

UNITED STATES PATENT OFFICE.

EDWARD ASHLEY, OF BOISE, IDAHO.

FLUME HEAD-GATE.

983,341.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed May 14, 1910. Serial No. 561,371.

To all whom it may concern:

Be it known that I, EDWARD ASHLEY, a citizen of the United States, residing at Boise, in the county of Ada and State of Idaho, have invented certain new and useful Improvements in Flume Head-Gates, of which the following is a specification.

This invention relates to improvements in flume gates and has for one of its objects to provide a gate which is simple in construction and easily operated, and which is readily applied to the mouth of a flume.

Another object is to provide a flume gate of such construction that when the gate is slid up to allow the water to pass from the end of the pipe leading into the irrigation ditch the force of the water will not tear the edge of the canvas sheet.

Another object of the invention is to provide a flume gate having an inclined mouth and on opposite sides recesses adapted to receive projections on the side of the gate whereby the gate is adapted to be moved up and down on the end of the pipe.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the accompanying drawings are shown several forms of my improved flume gate and also the flume. Figure 1 is a side elevation of the mouth end of the flume showing my gate applied. Fig. 2 is a side elevation of a portion of a modification of the flume, Fig. 3 is a front elevation of the flume gate, Fig. 4 is a vertical sectional view through the flume gate.

Referring now to the drawings, 1 represents a flume having one end thereof inclined at 2, and on either side of the mouth of said flume there is formed an elongated recess 3 for the reception of the projection 4 on the flume gate 5. The form of gate shown in Figs. 1, 3 and 4 comprises the frame formed of a U-shaped strip 5' of suitable material preferably metal over which is adapted to be stretched a sheet of canvas or other suitable material 6 and one edge of said strip is adapted to be bent upward at 5'' on its outer face and the lower edge of said canvas folded within the groove formed thereby. A wire 7 is placed in this

groove on top of the canvas and the upturned portion is then bent down to secure the wire and the canvas within the groove.

Across the face of the gate at its lower portion is a strip 8 having the ends bent downward at right angles thereto at 9 and secured to the side faces of the strip 5. The strip 8 is similarly bent to the strip 5 and the canvas sheet is brought around under the bottom of the first strip and seated within the groove by means of a wire 11.

The reinforcing strip 8 insures protection to the lower edge of the canvas strip and prevents the tearing of the same by the rush of the water when the gate is slightly raised. The incline of the end of the pipe provides for support of the water to relieve the strain from the gate. The canvas being held within the groove formed by the upturned edge of the strip 5 insures the proper securing of the canvas and prevents the same from coming loose when the force of the water is brought to bear against the gate or the water is turned into the flume.

From the foregoing it will readily be seen that I have provided a very simple and efficient flume gate and one which is readily moved up and down on the end of the flume to allow more or less water to pass from the end of said flume. Further, the gate is comparatively cheap of manufacture.

What is claimed is:

1. A flume gate comprising a metallic frame, a canvas sheet stretched over and secured thereto, a reinforcing strip secured across the lower ends of the frame for protecting the edge of the canvas.

2. A flume gate comprising a metallic frame, a canvas sheet stretched across and secured thereto, projections on the inner face of the frame, and a flume provided with recesses adapted to receive said projections.

3. The combination with a flume having elongated recesses on its sides, of a flume gate comprising a U-shaped frame having a strip of canvas stretched across and secured thereto, a reinforcing strip on the lower edge of said frame, and projections on the frame for engaging in the recesses of the flume.

4. A flume gate comprising a frame having one edge turned up, and doubled on itself, a canvas sheet stretched across said frame and having its marginal edge seated within the space between the upturned por-

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C. BAUER.
SCREEN CONSTRUCTION.
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FIG. 1

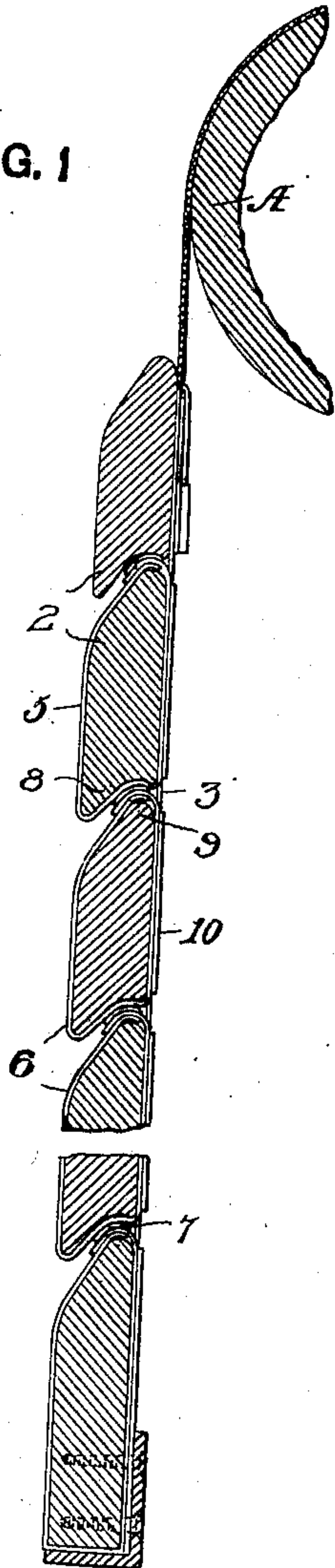


FIG. 2

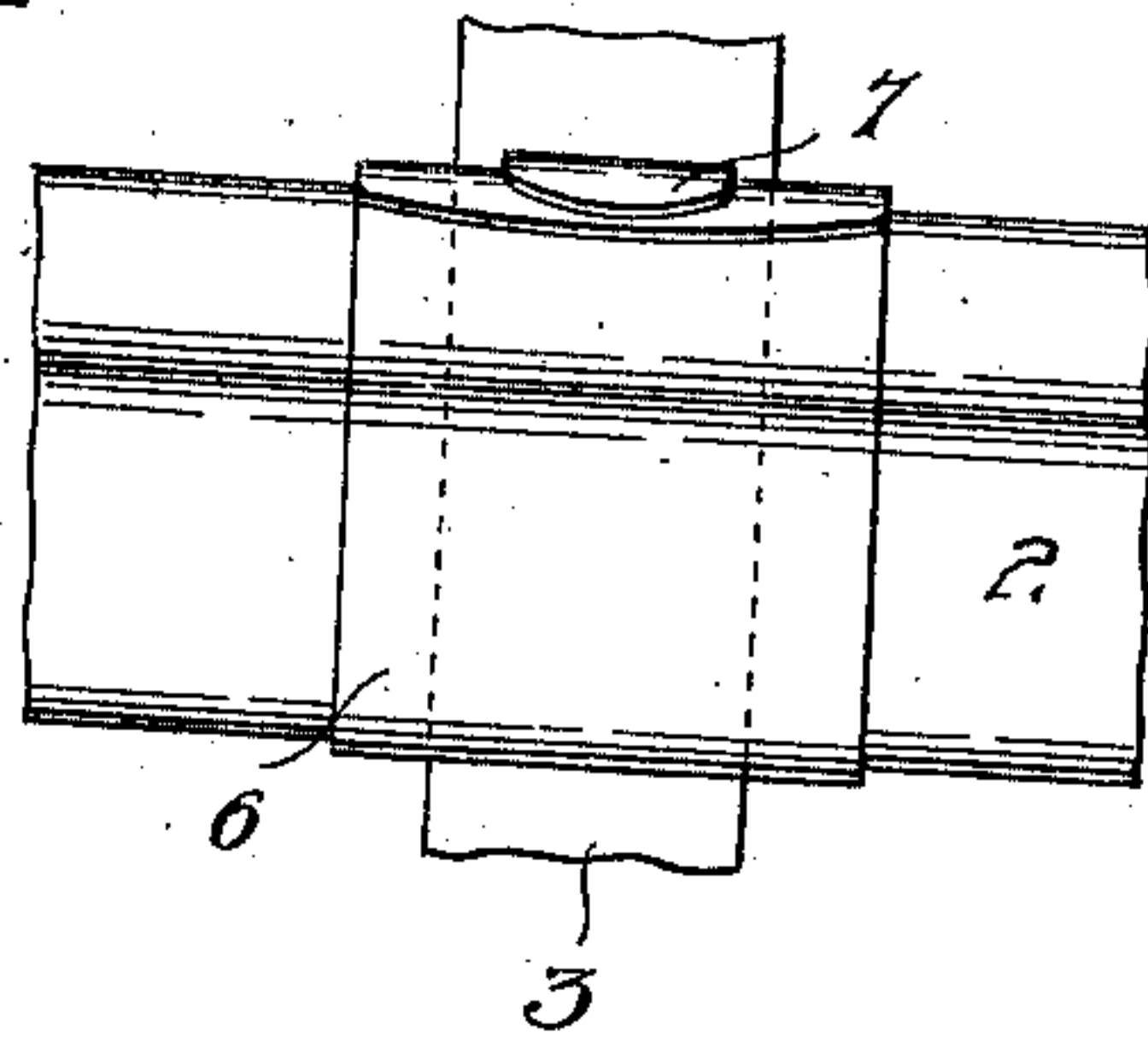


FIG. 3

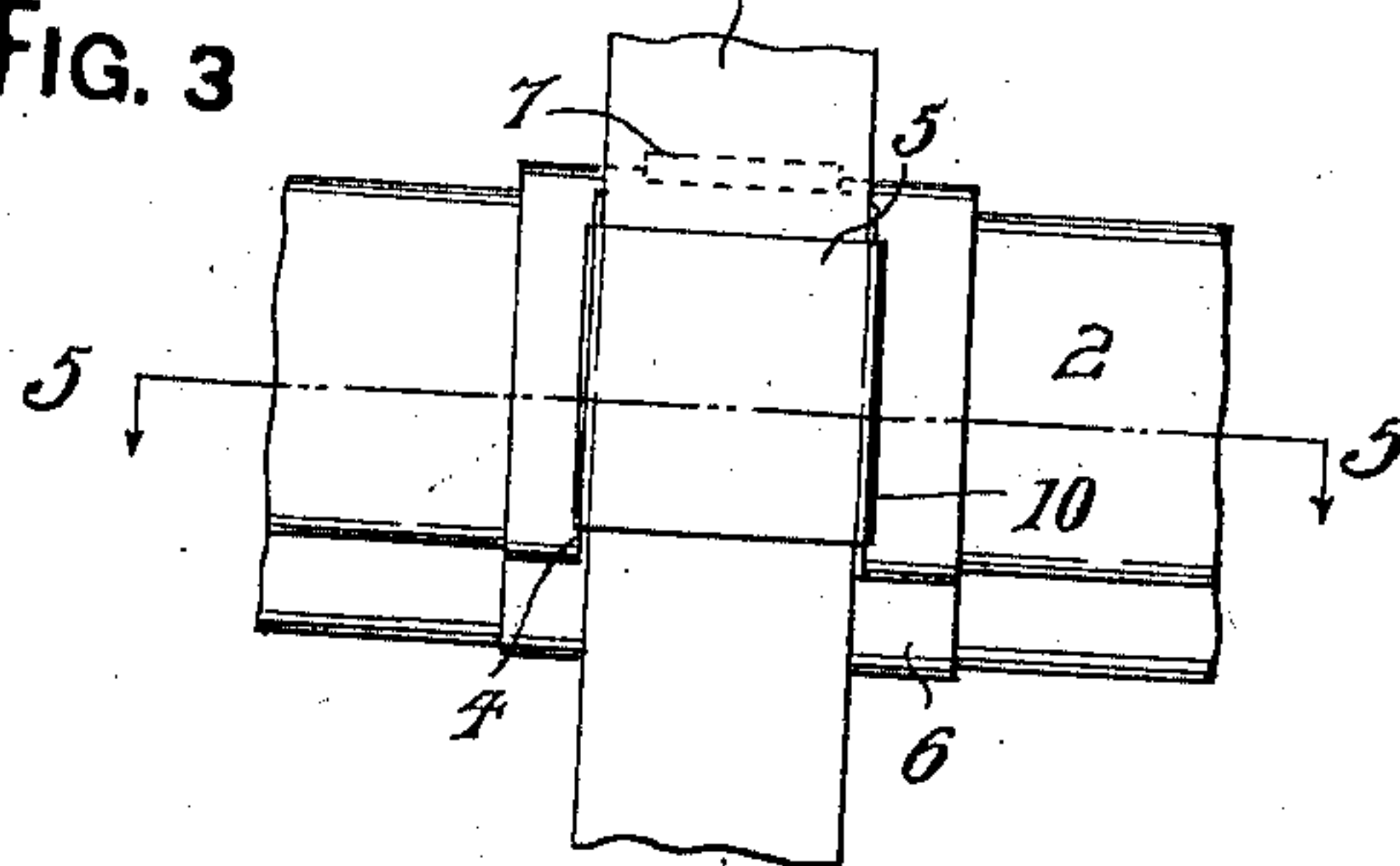


FIG. 4

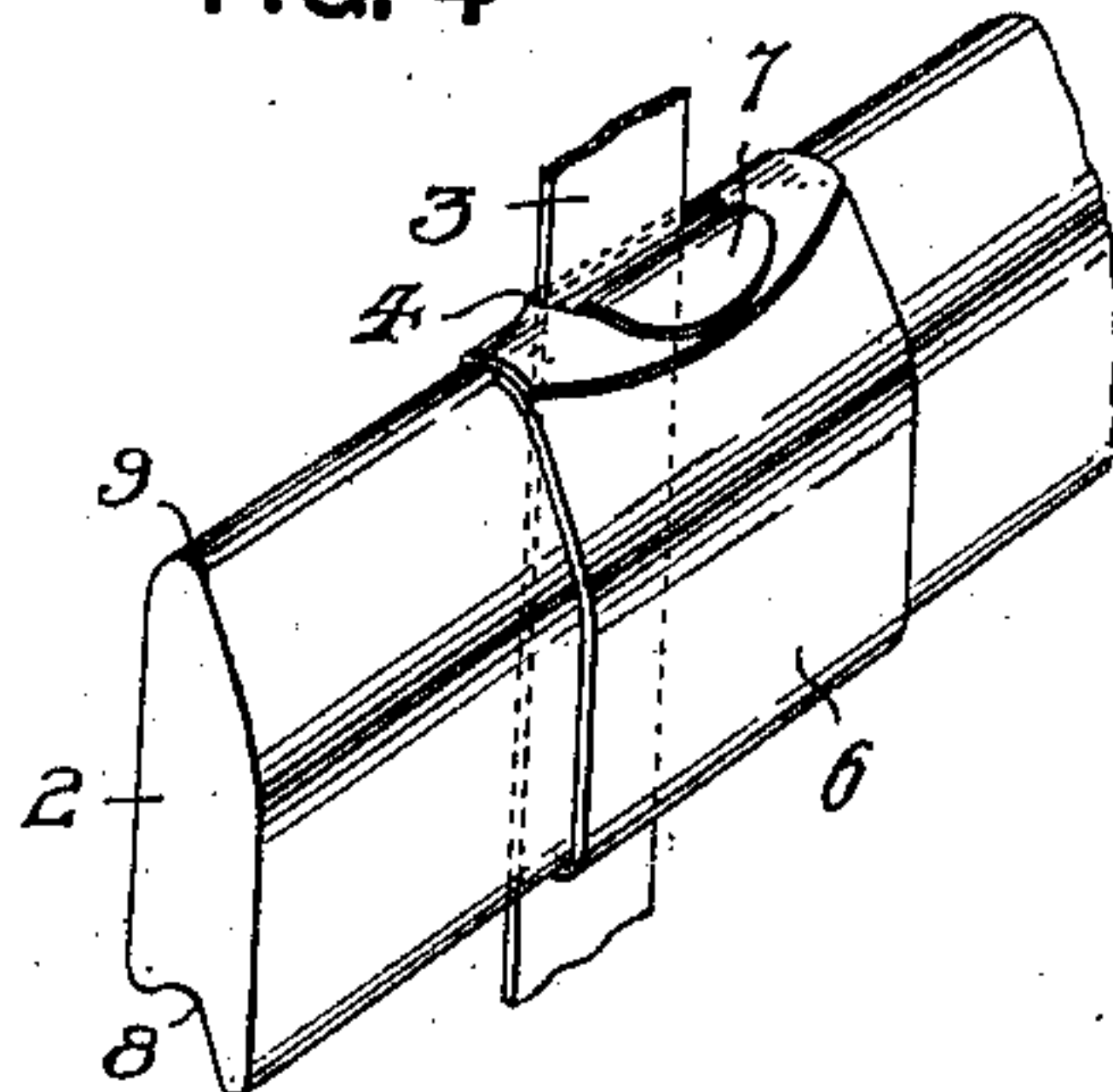


FIG. 5

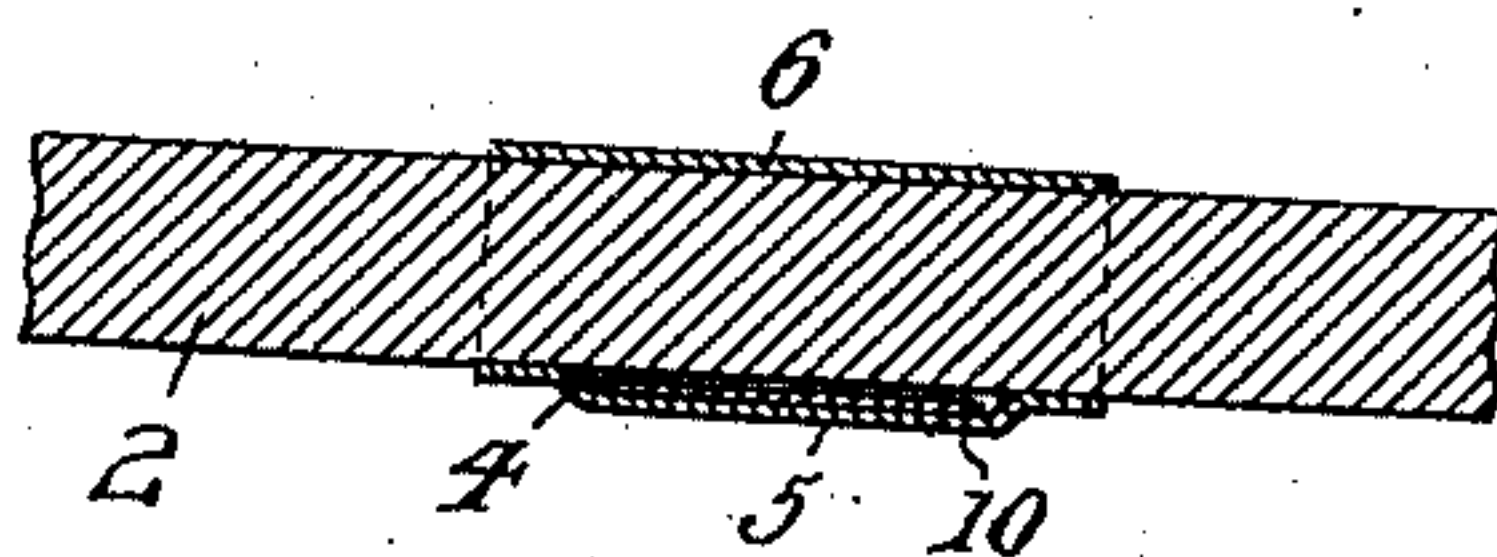


FIG. 6

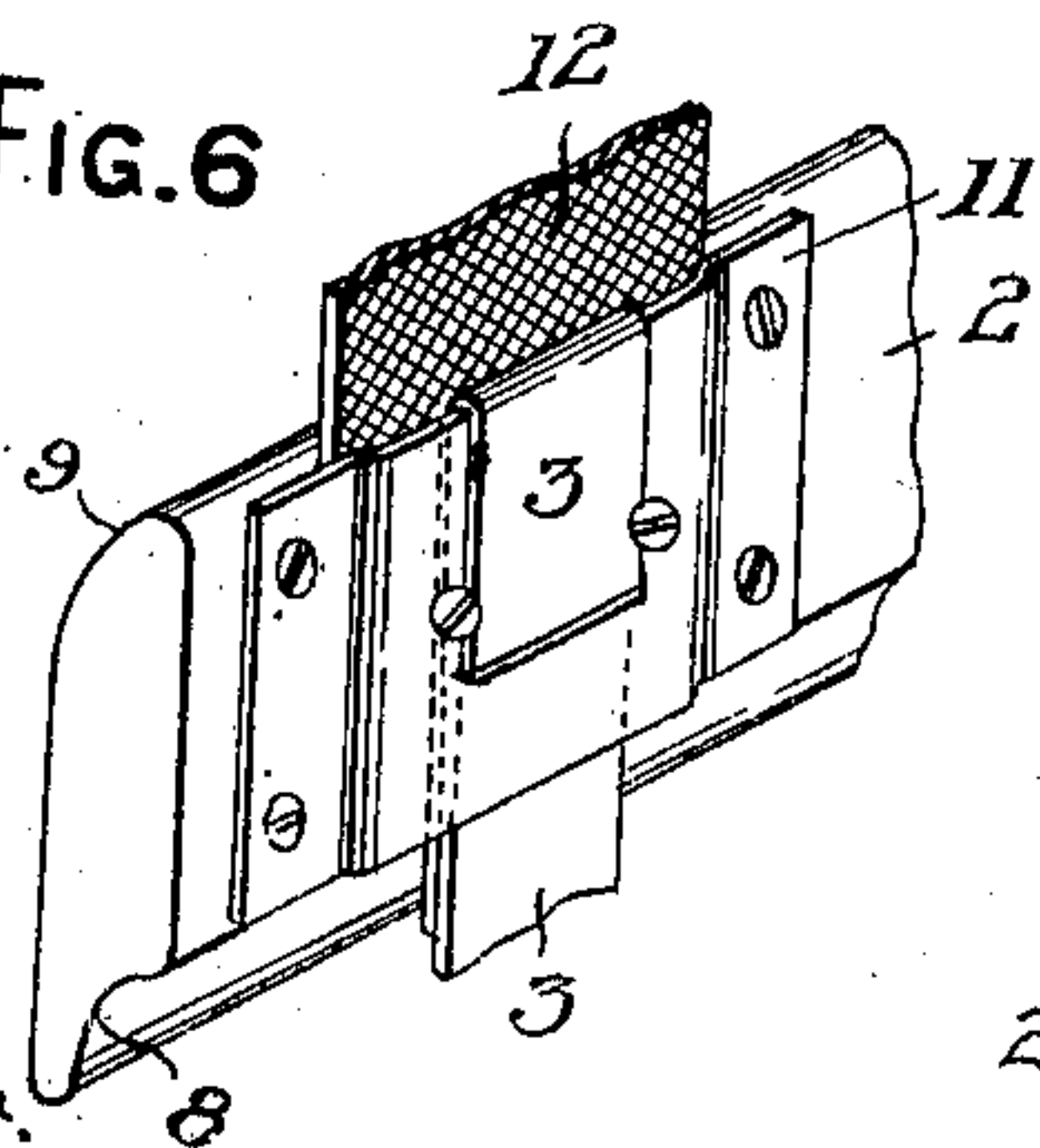
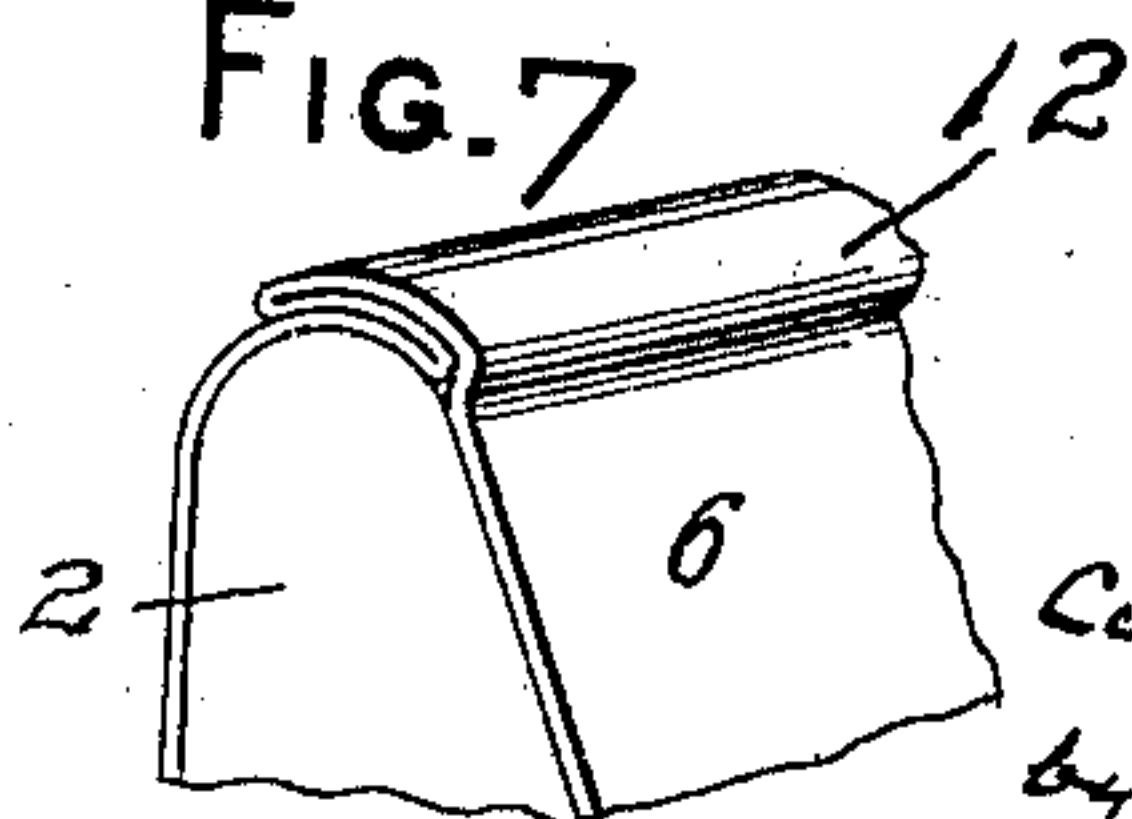


FIG. 7



WITNESSES

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