combination with a holding bar for the cloth, parallel with the channel bar adapted to slide |

laterally along the cross wires and the scale bars, with fasteners for said holding bar, and means for supporting the cloth on the latter, 25 substantially as shown and described.

2. A rectangular frame used in cutting cloth, composed of a main rod, a channel bar and two scale bars, and cross wires connecting the main rod and channel bar, and a mov- 30 able holding bar for the cloth supported by the cross wires, and fasteners for said holding bar, in combination with a clamping bar supported by the holding bar and adapted to move against the latter, substantially as shown 35 and described.

In witness whereof we have hereunto set our hands, this 31st day of August, 1894, in the presence of two subscribing witnesses.

> HENRIETTA HORN. FRANK COPPER.

Witnesses:

M. I. GREENWOOD, GEO. A. HORN.