

No. 719,672.

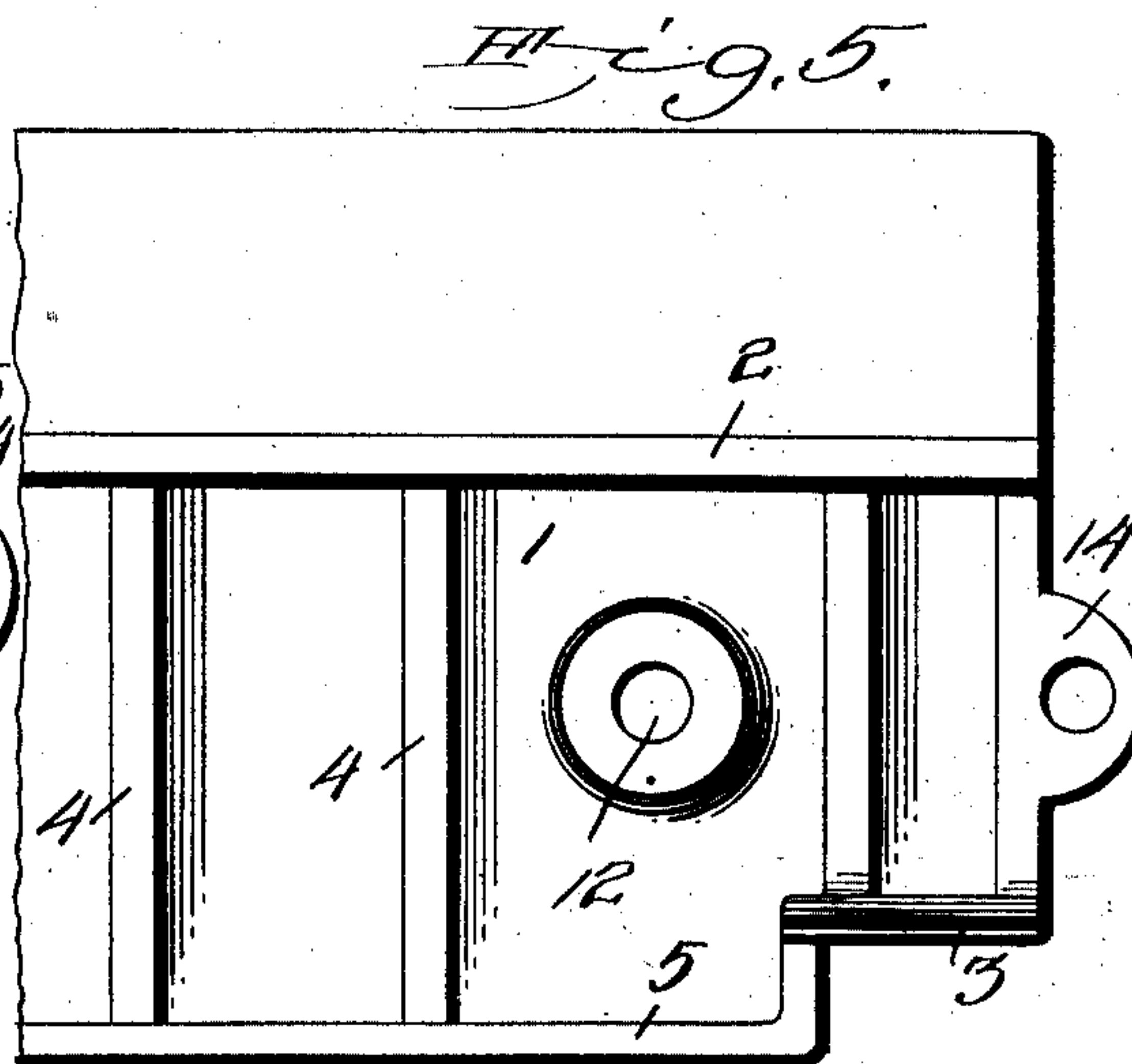
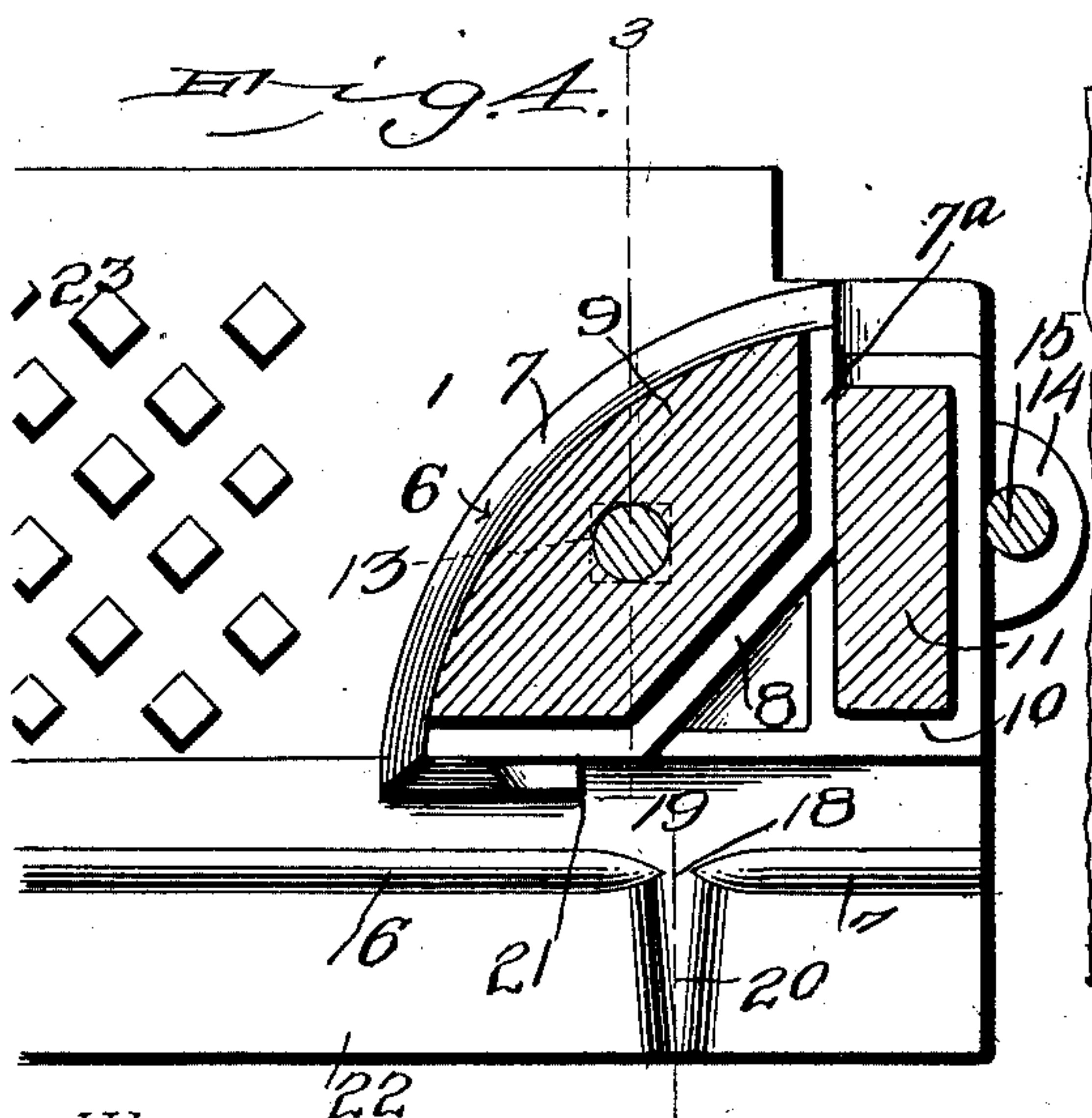
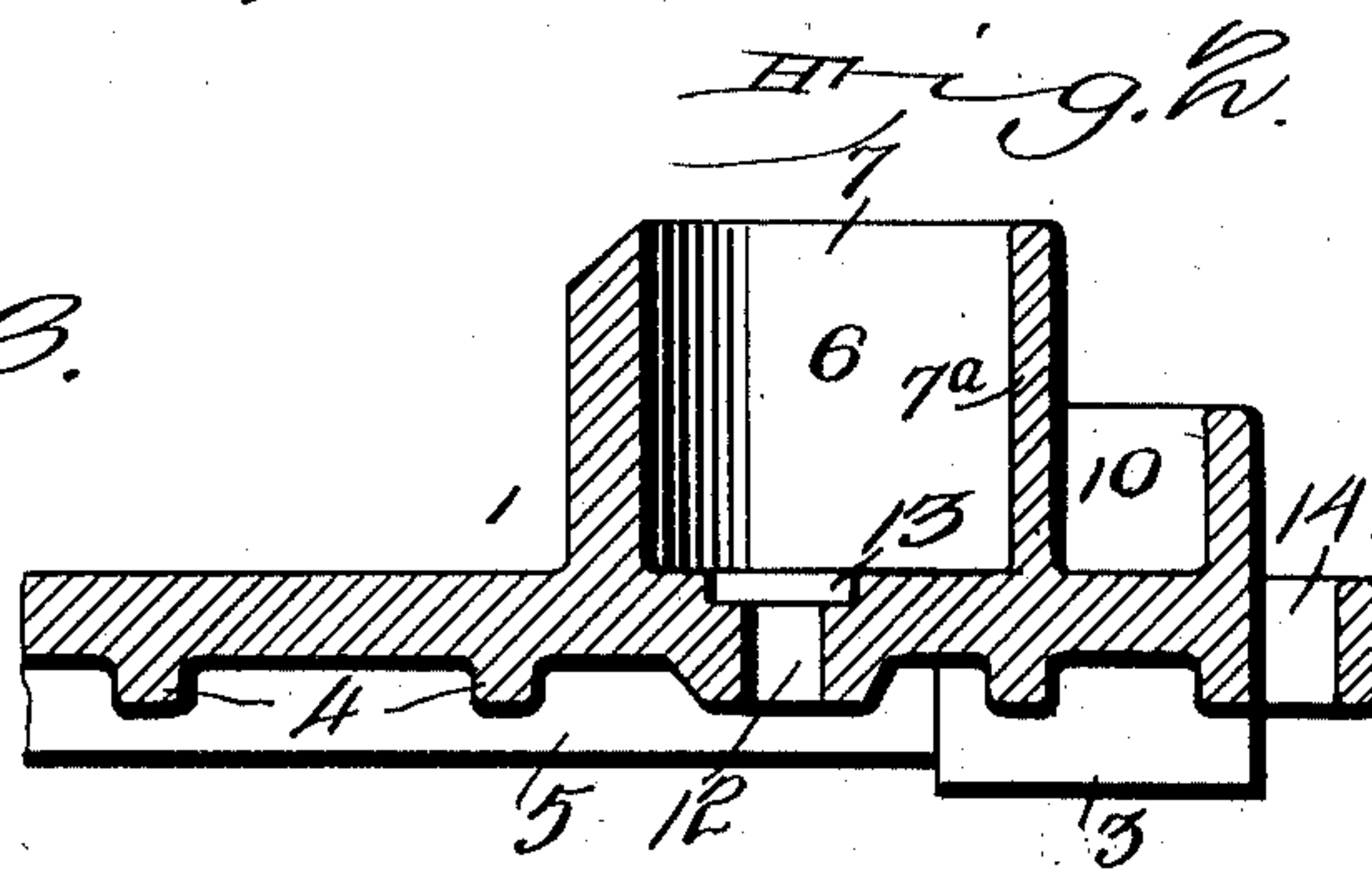
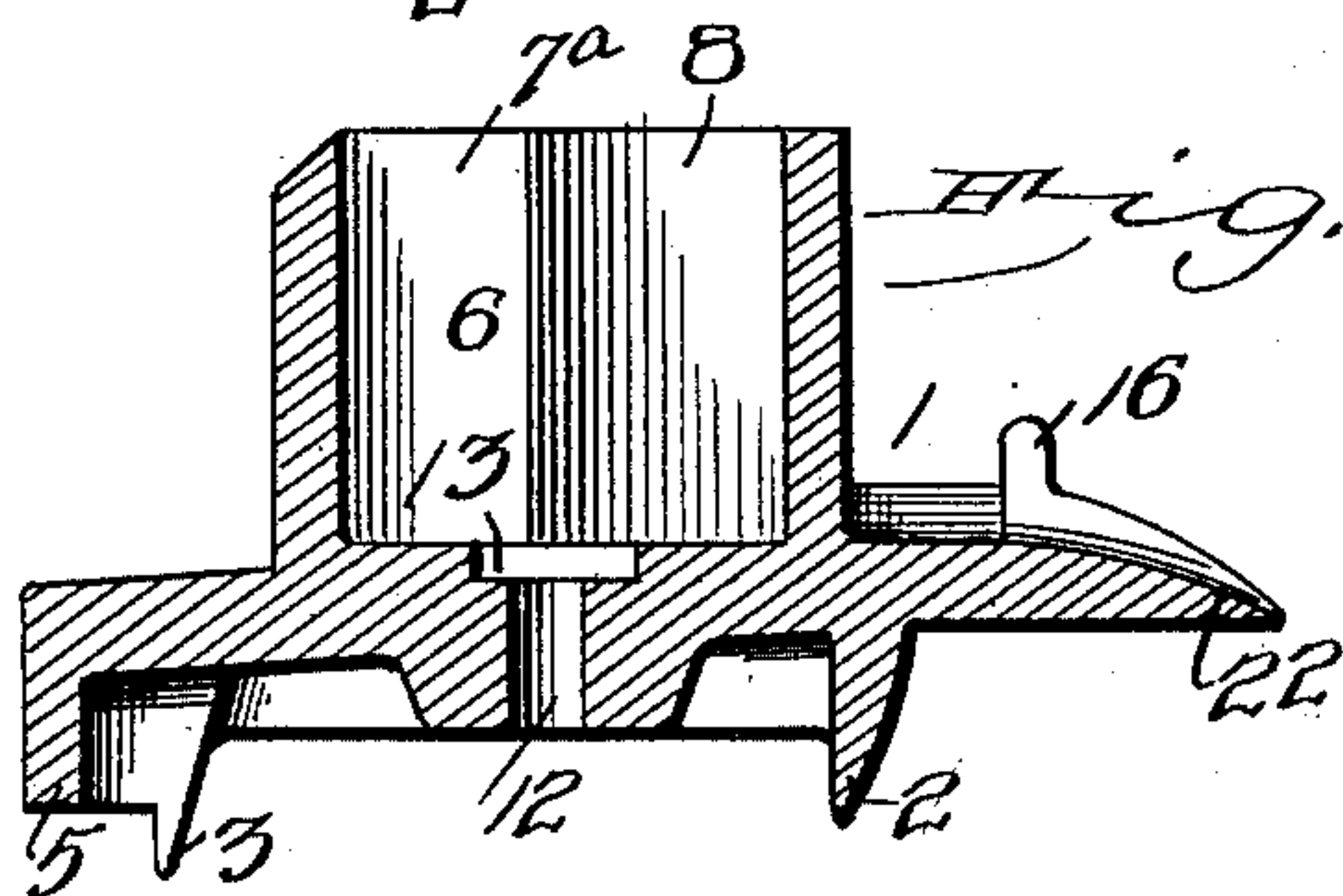
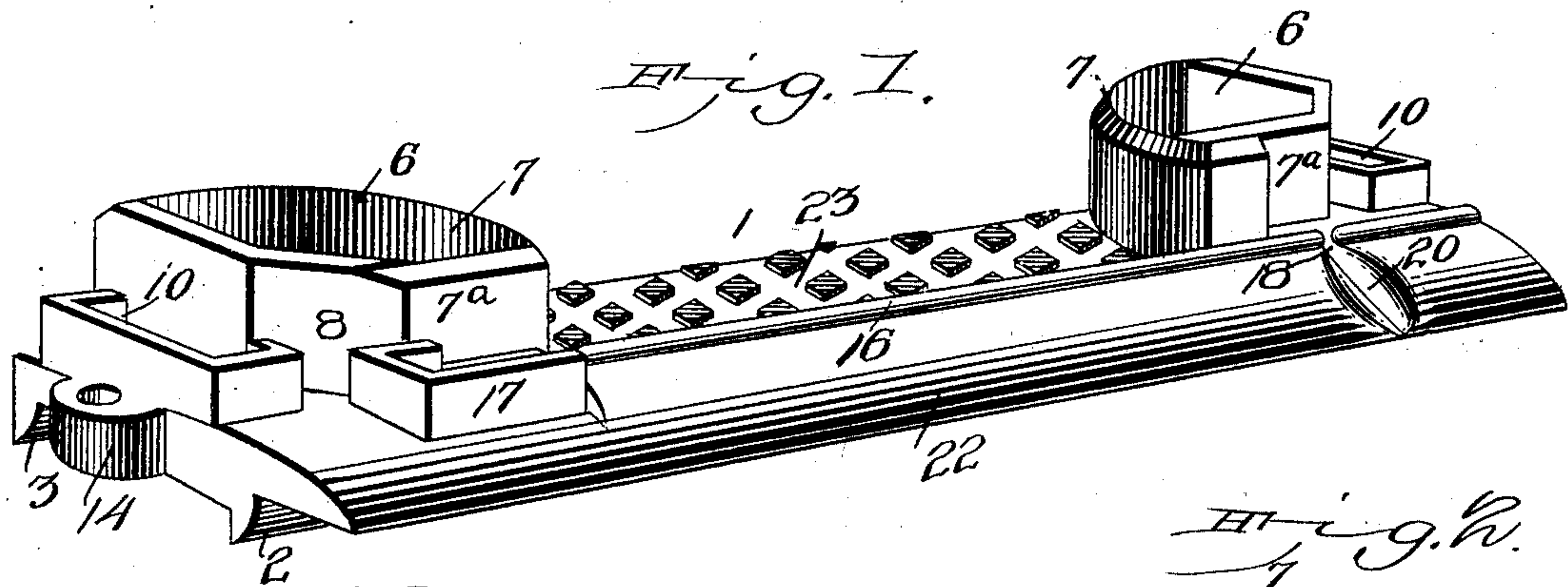
PATENTED FEB. 3, 1903.

W. O. & F. H. JEWELL.

DOOR SILL.

APPLICATION FILED AUG. 5, 1902.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM O. JEWELL AND FRANK H. JEWELL, OF MARION, INDIANA.

DOOR-SILL.

SPECIFICATION forming part of Letters Patent No. 719,672, dated February 3, 1903.

Application filed August 5, 1902. Serial No. 118,523. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM O. JEWELL and FRANK H. JEWELL, citizens of the United States, residing at Marion, in the county of Grant and State of Indiana, have invented a new and useful Door-Sill, of which the following is a specification.

The invention relates to improvements in door-sills for cars.

10 The object of the present invention is to provide for cars a simple, inexpensive, and efficient door sill or plate adapted to be used in connection with both swinging and sliding doors and capable of protecting the wooden
15 sills or framework beneath it and of effectually preventing water from percolating through it and rotting away the woodwork.

A further object of the invention is to provide a sill of this character which will be
20 adapted to be readily applied to cars without necessitating any material alteration in the construction thereof and which will increase the strength and durability of the framework around the door.

25 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

30 In the drawings, Figure 1 is a perspective view of a door-sill constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of one end of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a
35 plan view, partly in section, of one end of the door-sill. Fig. 5 is a reverse plan view of the same.

Like numerals of reference designate corresponding parts in all the figures of the drawings.
40

1 designates a metallic door-sill designed to consist of a single piece of metal or casting and forming a cap or cover for the wooden car-sill and adapted to exclude water there-
45 from to prevent the wooden sill or framework beneath it from rotting, whereby the durability of the wooden sill will be greatly increased. The door-sill is provided at its lower face adjacent to its inner edge with a
50 continuous longitudinal flange 2, adapted to fit against the inner longitudinal face of the wooden car-sill, which is arranged between

the said longitudinal flange and a pair of short beveled flanges 3. The wooden car-sill supports the door-sill, and the latter is provided at its lower face with a series of taper- 55
ing transverse flanges 4, forming horizontal lower faces or edges to fit the upper face of the wooden sill, the body portion of the door-sill being arranged at a slight inclination. 60
The front or outer portion of the door-sill is extended between the short beveled flanges 3 and is provided with a long longitudinal or marginal flange 5, having a horizontal lower edge and spaced from the front or outer edge 65
of the wooden car-sill to provide a longitudinal recess to receive a metal plate (not shown) and to cover the adjacent parts. The end portions of the door-sill are provided with approximately sector-shaped pockets or sockets 70
6, adapted to receive the corner-posts of a door-frame of the ordinary construction and having curved walls 7 to conform to the configuration of the outer faces of the said corner-
75 posts. The rear walls of the approximately sector-shaped sockets have converging portions 7^a and a connecting portion 8. The converging portions 7^a are disposed longitudinally and transversely of the door-sill, as clearly shown in Fig. 4, and the connecting 80
portion 8 is disposed diagonally of the same. The pockets or sockets 6 are set at an angle, and the corner-posts 9, which are shown in section in Fig. 4 of the drawings, are arranged
85 adjacent to the ends of the door-sill and are firmly supported by the same. The door-sill is also provided at each end with an oblong socket or pocket 10, arranged adjacent to one of the walls 7^a and adapted to receive a post 11. These oblong pockets or sockets 10 have 90
a portion of one of their walls formed by the adjacent wall 7^a of the pocket or socket 6, and the walls of the pockets or sockets 10 are approximately one-half the height of the walls of the pockets or sockets 6. The upper edges 95
of the curved walls are beveled to present a finished appearance, and the extreme upper edge is arranged horizontally, the walls of the sockets or pockets 6 being slightly tapered to conform to the bevel or inclination of the sill. 100
The door-sill is provided at the bottom of the pocket 6 with bolt-openings 12, and it has rectangular recesses 13 at the upper ends of the bolt-opening to receive squared heads of bolts,

whereby the latter are interlocked with the sill. The ends of the door-sill are also provided with perforated ears 14, adapted to receive tie-rods 15 for connecting the sill with the upper portion of the door-frame.

The door-sill is adapted to be used in connection with either sliding or swinging doors, and it may be provided with a longitudinal rib or flange 16, located adjacent to its inner edge and forming a track for a sliding door. At one end of the rib or rail 16 is arranged a partial pocket 17, adapted to receive a door-stop and composed of side walls and a connecting end wall. The rib or rail is provided near the other end of the door-sill with a recess or opening 18, and the door-sill is provided adjacent to the opening or recess 18 with grooves or gutters 19 and 20 for the escape of water. The groove or gutter 19 extends longitudinally of the door-plate, and the other groove or gutter 20 is disposed transversely of the same. The pocket adjacent to the longitudinal groove or gutter is provided with a projecting flange 21, extending outward and adapted to form a support for the car-lining, and the partial pocket 17 extends outward beyond the rear wall of the other pocket 6 to support the lining of the car.

The door-sill is rounded at its inner portion at 22, and its outer portion is provided between the pockets 6 with a roughened upper face 23 to prevent the feet from slipping.

It will be seen that the door-sill is simple and comparatively inexpensive in construction, that it possesses great strength and durability, and that it is adapted to effectually prevent water from passing through it to the wooden car-sill and rotting the same. It will also be apparent that it is adapted to support the adjacent parts of a door-frame and that it will increase the strength and durability of the same. Furthermore, it will be understood that the door-sill is adapted to be applied to the doors of coaches, mail-cars, baggage-cars, and various other structures where sliding or swinging doors are used.

What is claimed is—

1. A metallic door-sill for cars forming a cap for a wooden sill and provided at its lower face with an inner continuous longitudinal flange and having short outer beveled flanges located at the ends of the door-sill, said door-sill being extended at the front or outer side between the beveled flanges and provided with a depending flange offset from the beveled flanges to form a recess, substantially as described.

2. A metallic door-sill for cars forming a cap for a wooden sill and provided at its lower face with inner and outer longitudinal flanges

adapted to receive the wooden sill between them, said metallic door-sill being extended at the front and back beyond the flanges, substantially as described.

3. A metallic door-sill for cars forming a cap for a wooden sill and provided with a continuous inner longitudinal flange and having short outer longitudinal flanges and extended between the same to form a projecting front portion, said sill being also provided at its lower face with transverse ribs or flanges adapted to rest upon the upper face of the wooden sill, substantially as described.

4. A metallic door-sill for cars forming a cap for a wooden sill and provided at its ends with upwardly-extending pockets arranged to receive and support the corner-posts, substantially as described.

5. A metallic sill for cars forming a cap for a wooden sill and provided at its upper face with opposite pockets provided with walls formed integral with the door-sill, the front walls being curved to conform to the configuration of a corner-post, and the inner or rear walls being converged, substantially as described.

6. A metallic sill for cars forming a cap for a wooden sill and provided at its ends with inner angularly-disposed upwardly-extending pockets and having shorter transverse pockets arranged beyond the angularly-disposed pockets, substantially as described.

7. A metallic door-sill for cars forming a cap for a wooden sill and provided with angularly-disposed pockets and having transverse pockets arranged beyond the same, said door-sill being also provided with a longitudinal rib or flange, adapted to receive a sliding door, substantially as described.

8. A metallic door-sill for cars forming a cap for a wooden sill and provided at its ends with pockets, one of the pockets being provided with a projecting flange, a partial pocket projecting from the other pocket to form a flange or support, and a rib extending from the partial pocket, substantially as described.

9. A metallic door-sill provided at its ends with upwardly-extending pockets and having a longitudinal rib arranged adjacent to its inner portion and having an opening, and grooves or gutters arranged adjacent to the opening of the rib, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

WILLIAM O. JEWELL.
FRANK H. JEWELL.

Witnesses:

JAMES A. SQUIRES,
STEPHEN G. BALDWIN.