

W. St. MARTIN.
Billiard Cushions.

No. 139,434.

Patented May 27, 1873.

Fig. 1.

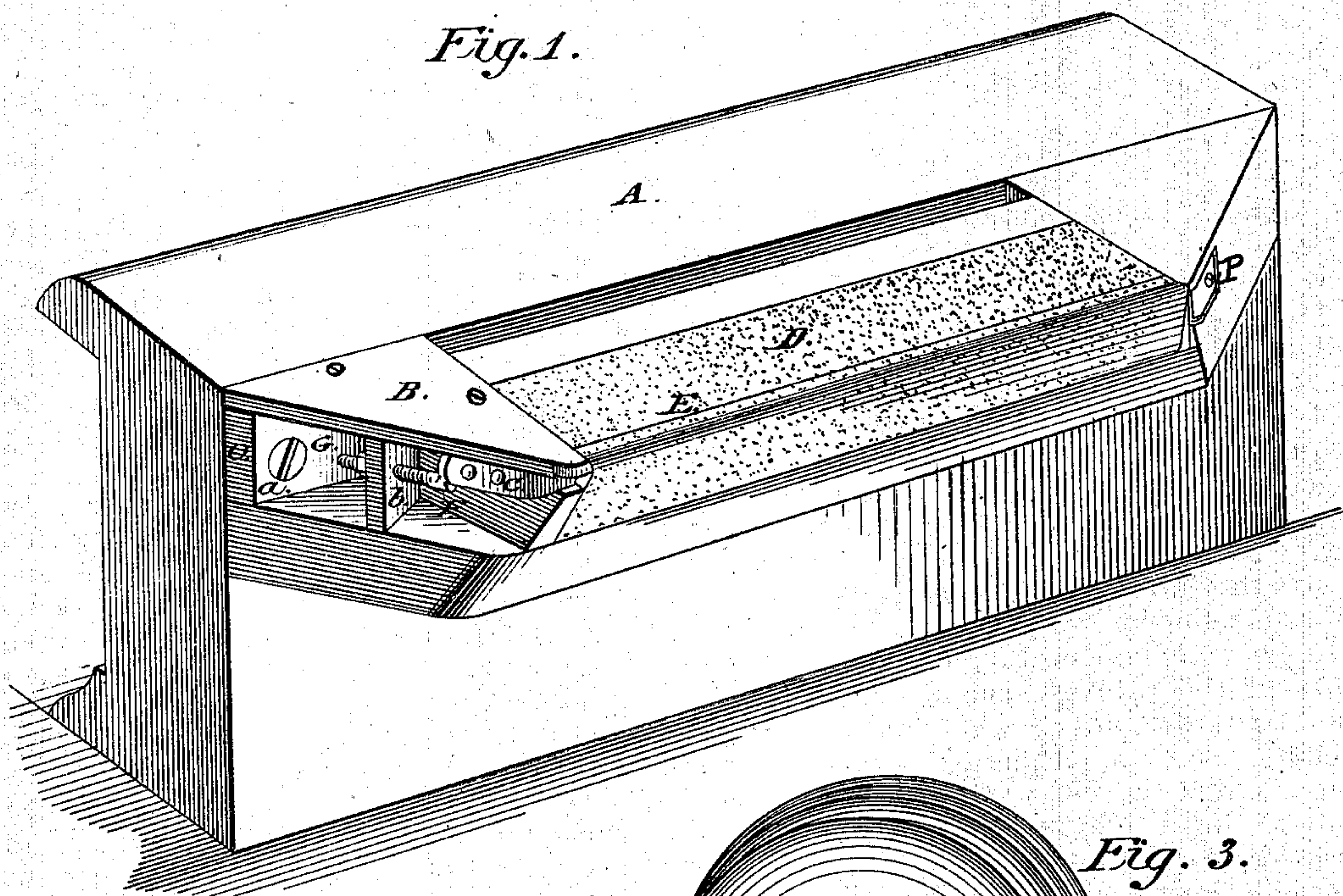


Fig. 3.

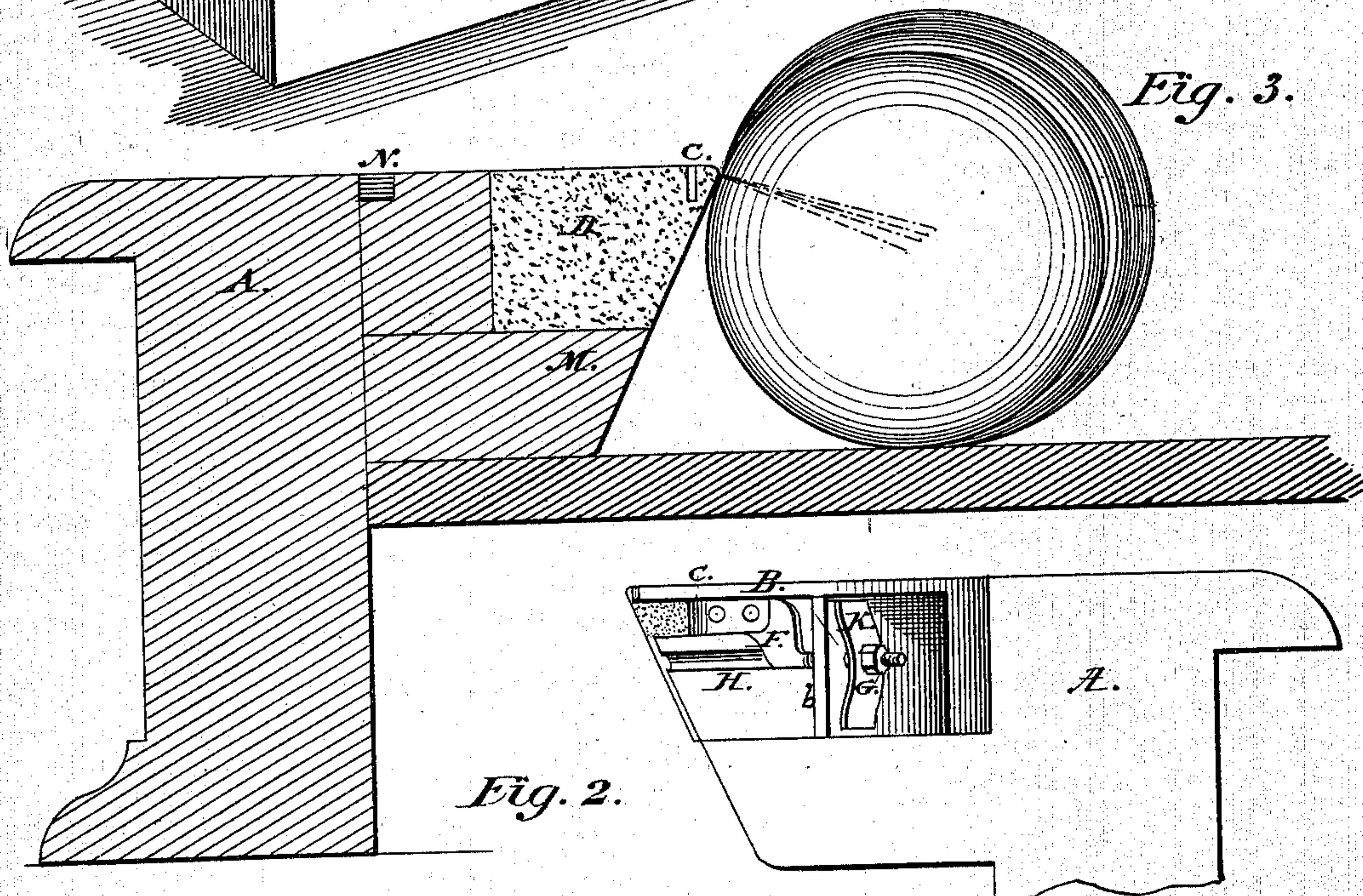


Fig. 2.

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UNITED STATES PATENT OFFICE.

WILLIAM ST. MARTIN, OF CINCINNATI, OHIO.

IMPROVEMENT IN BILLIARD-CUSHIONS.

Specification forming part of Letters Patent No. **139,434**, dated May 27, 1873; application filed May 23, 1873.

To all whom it may concern:

Be it known that I, WILLIAM ST. MARTIN, of Cincinnati, county of Hamilton and State of Ohio, have invented an Improvement in Billiard-Cushions, of which the following is a specification:

My invention consists of certain devices by means of which I am enabled to regulate the tension of the metallic ribbon which I employ, in the manner hereinafter indicated, for increasing and preserving the resilient properties of the rubber used in the construction of billiard-cushions.

In order to increase the elasticity and durability of the rubber cushion ordinarily used upon billiard-tables, I have found it desirable to make use of a flat metallic strip or ribbon, placed under tension, and inserted longitudinally in the cushion, and a little in rear of its face. I do not, however, in this application lay claim to the use of a billiard-cushion thus provided with a strained metallic ribbon, such device forming the subject of an application for Letters Patent heretofore filed by me. My present invention is limited to the special devices by means of which I regulate the tension of the strained ribbon.

In the accompanying drawing, Figure 1 is a perspective view of a shortened rail of a billiard-table, in which A represents the body of the rail; M, the ordinary wooden frame, to which the cushion is attached; D, the rubber cushion; B, the mitered corner, to which one end of the metallic ribbon is secured; C, the metallic ribbon inserted in the cushion; F, a bent rod riveted to the end of the metallic ribbon, and passing through and supported in the web *b*, the outer end of said rod being threaded to receive the nut G, by means of which the tension of the ribbon is regulated.

Fig. 2 is an elevation of one of my mitered corners, showing more particularly the compensating-spring K, introduced between the web *b* and the nut G. The function of this

spring is to relieve the ribbon, to some extent, from the injurious effects arising from the strain of a sudden and heavy blow, as well as to provide a compensation for the varying lengths of the ribbon under different degrees of heat and cold. Fig. 2 also shows a groove, H, in which the cylindrical portion of the bent arm F may be guided.

Fig. 3 is a vertical sectional view of the table and rail, showing the position that the ribbon ordinarily occupies in relation to the face of the cushion.

To facilitate the casting of my mitered corner I make it in two parts, B O, these parts being subsequently secured to each other, as shown in the drawings.

In practice, it is necessary to use only one of these mitered corners and compensating-springs upon each of the four rails of the table, the ribbon being rigidly attached, by any suitable means, at one end of the rail, as shown at P in Fig. 1, and my improved straining device being applied at the other end.

What I claim is—

1. The mitered corner, made of brass or other suitable material, substantially as and for the purpose set forth.

2. The combination of the metallic ribbon with the compensating-spring, whereby the tension of the ribbon is preserved under the varying conditions to which it is subjected.

3. The mitered corner B, in combination with the arm F and nut G, or their equivalents, for straining a wire cord, tape, or ribbon, substantially as and for the purpose set forth.

4. The mitered corner B, in combination with the spring K, arm F, and nut G, substantially as and for the purpose set forth.

WILLIAM ST. MARTIN.

Witnesses:

A. F. WENZEL,
JEREMIAH F. TWOHIG.