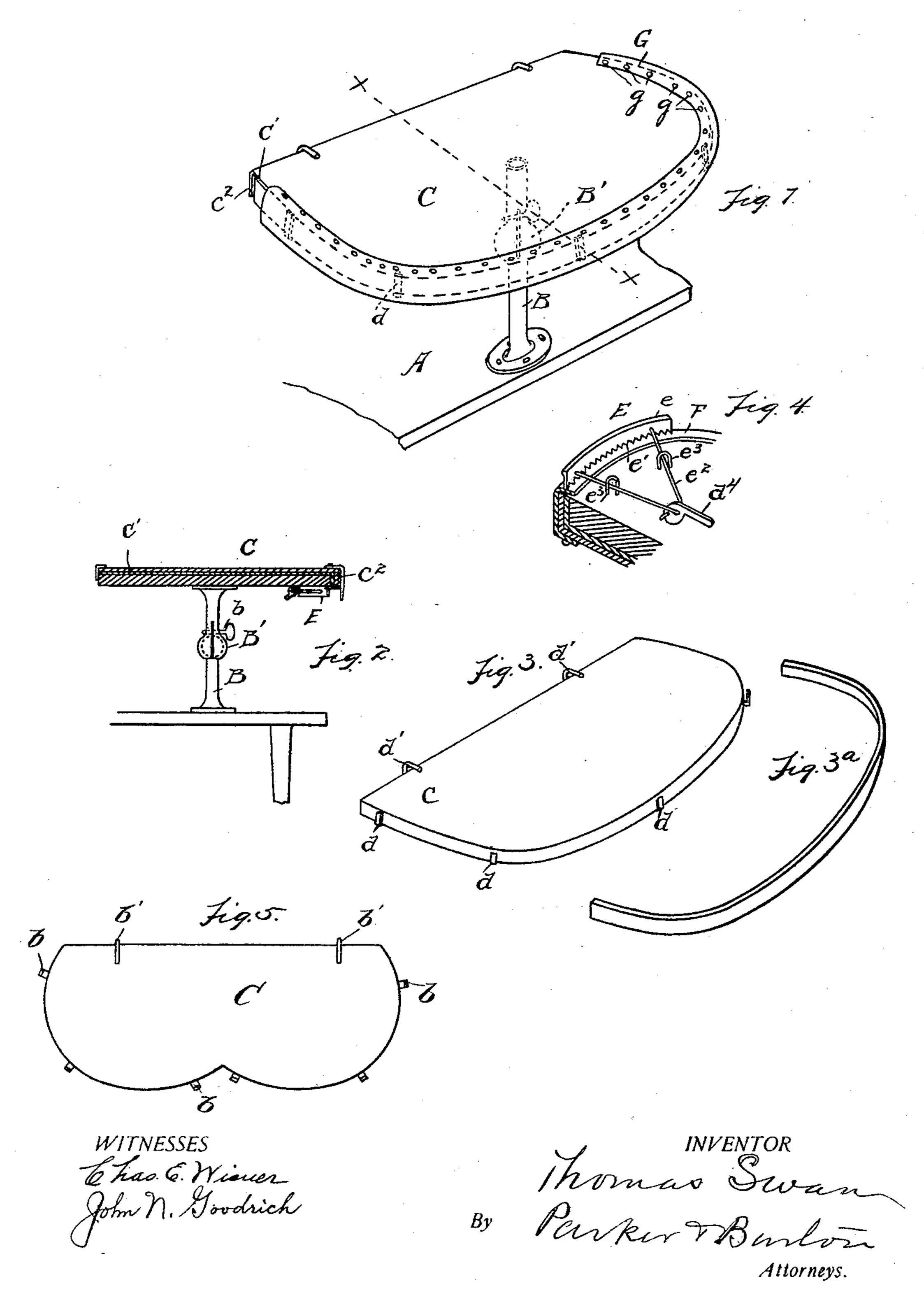
## T. SWAN. UPHOLSTERER'S FORM.

(Application filed July 1, 1899.)

(No Model.)



## United States Patent Office.

THOMAS SWAN, OF FLINT, MICHIGAN.

## UPHOLSTERER'S FORM.

SPECIFICATION forming part of Letters Patent No. 632,475, dated September 5, 1899.

Application filed July 1, 1899. Serial No. 722, 494. (No model.)

To all whom it may concern:

Be it known that I, Thomas Swan, a citizen of the United States, residing at Flint, county of Genesee, State of Michigan, have invented a certain new and useful Improvement in Upholsterers' Forms; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My improved invention relates to upholsterers' forms; and it consists in the various constructions, modifications, and combinations

hereinafter described and claimed.

In the drawings, Figure 1 is an elevation in perspective showing the general arrangement and construction of the form. Fig. 2 is a cross-section on line x x of Fig. 1. Fig. 3 represents certain details. Fig. 3<sup>a</sup> represents a strip forming a part of the work operated on. Fig. 4 represents in perspective a holder for grasping and holding the material upon a former. Fig. 5 is a modification of the form shown in Fig. 4.

In the drawings, A represents a table or bench upon which the former is fixed.

B is a standard containing a universal

30 joint B'.

C is the former proper, which, as is shown in Fig. 2, is attached to the top of the standard B. The former proper consists of a board c of substantially the form shown in Figs. 1 35 and 3 or of a modified form shown in Fig. 5. The top and edges of this board are armored with a heavy plate of sheet-steel C' C2, the object of this armoring being to compel the clenching of nails used in the process of up-40 holstering. It is obvious that the whole former might be made of a plate of iron of the proper shape and having the requisite depth or thickness at the edges, my object in making its body of wood being to secure lightness. 45 Around the curved edges of the former proper are attached a series of hooks dd, while on the straight edge another set of hooks  $d'\,d'$  of a different form is provided. The hooks around the curved edge project upwardly and form 50 what might be termed a "skeleton" trough for the insertion of a part of the work, which

consists of a strip of heavy cardboard, which is shown separately in Fig. 3a. The hooks along the straight edge project over the top surface of the former C, as shown in Figs. 3 55 and 5. These are for the purpose of holding down the base of the work, which is laid upon the former in position to be attached to the edge of the work or the piece shown in Fig. 3a. Upon the under side of the former I pro- 60 vide clamps E of peculiar construction for the purpose of drawing the edge of the work down to the former, and thus making it conform to the shape of the same smoothly and without wrinkles. One of these clamps is 65 shown in Fig. 4, and as the other is similar it is unnecessary to show more than one. Each clamp consists, essentially, of a curved strip of steel e, having a serrated edge e', which is adapted to grasp the material to be drawn 70 over the edge of the former in the manner shown in Fig. 4. The strip e is mounted upon a rigid metal loop  $e^2$  and is loosely but non-detachably fixed to the under side of the former by means of the staples  $e^3 e^3$ , through which 75 the sides of the loop  $e^2$  pass. At the apex of the loop are a cam and lever  $d^4$ , which when turned down, as shown in Fig. 4, draw the strip e away from the edge, carrying with it the attached strip of material F, thereby 80 drawing it tightly around the angles of the former.

It is obvious that while I have shown a universal ball-and-socket joint B' with a clamping b many other forms of universal joint 85 might be used, and I do not limit my inven-

tion to any particular form.

The mode of operation of this apparatus is as follows: The former being in any convenient position—say as in Fig. 1—the strip shown 90 in Fig.  $3^a$  is inserted between hooks d and the edge of the former and is thus held in position extending the entire length of the curved portion of the former. A sheet of backing for the cushion is then laid upon the surface 95 of the former, the straight edge coming under the hooks d'd'. The strip of the proper flexible material is then attached to the sheet of backing by nailing, the strip of flexible material being shown at G in Fig. 1 and the nails 100 being shown at g. The nails penetrating the backing are clenched by coming in con-

tact with the iron plate of the former. The flexible strip is then forcibly drawn tightly around the edges by means of a number of clamps like that shown in Fig. 4. The nails 5 are then driven around the edge of the former, attaching the flexible strip to the strip shown in Fig. 3a, the nails being clenched against the iron edge of the former. While the work is in process of construction, the former may be 10 tilted into any desirable position or turned in any direction by means of the universal joint shown at B'. The work of thus forming the backs and foundations for cushions is thus very largely facilitated.

What I claim is—

1. In an upholsterer's former, the combination of a metal clenching-plate, and hooks attached thereto to form sockets into which the work to be operated upon may be carried, sub-

stantially as described.

2. In an upholsterer's former, the combination of a metallic clenching-plate mounted upon a universal joint, hooks attached thereto substantially as described to form sockets to hold the work to be operated upon, an ad- 25 justable clamp adapted to grasp the edge of flexible material and draw it tightly over the edge of the former, with means for holding the clamp in the straining position, substantially as described.

In testimony whereof I sign this specification in presence of two witnesses.

THOMAS SWAN.

Witnesses:

G. V. CHAMBERLAIN,

W. C. KELLY.