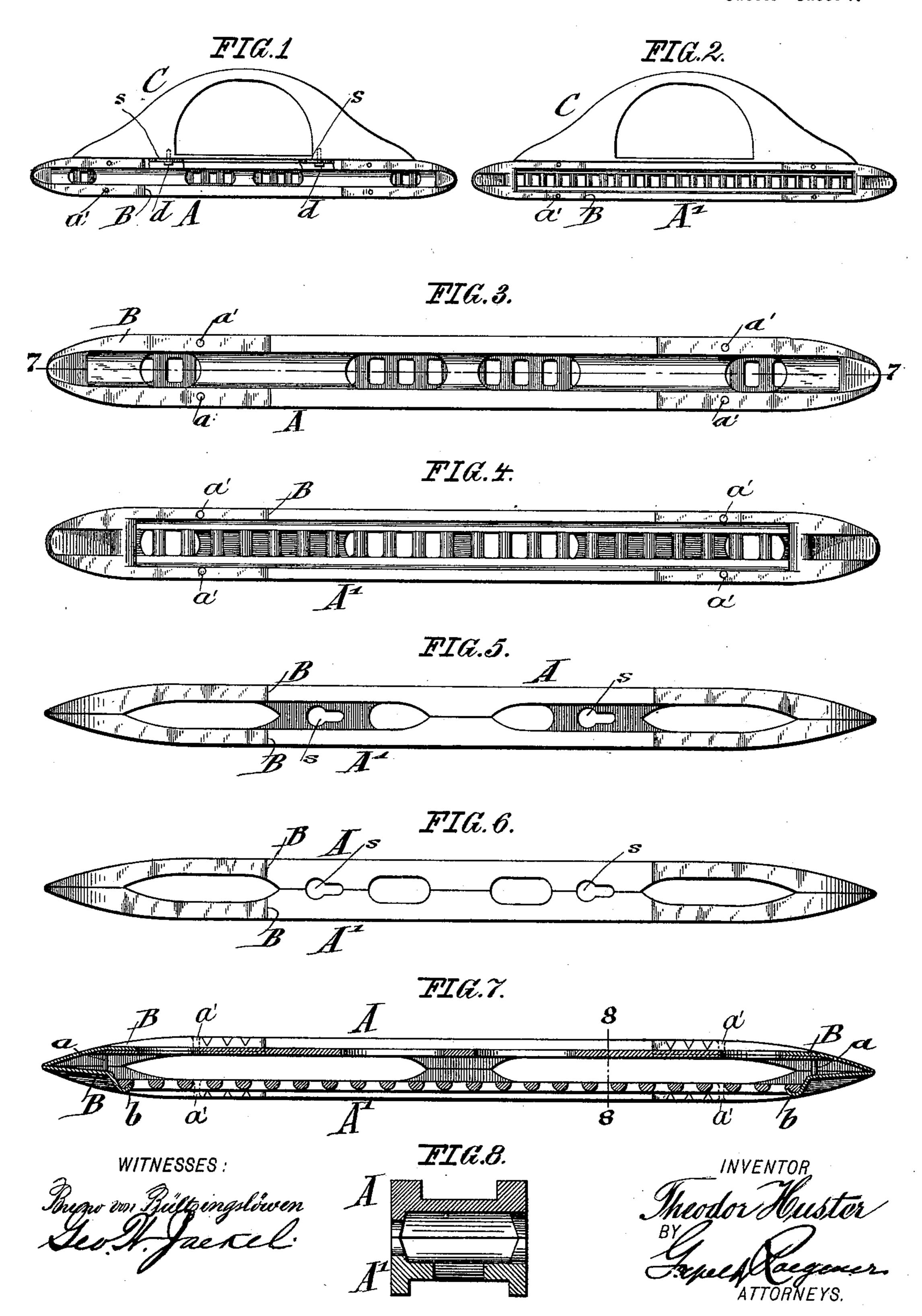
## T. HUSTER. LOOM SHUTTLE.

(Application filed Mar. 26, 1898.)

(No Model.)

2 Sheets—Sheet 1.

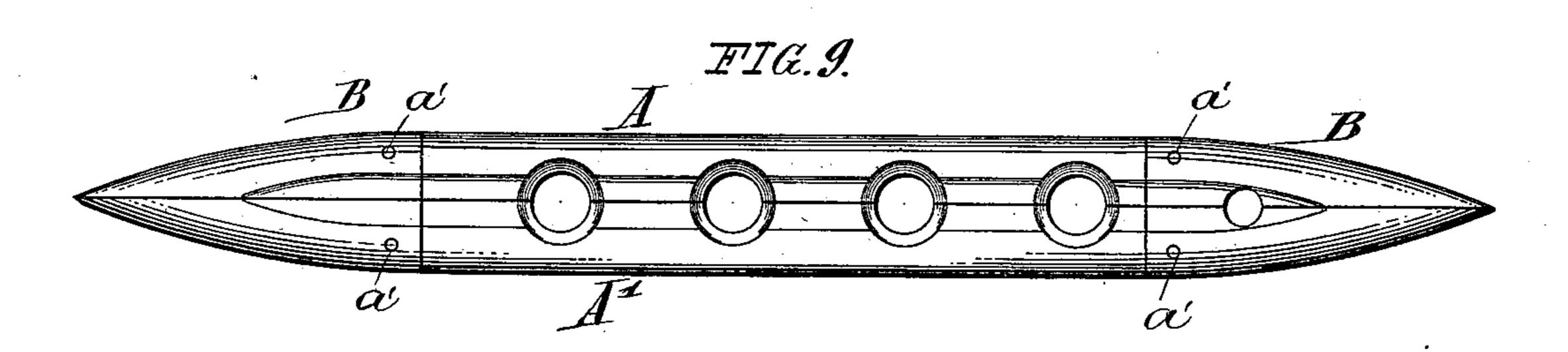


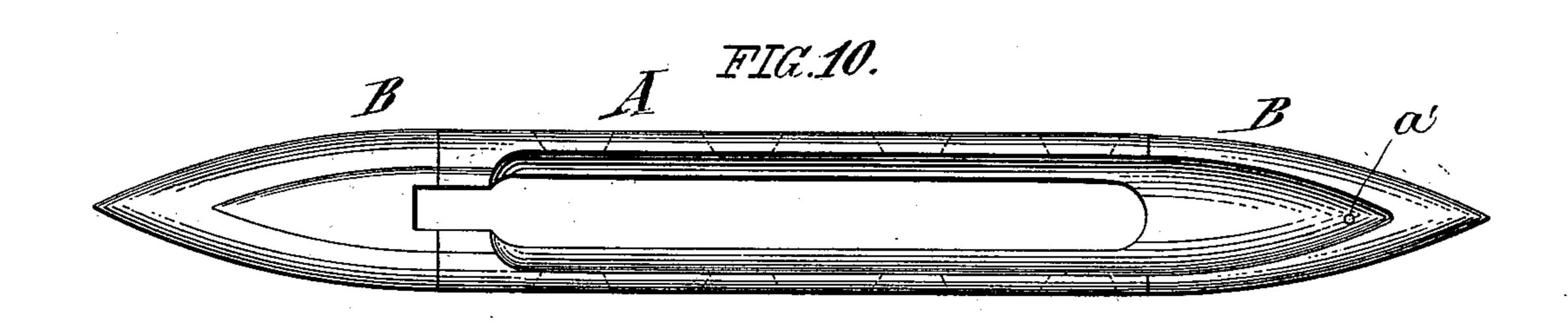
## T. HUSTER. LOOM SHUTTLE.

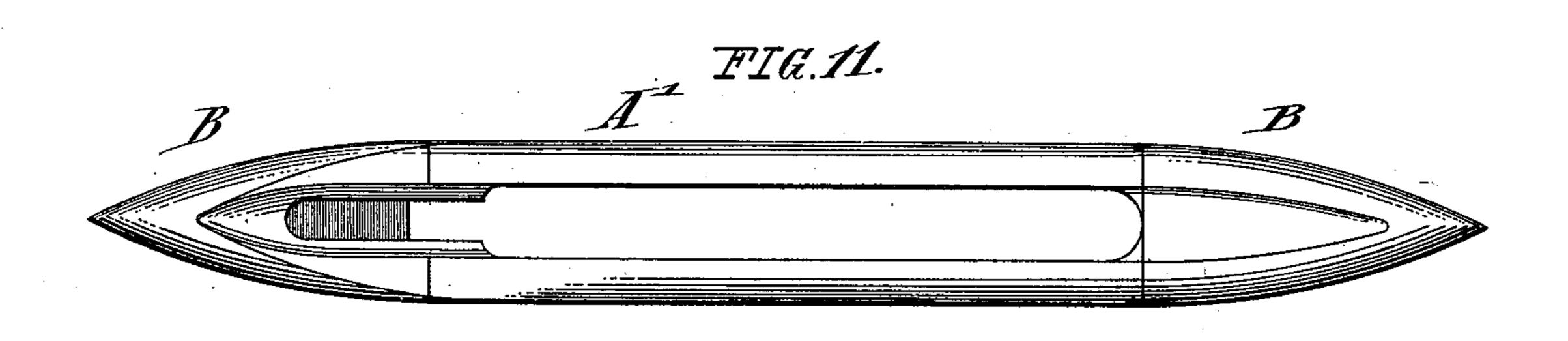
(Application filed Mar. 26, 1898.)

(No Model.)

2 Sheets-Sheet 2.







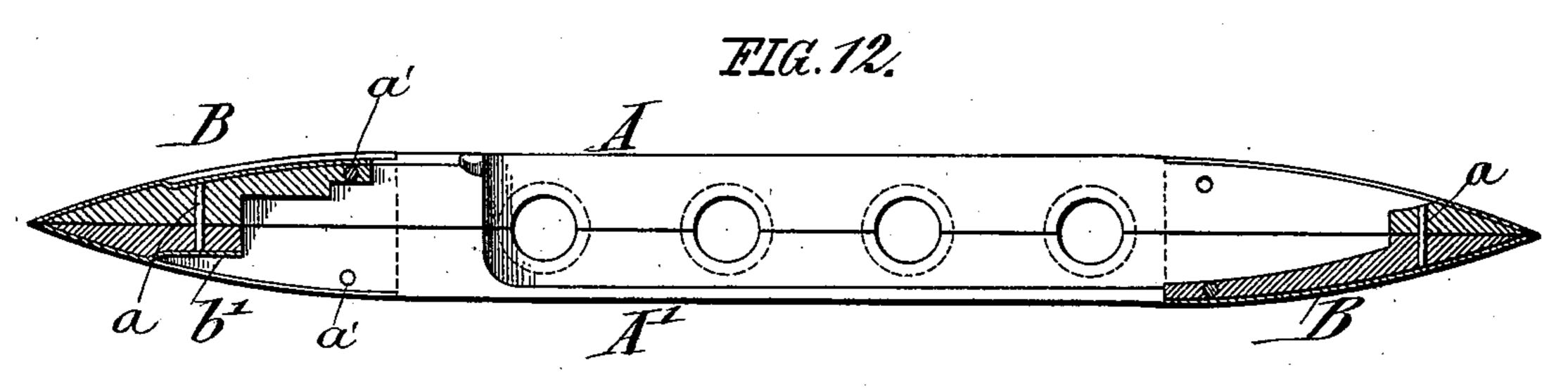
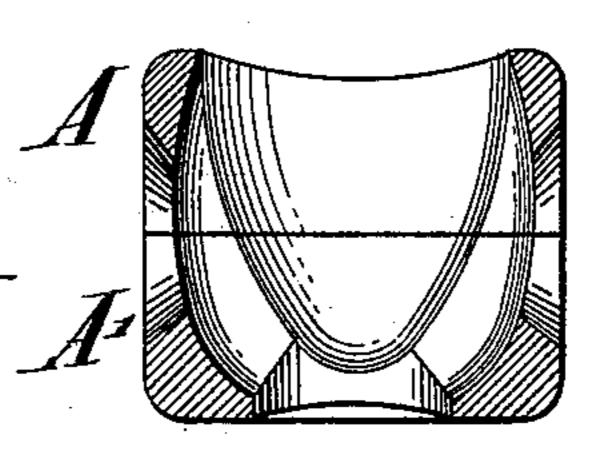


FIG. 13.

MITNESSES:
Bryswood Billspringslowen
Jes H. Jaerel.



Theodor Souster Souseflaguer.
ATTORNEYS.

## United States Patent Office.

THEODOR HUSTER, OF PATERSON, NEW JERSEY, ASSIGNOR OF ONE-HALF TO FREDERICK W. HELMS, OF SAME PLACE.

## LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 627,423, dated June 20, 1899.

Application filed March 26, 1898. Serial No. 675, 223. (No model.)

To all whom it may concern:

Beitknown that I, Theodor Huster, a citizen of the United States, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Loom-Shuttles, of which the following is a specification.

This invention relates to certain improvements in loom-shuttles, both for ribbon and fabric looms, in which the body of the shuttle instead of being made of wood is made of aluminium and reinforced at the portions that are subjected to wear by suitable sheet-metal strips, so that a light, durable, and less-expensive shuttle is obtained; and the invention consists of certain features of construction to be hereinafter described and then claimed.

In the accompanying drawings, Figures 1 20 and 2 represent a top and bottom view, respectively, of my improved shuttle of that kind used for ribbon-looms. Figs. 3 and 4 are top and bottom views, drawn on a larger scale, of the main part or body of the shuttle 25 with the spool-holding portion detached. Figs. 5 and 6 are respectively front and rear elevations. Fig. 7 is a vertical longitudinal section on line 77, Fig. 3. Fig. 8 is a vertical transverse section, drawn on a larger scale, 30 on line 8 8, Fig. 7. Fig. 9 is a side elevation of a fabric-loom shuttle. Figs. 10 and 11 are respectively top and bottom views of the same, and Figs. 12 and 13 are respectively a vertical longitudinal section and a vertical

35 transverse section of the same. Similar letters of reference indicate corre-

sponding parts.

Referring to the drawings, A A' are two semisections of my improved shuttle for rib-

semisections of my improved shuttle for ribto bon and fabric looms. Said semisections A
A' are preferably made of cast aluminium, so
as to keep the weight of the entire shuttle
equal to if not below that of the ordinary
wooden shuttles. The semisections A A' are
united by suitable rivets a, and the ends and
lower part, which are subjected to the greatest wear, covered by a capping-layer B of
sheet metal, preferably sheet-steel, which is
placed in the mold before casting and retained
on the cast metal by means of rivets a' and inwardly-bent prongs or portions b b', which are
bent around and engaged over shoulders or
ribs a', as shown, respectively, in Figs. 7 and 12.

In the shuttle for ribbon-looms (shown in Figs. 1 to 8) the bow-shaped support C for 55 the spool-tension device, &c., is made of wood, as before, and connected by means of headed studs d with the correspondingly-slotted side wall of the metallic portion of the shuttle, as shown in Fig. 1, the slots s for said headed 60 studs being provided with enlargements, as shown in Figs. 5 and 6, so as to produce the rigid connection of the metallic portion of the shuttle with the wooden portion of the same. The reinforcing-layers B of sheet-steel at the 65 wearing parts of the shuttle are preferably stamped up by dies, each section being provided with said reinforcing-layers. These layers also prevent the discoloring, especially of light fabrics, by the aluminium, which with- 70 out the same would impart a slight color to white and other fabrics. The sheet-metal reinforcing-layers can be made very thin, as sheet-steel stands considerable wear. They do not materially increase the weight of the 75 shuttle, so that the same is kept within the maximum weight required.

My improved shuttles can be manufactured at a smaller expense than the present shuttles in use with ribbon and other looms. 80 They have all the advantages of the ordinary shuttles and can be made even lighter than the same by providing the side, top, and bottom walls of the same with the required openings, so as to reduce the stock to the lowest 85 possible limit.

Having thus described my invention, what I claim is—

A loom-shuttle, consisting of a body of semisections divided on the horizontal center line 90 of the shuttle and provided with shoulders near the ends, means for uniting the said sections, and reinforcing-layers of sheet metal capping the ends of the shuttle, said layers having bent portions interlocking with and 95 engaging over the shoulders of the sectional body, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

THEODOR HUSTER.

Witnesses:
PAUL GOEPEL,
GEO. W. JAEKEL.