

(No Model.)

H. ROBERTS.
WOVEN WIRE SEAT.

No. 279,598.

Patented June 19, 1883.

Fig. 1.

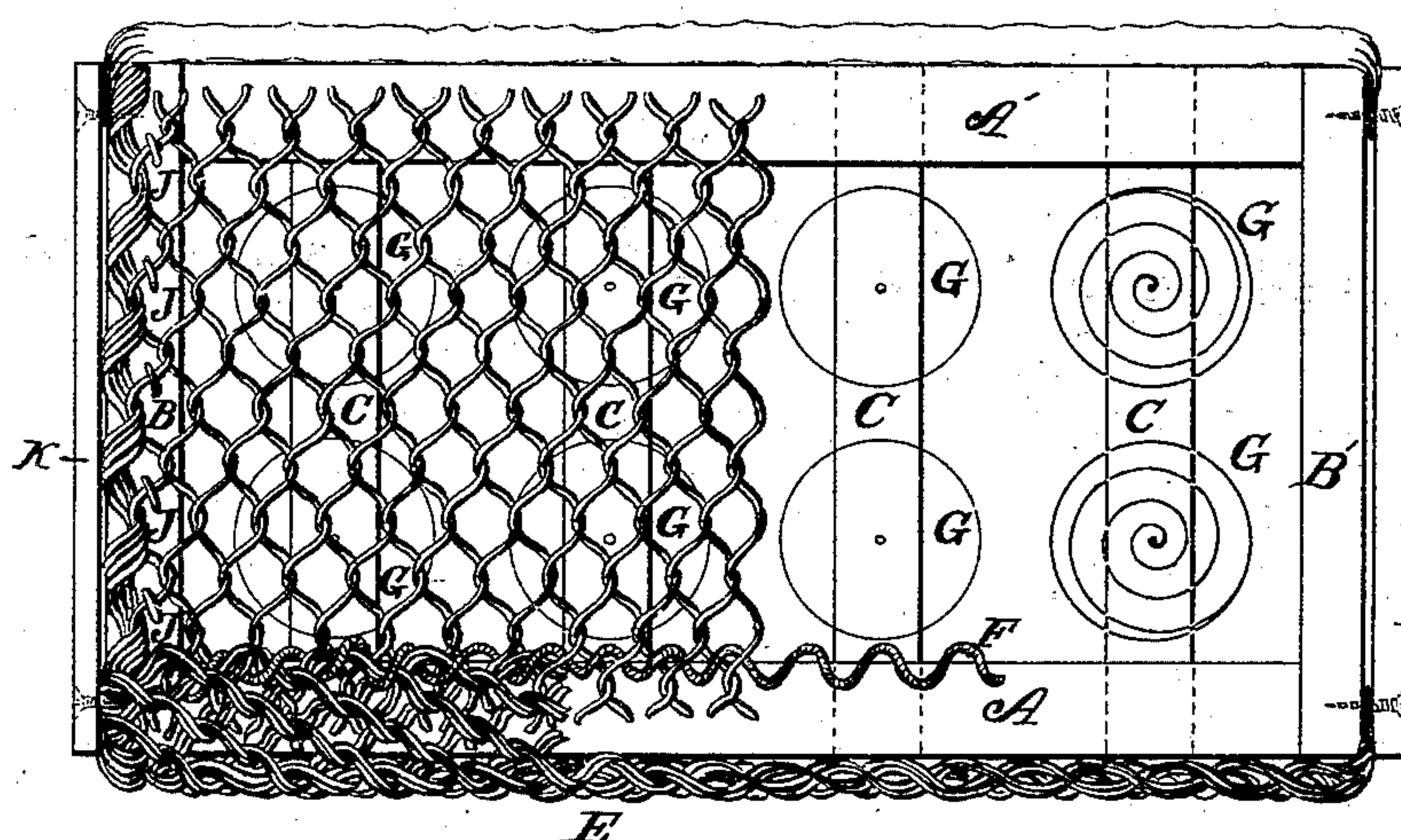


Fig. 2.

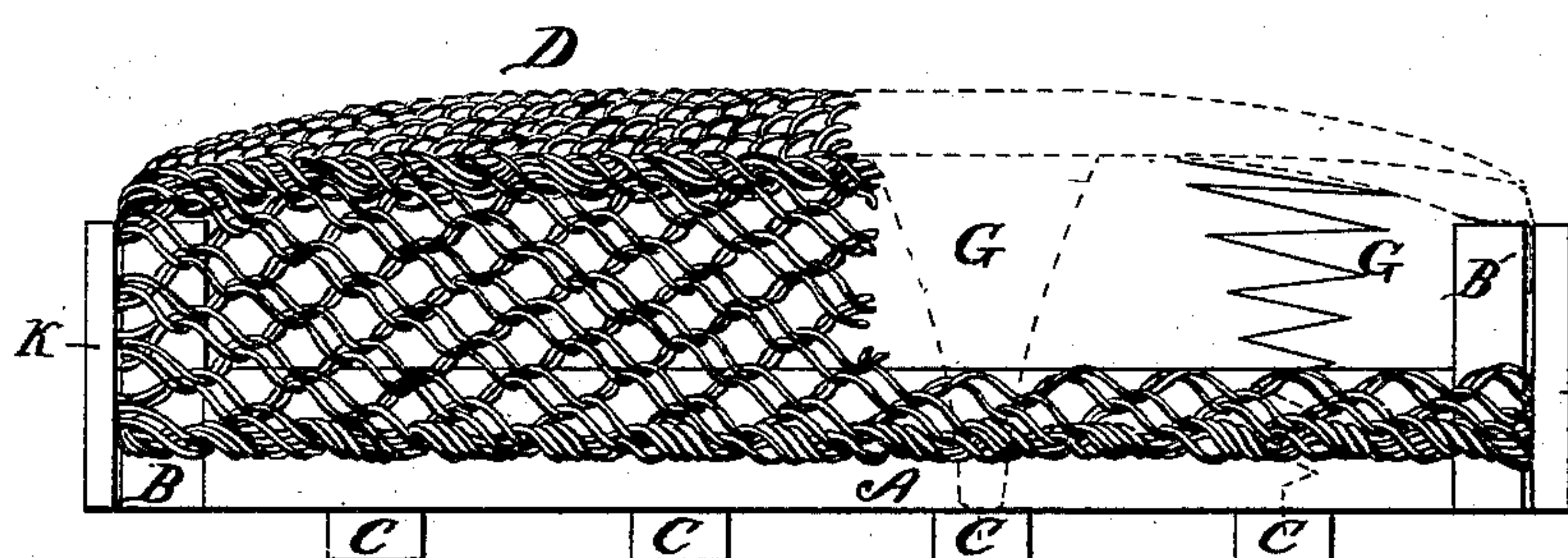
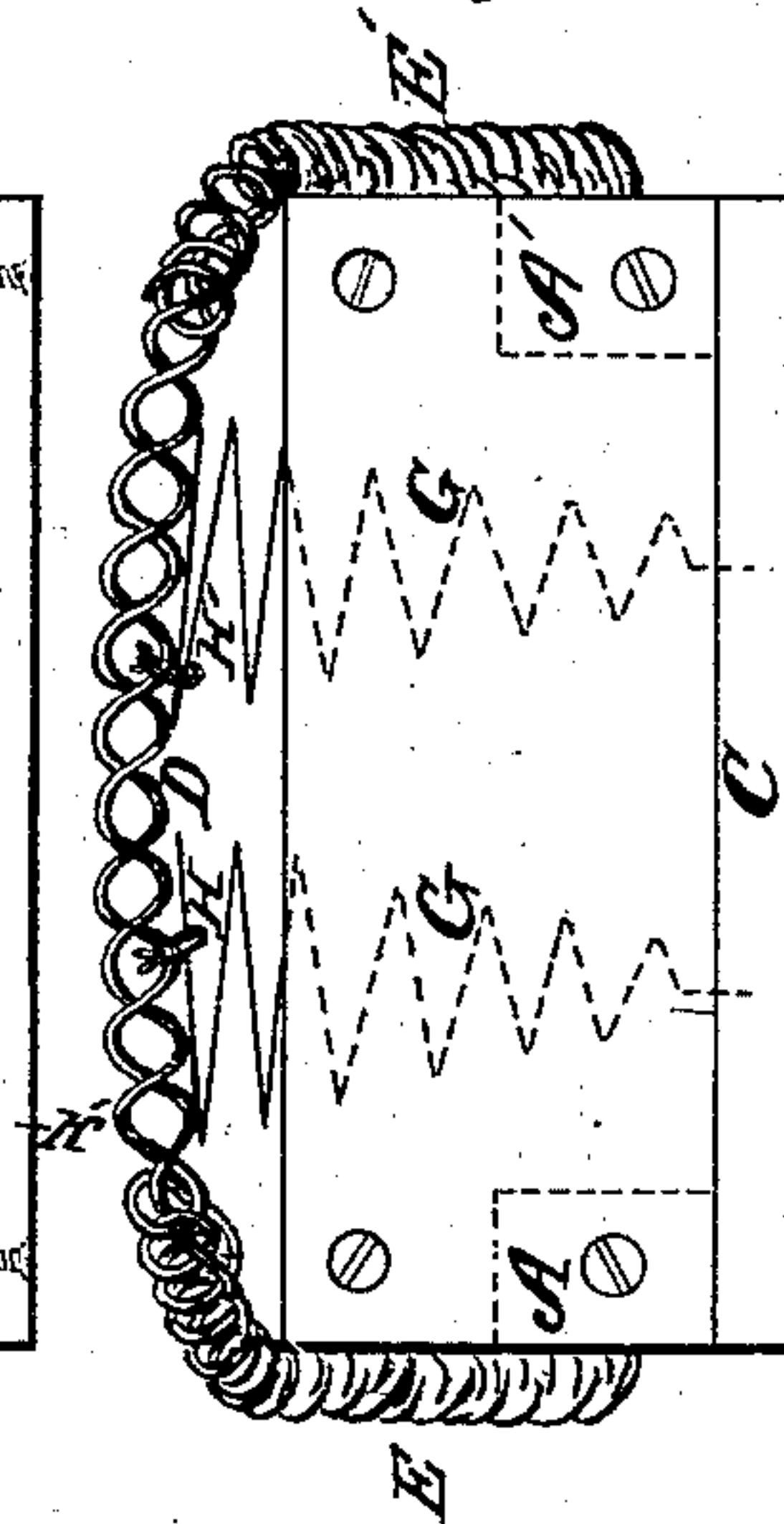


Fig. 3.

Witnesses:

Albert H. Walker
Morgan W. Beach

Inventor:

Henry Roberts

UNITED STATES PATENT OFFICE.

HENRY ROBERTS, OF HARTFORD, CONNECTICUT.

WOVEN-WIRE SEAT.

SPECIFICATION forming part of Letters Patent No. 279,598, dated June 19, 1883.

Application filed March 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY ROBERTS, of the city and county of Hartford, in the State of Connecticut, have invented a new and useful Improvement in Woven-Wire Seats; and I do hereby declare that the following is the true specification thereof, reference being had to the accompanying drawings as a part of the specification.

10 This invention relates to woven-wire seats composed of a rigid frame of wood or other suitable material, a woven-wire fabric on the top of the seat, which fabric is composed of strands running crosswise of the seat, a woven-
15 wire fabric on each side of the seat, which fabric is composed of strands running lengthwise of the seat, and a number of spiral springs supporting the top fabric, and supported by cross-pieces rigidly attached to the frame.

20 Figure 1 is a top view of the seat, with portions of the fabrics broken away to show the method in which the side fabrics are joined to the end fabrics. Fig. 2 is an end view of the seat, with a part of the top fabric absent, so as
25 to show the method of connecting the top fabric with the spiral springs. Fig. 3 is a side view of the seat, with portions of the fabric broken away to show the spiral springs.

A and A' are the side pieces of the frame.
30 B and B' are the end pieces of the frame. C C C are cross-pieces of the frame. D is the top fabric. E and E' are the side fabrics. F is a spiral wire, which fastens the side fabric E to the top fabric. A similar wire fastens
35 the other side fabric to the top fabric. G represents the spiral springs. H and H' are specimen wire loops connecting the spiral springs to the top fabric. J represents the staples which fasten the top fabric to the end
40 piece B. Similar staples fasten the other side of the top fabric to the other end piece. K and K' are clamp-pieces, of wood or other suitable material, which are fastened to the
45 outside of the respective end pieces of the frame, inclosing the ends of the side fabrics between the end pieces and the clamp-pieces.

The top fabric is composed of a series of spiral wires simply interwoven, as shown in the drawings, and may have its outer strand on
50 each side composed of several wires spiraled to-

gether. The ends of the top fabric are at the sides of the seat, and are made by cutting fabric of the proper width through from side to side.

The side fabrics are composed of a series of 55 spiral wires interwoven in such a compound manner that the side fabrics have more wires and more strength in proportion to surface than the top fabric has. The lower side of each side fabric may be finished with an outer 60 strand composed of several wires spiraled together. The upper side of each side fabric is lapped over the adjoining end of the top fabric, and is joined to the top fabric by the spiral wire H, which, being interwoven with 65 the meshes of both fabrics, unites both fabrics by a sort of cross-weaving. The ends of the side fabrics are clamped rigidly to the corresponding corners of the frame by being bent around the corresponding outer angles of the 70 end pieces, and clamped to the outer sides of the end pieces by means of the clamp-pieces. The spiral springs rest on the cross-pieces, and their tops are fastened to the top fabric by the wire loops. There should be enough 75 of these loops to each spring to prevent that spring from leaning in any direction. In an actual seat there should be at least three rows of springs, and at least three times as many springs in each row as the number of persons 80 the seat is designed to provide for. Thus constructed the seat may be upholstered in any proper manner.

This invention has the following new mode of operation: The weight of the sitter is sup- 85 ported partly by the spiral springs, and partly by the side fabrics, and partly by the top fabric, and not at all by any rigid thing, except through those springs and those fabrics.

I claim as my invention—

90 The combination, in a seat, of the top woven-wire fabric, the strands of which run across the seat, and a side woven-wire fabric, the strands of which run lengthwise of the seat, and one or more spiral springs under the top 95 fabric, all arranged substantially as described.

HENRY ROBERTS.

Witnesses:

ALBERT H. WALKER,
MORGAN W. BEACH.