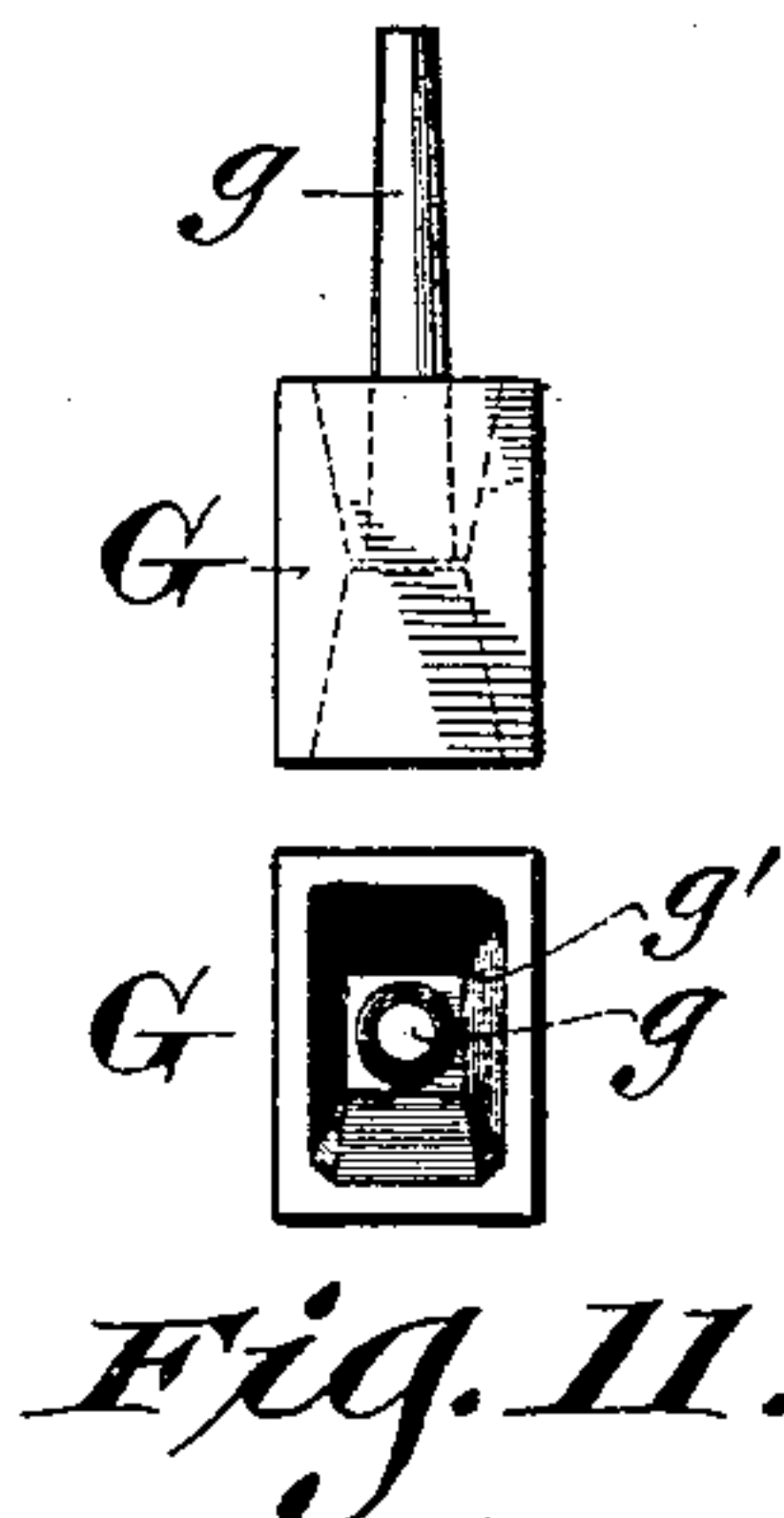
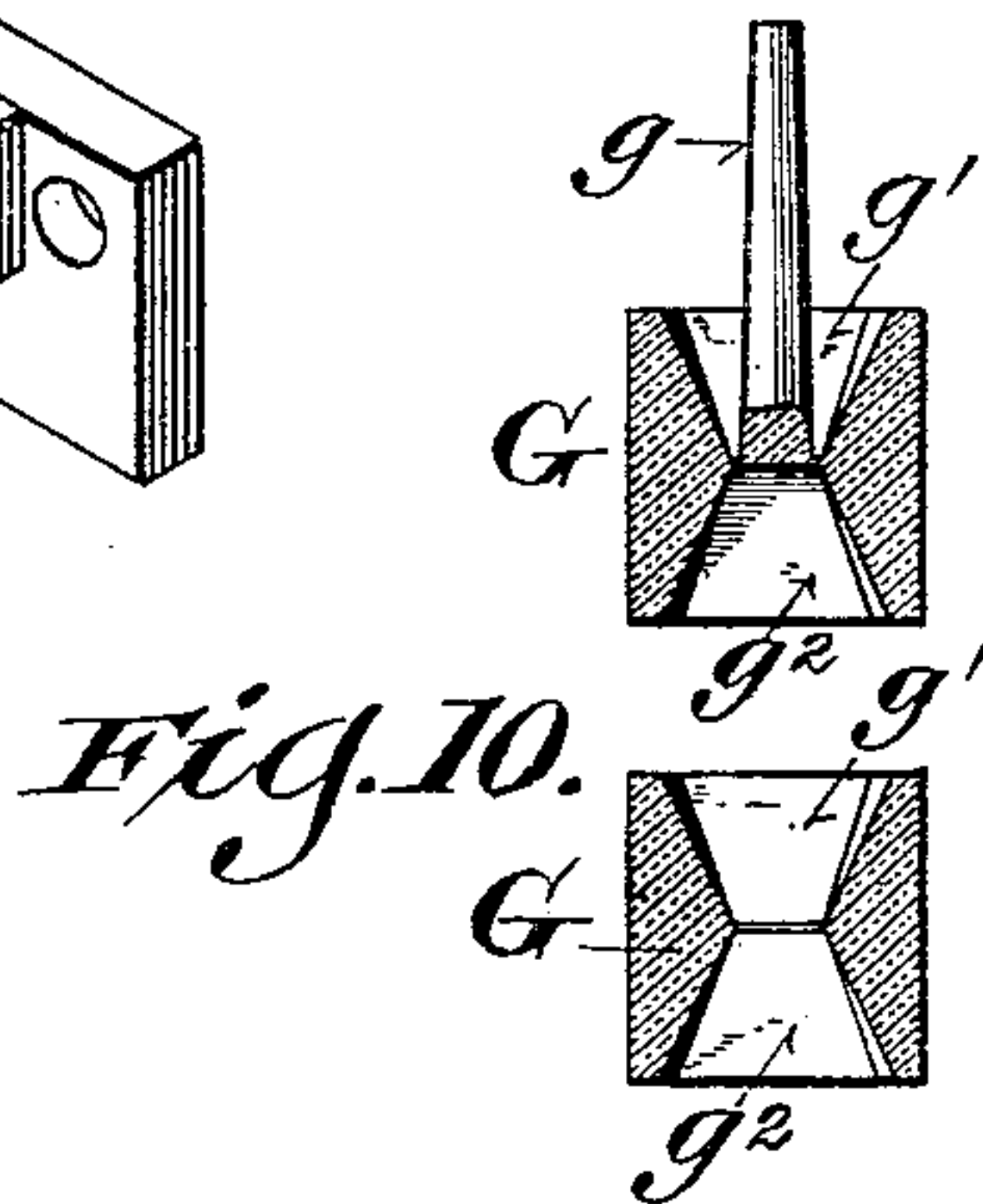
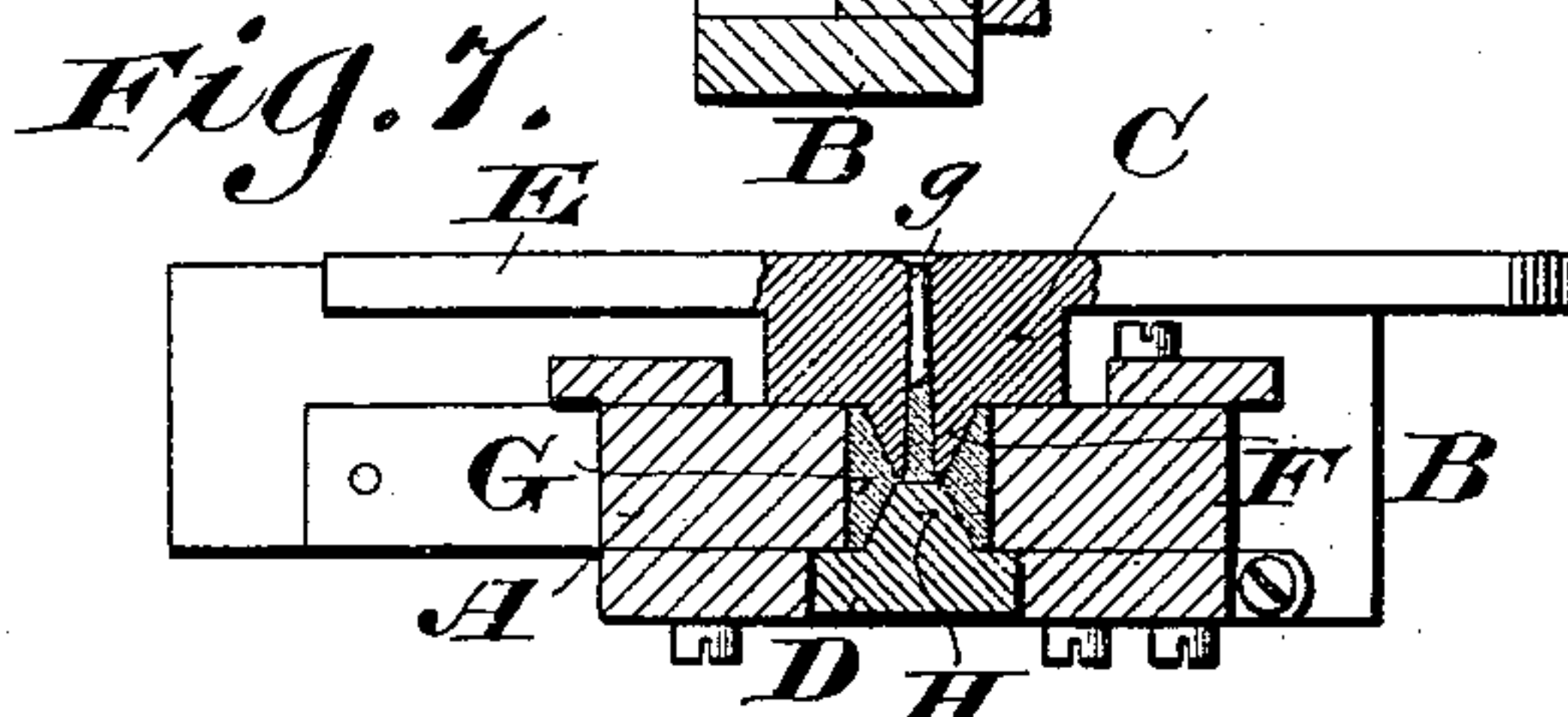
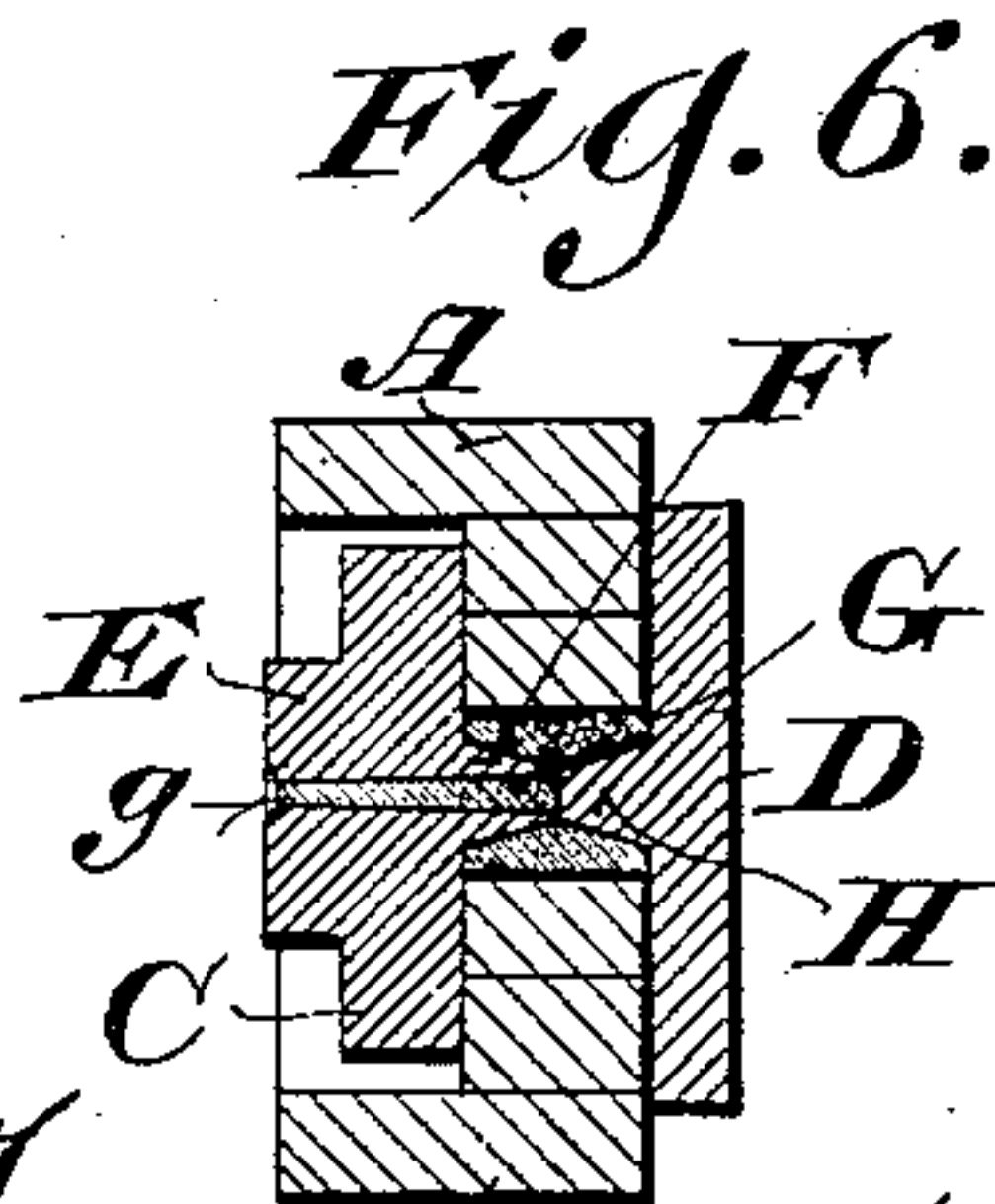
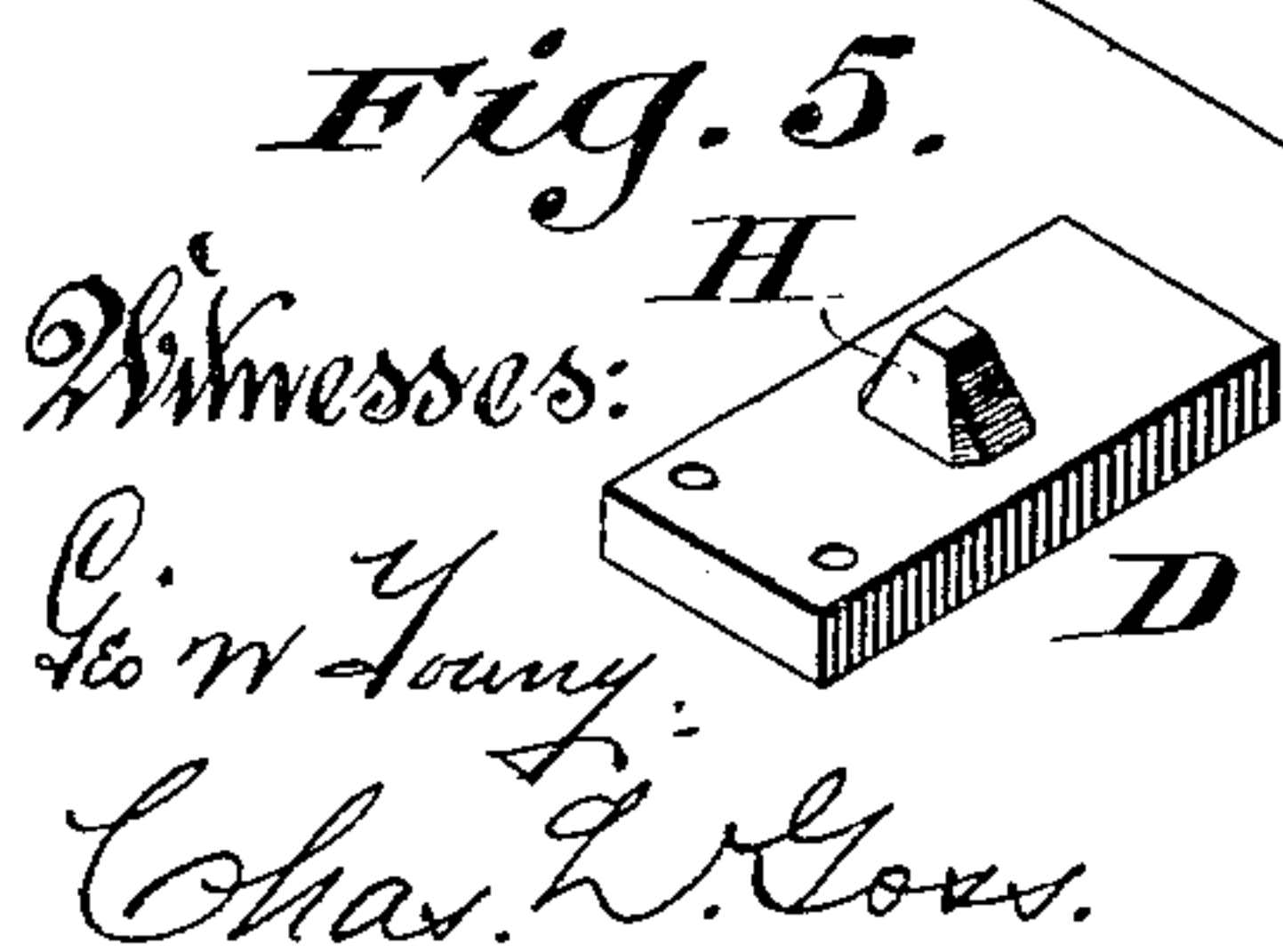
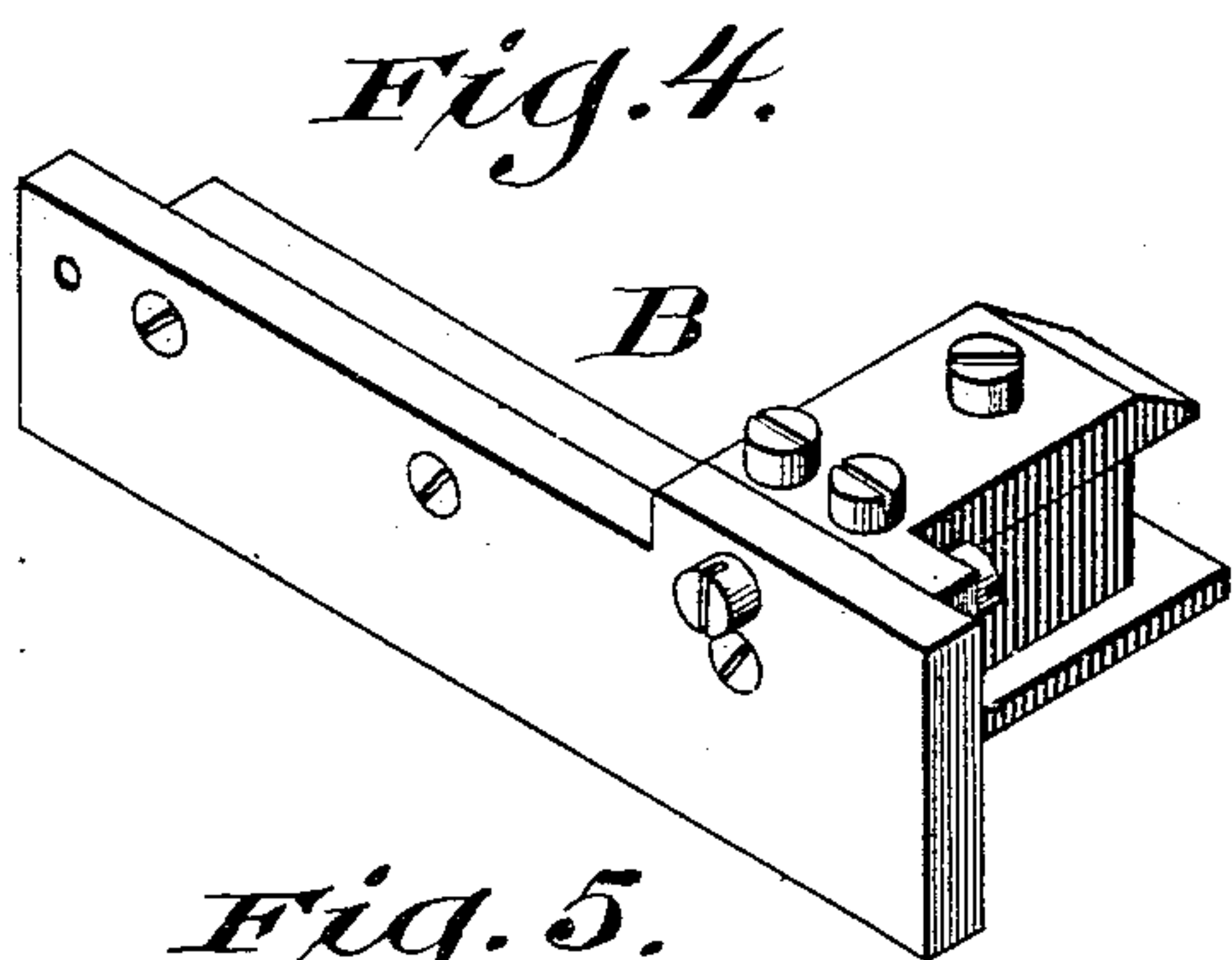
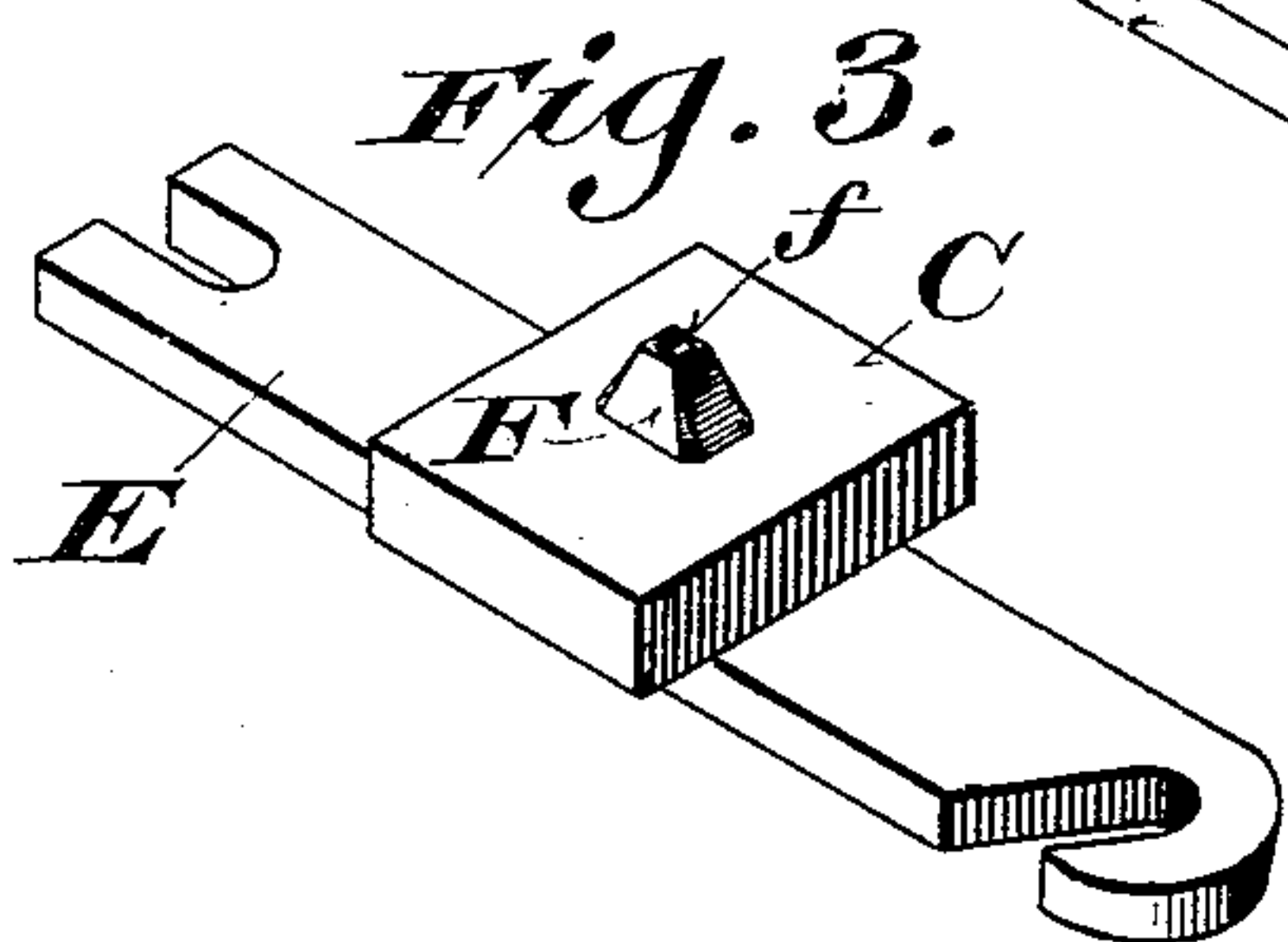
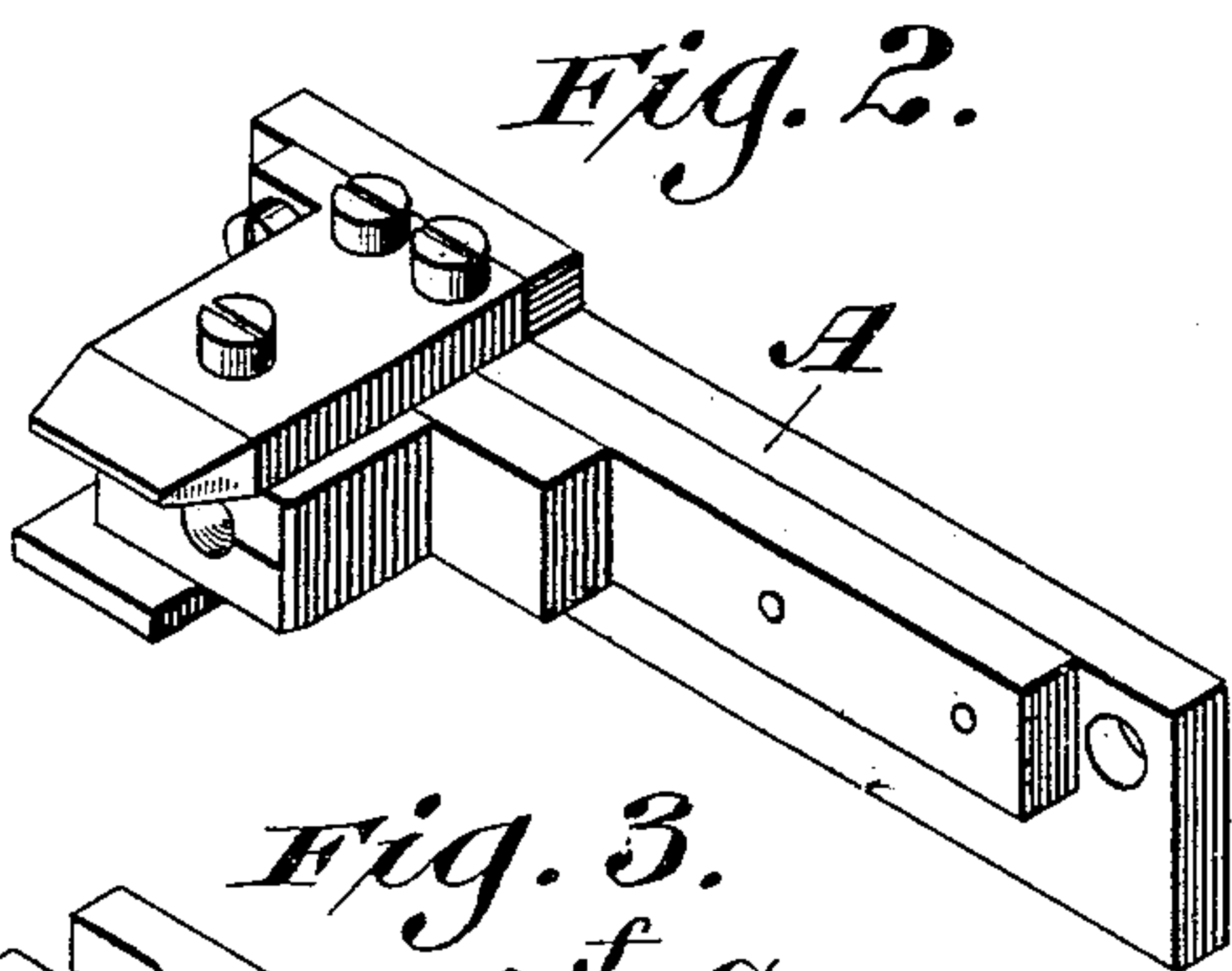
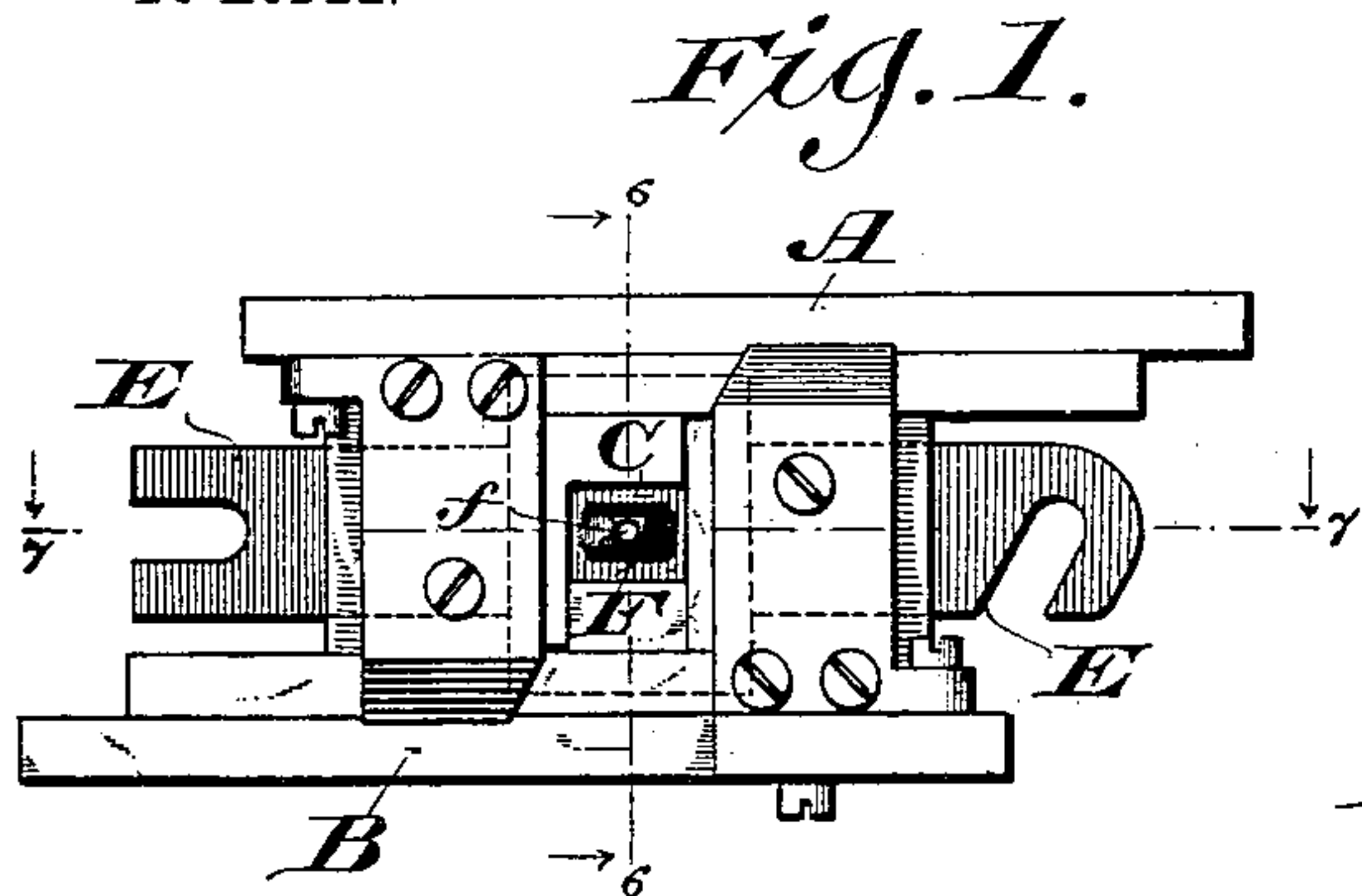


I. BAAS.
MOLD FOR CASTING PRINTERS' FURNITURE.
APPLICATION FILED JULY 5, 1898.

NO MODEL.



Inventor:
Isaac Baas

By Winkler Hauders Smith Attorneys.

UNITED STATES PATENT OFFICE.

ISAAC BAAS, OF NEWARK, NEW JERSEY, ASSIGNOR TO AMERICAN TYPE FOUNDERS COMPANY, A CORPORATION OF NEW JERSEY.

MOLD FOR CASTING PRINTERS' FURNITURE.

SPECIFICATION forming part of Letters Patent No. 733,531, dated July 14, 1903.

Application filed July 5, 1898. Serial No. 685,083. (No model.)

To all whom it may concern.

Be it known that I, ISAAC BAAS, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have
5 invented certain new and useful Improvements in Molds for Casting Printers' Furniture, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

10 The main objects of my invention are in the manufacture of printers' metal furniture to avoid hand or machine work, planing, or finishing for the purpose of removing the bur left by breaking off the jets and of forming
15 feet for the furniture to stand upon, to form drain-holes through the bodies of the furniture by simply breaking the jets therefrom, to better distribute the metal for resisting strain, and to reduce the cost of manufac-
20 ture.

It consists in certain novel features in the construction of molds for casting metal furniture, as hereinafter particularly described, and pointed out in the claim.

25 In the accompanying drawings like letters designate the same parts in the several figures.

Figures 1 to 7, inclusive, illustrate a mold embodying my invention, Fig. 1 being a front
30 elevation of the mold with all the parts except the front plate assembled in position for casting a piece of furniture, Figs. 2, 3, 4, and 5 being perspective views of the upper mold-section, the nipple-plate, the lower mold-section, and the front plate, respectively, Fig.
35 6 being a vertical cross-section on the line 6 6, and Fig. 7 a horizontal longitudinal section on the line 7 7, Fig. 1; and Figs. 8 to 11, inclusive, show a piece of metal furniture such as said mold is designed to cast, Fig. 8 being
40 a vertical runningwise section and Fig. 9 a bodywise elevation including the jet, Fig. 10 a runningwise section without the jet, and Fig. 11 a plan view with the jet.

45 Referring to Figs. 1 to 7, inclusive, A designates the upper part or section, and B the lower part or section, of the mold. These two parts are or may be like or similar to those of molds in common use for casting
50 metal furniture and type. They are brought together in the usual way, as shown in Figs.

1, 6, and 7, and form a cavity of the exact runningwise and bodywise dimensions of the furniture to be cast. The upper mold-section is shown by itself in Fig. 2 and the lower
55 mold-section in Fig. 4. The cavity thus formed by the upper and lower mold-sections is closed when the parts of the mold are assembled, as seen in Figs. 6 and 7, by the nipple-plate C on the back side next to the
60 melting-pot and by the plate D on the front side of the mold. The nipple-plate C, with the bar E, by which it is supported on a type-casting machine, is shown by itself in perspective in Fig. 3, the plate D being shown
65 in like manner in Fig. 5. The nipple-plate C is formed or provided on its front face, as shown in Fig. 3, with a pyramidal or tapering boss or projection F, which when the parts of the mold are assembled extends
70 about midway into the cavity formed by the upper and lower mold-sections A and B. A gate hole or passage *f* for filling the mold with type-metal from the melting-pot of the casting-machine is formed through the bar
75 E, nipple-plate C, and boss F, opening at its front or outer end into the mold at or in the apex of said boss. By this means the jet *g* of metal furniture G is made to join the body in the cavity *g'*, which is formed by the boss
80 F, as shown in Figs. 6, 7, and 8.

For casting furniture like or similar to that shown in Figs. 8 to 11, inclusive, the plate D is formed or provided with a pyramidal or tapering boss or projection H, as shown in
85 Fig. 5, like or similar to the boss F on the nipple-plate, and this boss H projects about midway into the mold-cavity when the parts of the mold are brought together, as shown in Figs. 6 and 7, so as to form a cavity *g''* in
90 the end of the furniture opposite that formed by the boss F, as shown in Figs. 8 and 10. A space is left between the inner ends of the bosses F and H when the parts of the mold are assembled, so as to form at the base of the
95 jet *g* a thin partition, by which it is joined to the body of the furniture, as seen in Figs. 6, 7, and 8, and which is broken or driven out with the jet *g*, thus forming a drain-opening between the cavities *g'* and *g''*.
100

Heretofore in casting metal furniture the jet has generally, if not always, been joined

to the bottom of the body and has extended completely across it in a runningwise direction. When such a jet is broken off, it leaves a bur or rough projection on the bottom of the body, and this has to be planed out, so as to produce feet for the body to stand squarely upon and a drain hole or opening into the cavity formed by a boss on the front plate. In order to produce this drain hole or opening without planing an unnecessarily deep groove in the bottom of the body, the boss for forming the cavity is made relatively much longer than the boss H which I employ in my mold, so as to leave a comparatively thin wall of metal between the bottom of the cavity and the lower end of the furniture-body.

In metal furniture it is necessary or desirable for greater strength to have the greater thickness or volume of metal about midway between the ends of the body so as to afford the greater support at that point. This is accomplished in my improved mold by making the tapering bosses on the front and nipple or back plates extend into the cavity of the mold to points nearly midway between its ends.

From the foregoing it will be apparent that with my improved mold and method of casting, the metal is distributed to better advantage, and the time, labor, and expense required

to remove the rough bur left by the jets and to form feet on furniture cast in the ordinary molds in the usual way, are saved, since by simply breaking off or driving out the jets drain holes or openings are incidentally formed through the bodies.

I claim—

A mold for casting metal furniture consisting of the combination with side mold-sections of a back plate having a tapering boss with a gate-hole passing through it for forming a cavity in the end of the furniture-body to which the jet is attached, and a front plate having a similar tapering boss for forming a cavity in the other end of the furniture-body, said bosses projecting toward each other into the cavity of the mold when the parts are assembled in position for casting, and a thin space being left between the opposing ends of said bosses for the passage of the molten metal from the gate-hole into the mold for forming a fragile partition connecting the jet with the interior walls of the furniture-body between the cavities therein, substantially as described.

In witness whereof I hereto affix my signature in presence of two witnesses.

ISAAC BAAS.

Witnesses:

R. V. WALDO,

CHAS. S. CONNER.