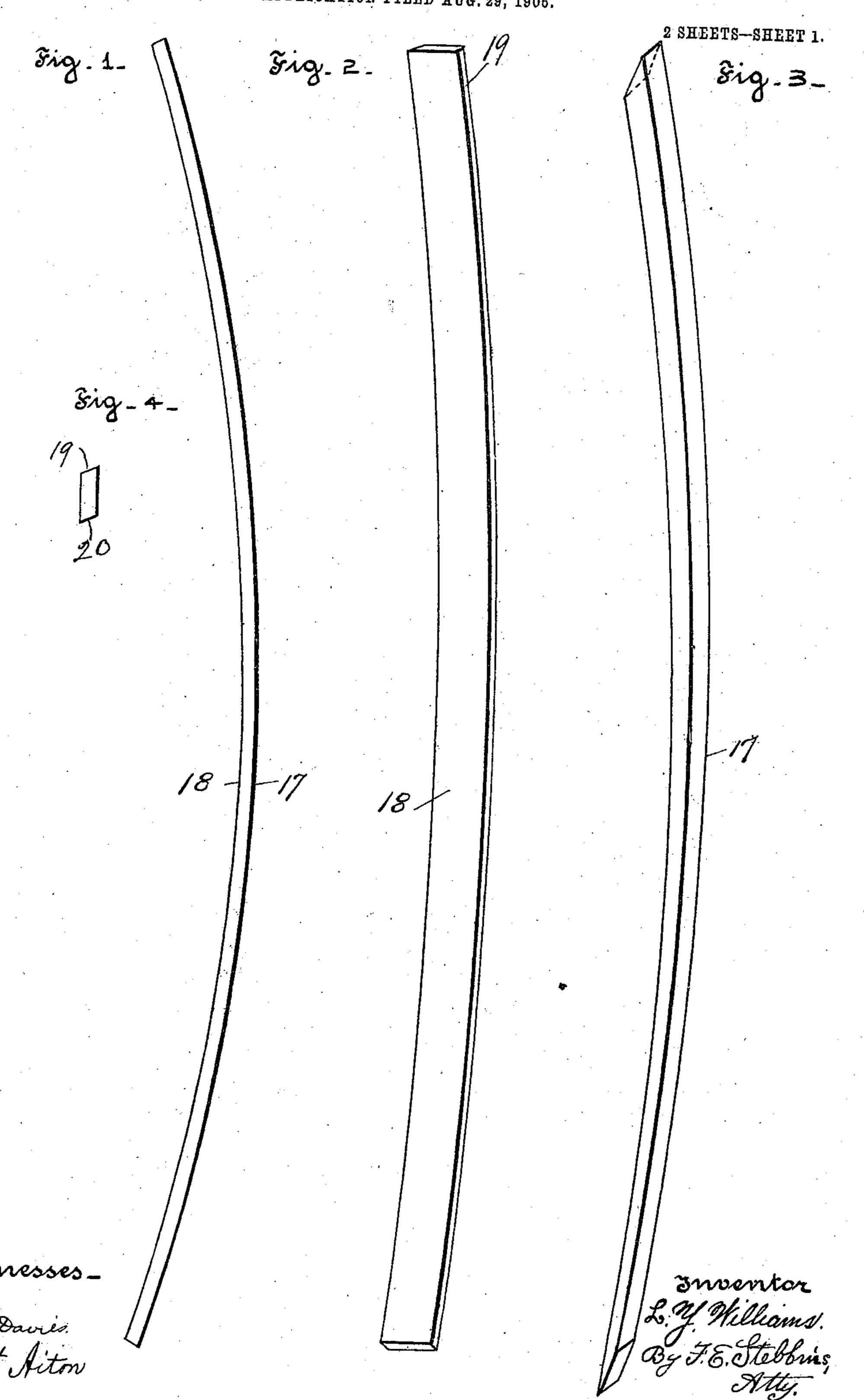
L. Y. WILLIAMS.

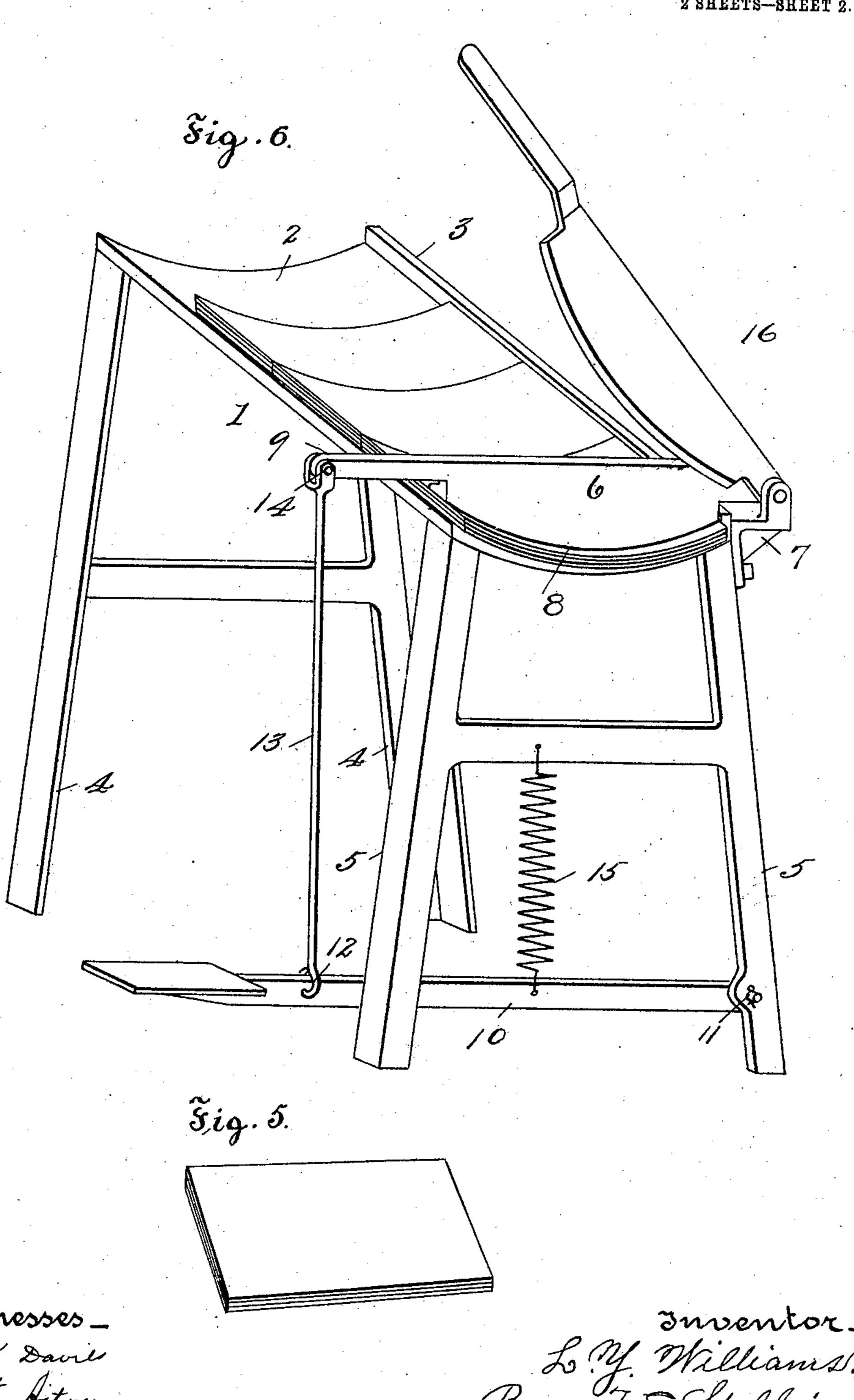
METHOD OF MAKING HEAD LININGS FOR BARRELS,

APPLICATION FILED AUG. 29, 1906.



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UNITED STATES PATENT OFFICE.

LACEY Y. WILLIAMS, OF TOLEDO, OHIO.

METHOD OF MAKING HEAD-LININGS FOR BARRELS.

Mo. 846,885.

Specification of Letters Patent.

Farented Warch 12, 1907.

Application filed August 29, 1906. Serial No. 332,480.

...o all whom it may concern:

Be it known that I, LACEY Y. WILLIAMS, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in the Art of Manufacturing Read-Linings for Barrels, of which the fol-

lowing is a specification.

My invention relates to head-linings for barrels, and specifically to the art of making the same, the object being the devising of a method or process of manufacture by which the linings may easily and cheaply be produced and at the same time have the requisite shape or configuration to frictionally engage and match the head and chime of a barrel.

The invention consists substantially in the art or process hereinafter set forth and

20 claimed.

Referring to the accompanying drawings, Figure 1 is an edge view of a single head-lining made by my improved method of manufacture. Fig. 2 is a plan view. Fig. 3 is an isometric or perspective view. Fig. 4 is a cross-section or end view. Fig. 5 shows a series of thin boards or sheets of material which are to be fashioned into head-linings. Fig. 6 is a perspective view of an apparatus which, for example, may be employed in per-

forming part of the process.

The apparatus (shown by Fig. 6) consists of a bed or table 1, having a concave top surface 2, provided with a guiding-flange 3 along 35 one edge; rear legs 4, upon which one end of the table is supported; legs 5, upon which the front end of the table is supported, the front legs being shorter than the rear legs, so that the table or bed will occupy an inclined posi-40 tion; a presser-foot 6, pivoted at one end to a casting 7, secured to the table or to one of the front legs, said presser-foot having a convex surface 8 and an arm 9, as shown; a pedal 10, pivoted at 11 to one of the legs and pivotally 45 connected at the point 12 by a rod 13 to the arm 9 of the presser-foot through the medium of a journal 14, so the movement of the pedal will transmit a similar reciprocating movement to the presser-foot; a spring 15, which 50 serves to hold the pedal and presser-foot in normally raised positions, and a reciprocating knife 16, pivoted to the casting 7 in front of the presser-foot, as shown. This specific apparatus is illustrated as one of the several 55 means which may be employed in taking part

of the steps of the process, and other and different means may be selected or devised for

the purpose when so desired.

The art of manufacture is as follows: First a wooden block of suitable timber cut to the 50 desired shape is steamed or soaked in water; secondly, the said block is fashioned into thin sheets or boards by means of a saw or reciprocating knife or cutter operated longitudinally of the grain of the wood; thirdly, 65 the thin sheets may be passed between rollers or otherwise and bent to a concavo-convex shape crosswise of the grain of the wood; fourthly, the bent sheets may be placed in a "former" till set or dried sufficiently 70 to maintain their concavo-convex shape; fifthly, the sheets of wood, preferably in layers, are placed upon the concave surface of the bed or table 1 of the apparatus, (shown by Fig. 6,) the edges projected a suitable dis- 75 tance beyond the edge of the lower end of the table, the presser-foot forced down upon the sheets so as to hold them firmly, and the projecting edges clipped off or severed from the main bodies of the strips by the recipro- 80 cating knife. The sheets of wood are repeatedly and intermittently fed and cut longitudinally of the grain, and the severed strips are of the shape shown by Figs. 1 to 4 of the drawings—that is, each strip has a 85 convex surface 17, a concave surface 18, abeveled convex top edge 19, and a concave beveled lower edge 20, the latter edge being adapted to fit the head of a barrel and the convex surface 17 to fit the chine of the 90 staves of the barrel. To secure the desired shape of the head-lining, and particularly the concave beveled lower edge 20 in connection with the convex surface 17, the concavo-convex thin sheets of wood are fed to the knife 95 at an angle oblique to the plane in which the knife reciprocates.

While I have set forth in detail one complete mode of carrying out the art of manufacture, I do not thereby restrict the scope of my invention to the specific details or spe-

cific order of procedure.

The essential steps are the cutting of the wood into thin sheets, the bending of them to a concavo-convex shape or shapes, and feeding them to a severing means in a plane oblique to the plane of the path of such severing means or otherwise cutting them on a plane which is oblique to the curved surface of the sheet or sheets.

What I claim is—

1. The method of forming curved beveledged linings, which consists in cutting strips from a curved sheet of wood on a plane 5 oblique to the curved surface of the sheet and lengthwise of the curve.

2. The art of making head-linings consisting in fashioning a sheet or sheets of suitable material to a concavo-convex shape or shapes 10 and severing therefrom strips, the plane of severance being oblique to the curved surface or surfaces of the sheet or sheets and lengthwise of the curve.

3. The art of forming curved bevel-edged 15 linings, which consists in cutting strips from a concavo-convex sheet of wood on a plane at an angle to the curved surface of the sheet, lengthwise of the curve, and substantially

parallel with the grain.

4. The art of making head-linings con- 20 sisting in cutting a block of wood into thin sheets, said cutting being parallel with the grain of the wood, fashioning the sheets to a concavo-convex shape, and cutting the same into strips, the plane of severance being 25 oblique to the curved surfaces of the sheets lengthwise of the curve, and substantially in line with the grain of the wood.

In testimony whereof I affix my signature

in presence of two witnesses.

LACEY Y. WILLIAMS.

Witnesses: JOHNSON THURSTON,

MAY P. FOSTER.