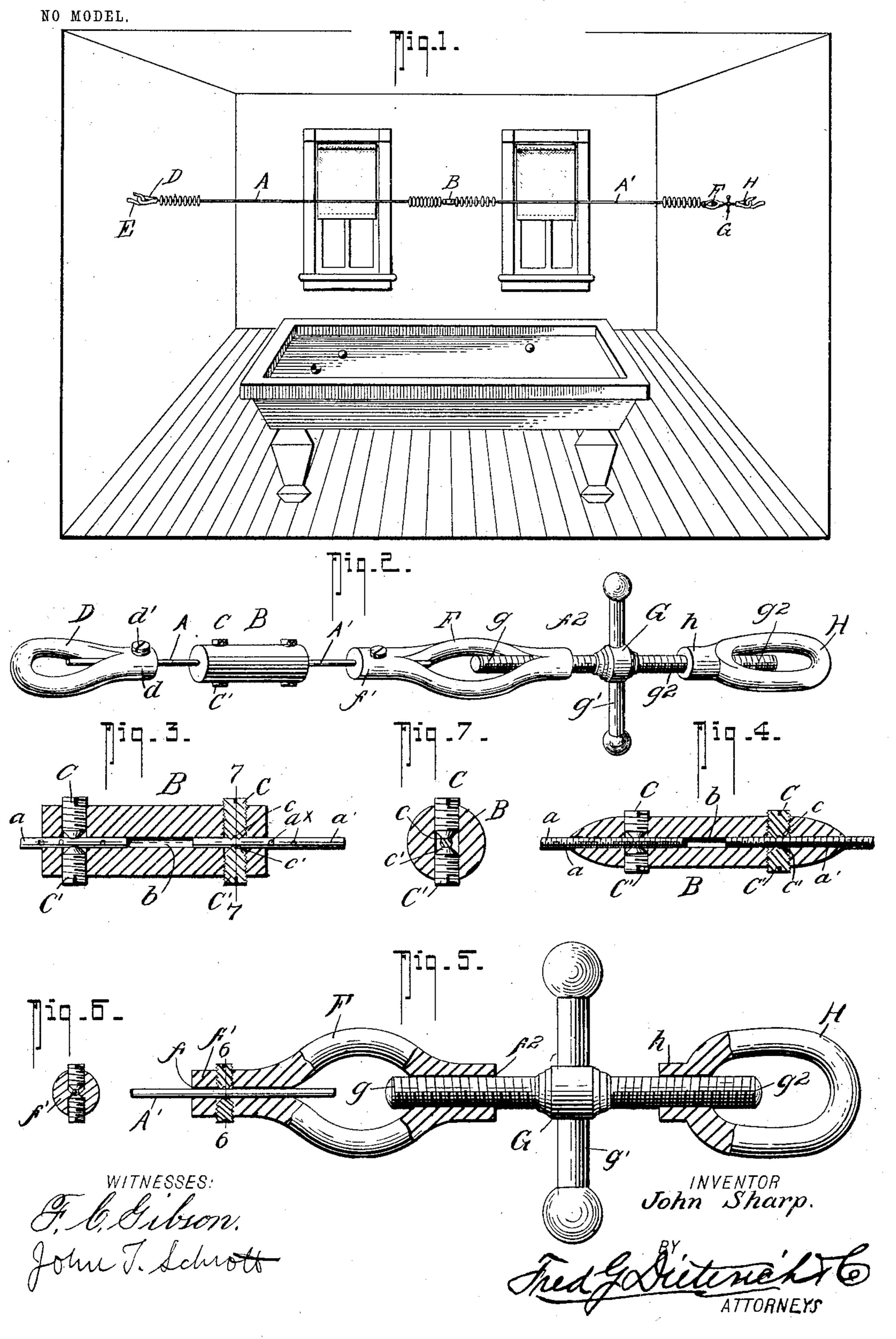
## J. SHARP. WIRE HOLDER.

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## United States Patent Office.

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## WIRE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 745,918, dated December 1, 1903.

Application filed July 17, 1903. Serial No. 166,007. (No model.)

To all whom it may concern:

Be it known that I, JOHN SHARP, residing at Portland, in the county of Multnomah and State of Oregon, have invented a new and 5 Improved Wire-Holder, of which the follow-

ing is a specification.

My invention is in the nature of an improved means for holding button-carrying wires or rods commonly used in connection ro with billiard and pool tables, and it seeks to provide means for the purpose stated of a simple and economical construction which will effectively support the said wires, admit of the ends being readily separated to slip on 15 the buttons or counters by which the slack in the wire or rods can be quickly taken up.

My invention consists in certain details of construction and peculiar combination of parts, all of which will be hereinafter fully 20 explained, and specifically pointed out in the appended claims, reference being had to the

accompanying drawings, in which—

Figure 1 is a view illustrating my invention as in use. Fig. 2 is a perspective view of the 25 same. Fig. 3 is a longitudinal sectional view of the center connection or button-stop. Fig. 4 is a similar view of the modified construction thereof. Fig. 5 is a longitudinal section of the combined clamp and tension device. 30 Fig. 6 is a cross-section of the same on the line 6 6 of Fig. 5, and Fig. 7 is a detail cross-

section on the line 7 7 of Fig. 3.

In the drawings like letters indicate like parts, and A A' designate two wire sections, 35 the meeting ends of which are joined by a combined counter-stop and clamp device B, which may be and preferably is constructed as shown in Fig. 3, which illustrates a cylindrical block having a central aperture b to 40 receive the adjacent ends a a' of the wire strands A A', which are securely clamped in the block by the opposing clamp-screws  $\mathbb{C}'$ , whose ends c c' are radially serrated to grip in the transverse notches  $a^{\times}$  of the wire ends 45 to primarily bite the said ends.

If desired, the block B may have the ends of its aperture b formed with right and left threads to engage the right and left threaded ends a a' of the wires, and thereby provide for 50 easily putting the buttons on the wires in the center of the room, and in the latter form of the center or stop block B the same is also

provided with clamp-screws C C C' C', as clearly shown in Fig. 4.

The outer end of one section A is projected 55 into an apertured hub d of the ring or eye piece D, which engages the supporting hook or eye E, permanently secured to the wall or other fixed part of the room, and the said hub d has a clamp-screw d' for gripping the wire 60 A to hold it from falling out of the hub under ordinary strain. The other wire, A', has its other end held within the aperture f, formed in the hub f' of the eye or ring member F, which is also formed with a hub having a 65 threaded aperture  $f^2$ , disposed in a longitudinal plane of the hub f', adapted to receive the threaded end g of the tension device G, which is also provided with a cross-bar g' for conveniently turning it in another direction, 70 and the said tension device also includes a threaded shank  $g^2$  for engaging the threaded hub h or eyepiece H, fixedly held against the wall of the room at the side opposite the eye D.

The fixedly-projected screw-shanks g  $g^2$  75 are in the nature of right and left threaded members, and the hubs  $f^2$  and h have their apertures correspondingly threaded, whereby the turning of the tension device G in one direction will positively draw the wires A and 80 A' taut and when turned in an opposite direction loosens the said wires without affecting the end twist or torsional strength thereof.

From the foregoing description the general arrangement and operation and also the ad- 85 vantages of my invention are thought to be readily apparent. One of the advantages of my invention is that the wires may be readily turned taut without in the least twisting or buckling the said wires, and the wires may be 90 quickly removed and adjusted in position for the removal of the counter. The construction is such that the appliance can be economically made, and the parts are so joined and made that the danger of breaking is re- 95 duced to the minimum.

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

1. A wire-holding device of the character 100 described, comprising in combination with means for securing one end of the wire; a combined holder and tension device consisting of a member adapted to be fixedly

held and provided with a threaded hub, a second member having a socket to receive the free end of the wire, a clamp mounted in the said end for engaging the wire, said latter member having a threaded socket in the other end, and a turn-spindle whose opposite end is formed with right and left threads for engaging the threaded hubs in the two members aforesaid, for the purposes specified.

2. A means for holding two wire sections comprising a fixedly-held clamp for gripping the outer end of one wire section, a clamp for gripping the outer end of the other wire section, a fixedly-held eyepiece, a tension device connected with said eyepiece and the adjacent wire-clamp, and a button-stop having sockets in the opposite ends to receive the meeting ends of the two wire sections and provided with clamp devices for gripping the said adjacent wire ends, as set forth.

3. In a wire-holding means as described, in combination with the adjacent wire ends, having transverse notches, of a combined wire-clamp and button-stop having sockets in the ends for receiving the notched ends

of a pair of wire strands, and clamp-screws mounted in the ends of the said stops being radially serrated to grip into the notches in the wire ends.

4. The herein-described improved wire- 30 holder comprising in combination with a pair of oppositely-disposed fixedly-held eye members, one of which has an apertured hub to receive the outer end of one wire section and the clamp-screw mounted in the said hub, the 35 other eye member having a threaded hub, a tension device connected to the last-named eye member consisting of a spindle having a turn-handle and right and left threads, one end of said spindle engaging the opposite 40 apertured hub of the wire member, a clamp for engaging the outer end of the other wire section and provided with a threaded aperture to receive the other end of the turn-spindle, and means for clamping and joining the ad- 45 jacent ends of the wire section, as specified. JOHN SHARP.

Witnesses:
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