J. W. SHARP, Jr.

LAVATORY.

APPLICATION FILED FEB. 17, 1910.

989,816.

Patented Apr. 18, 1911.

3 SHEETS—SHEET 1.

FIG 2

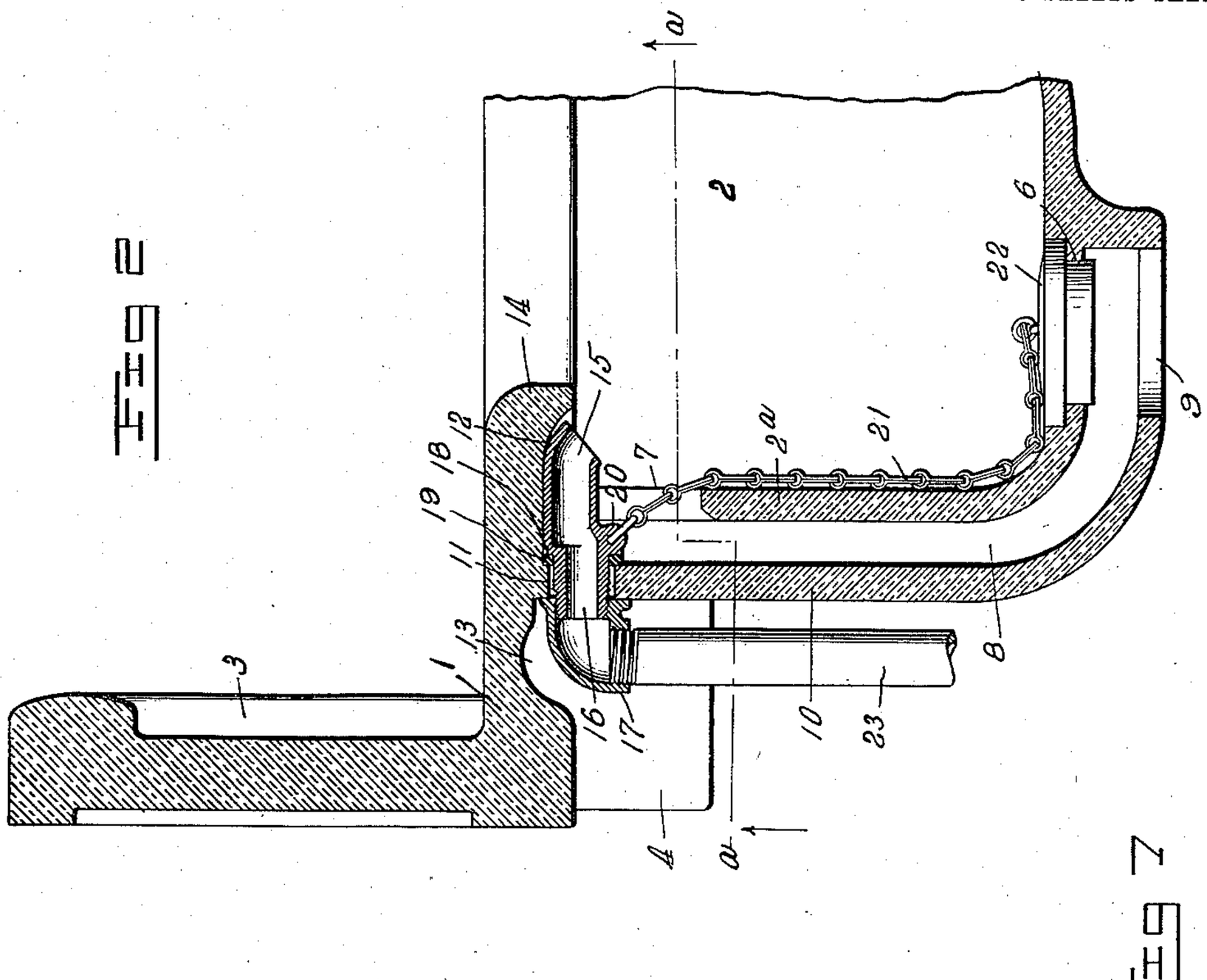


FIG 3

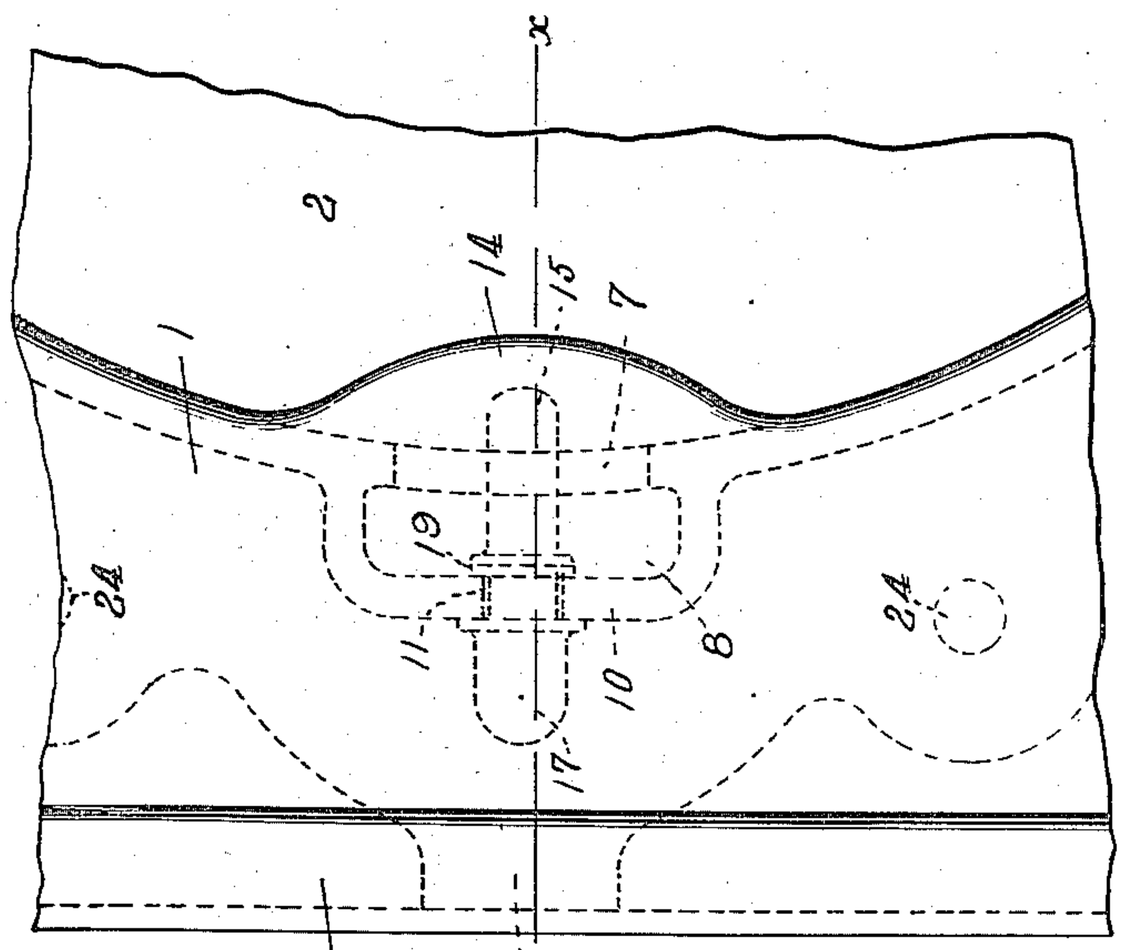


FIG 4

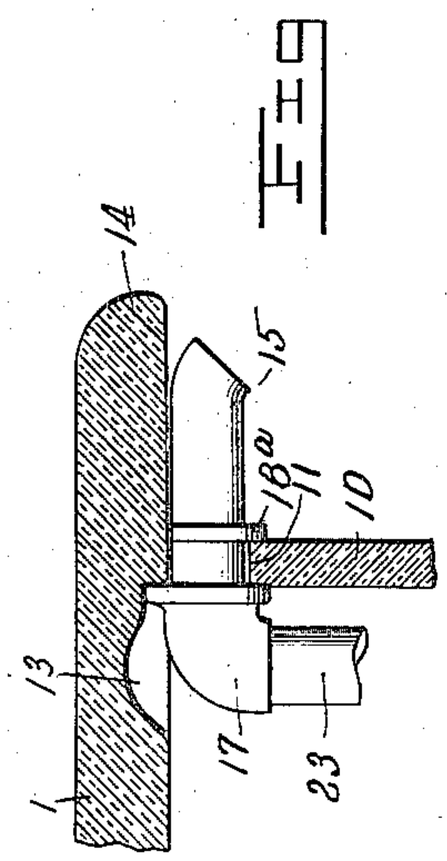
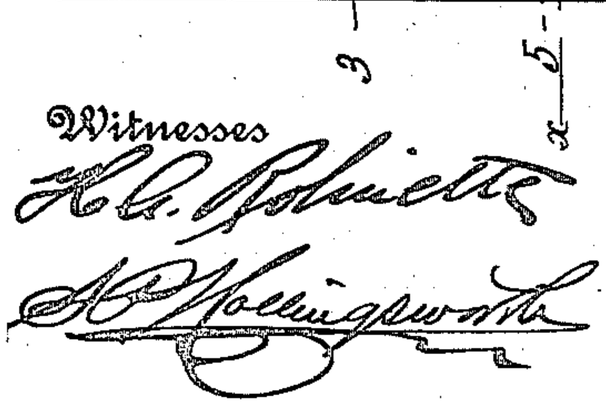


FIG 5



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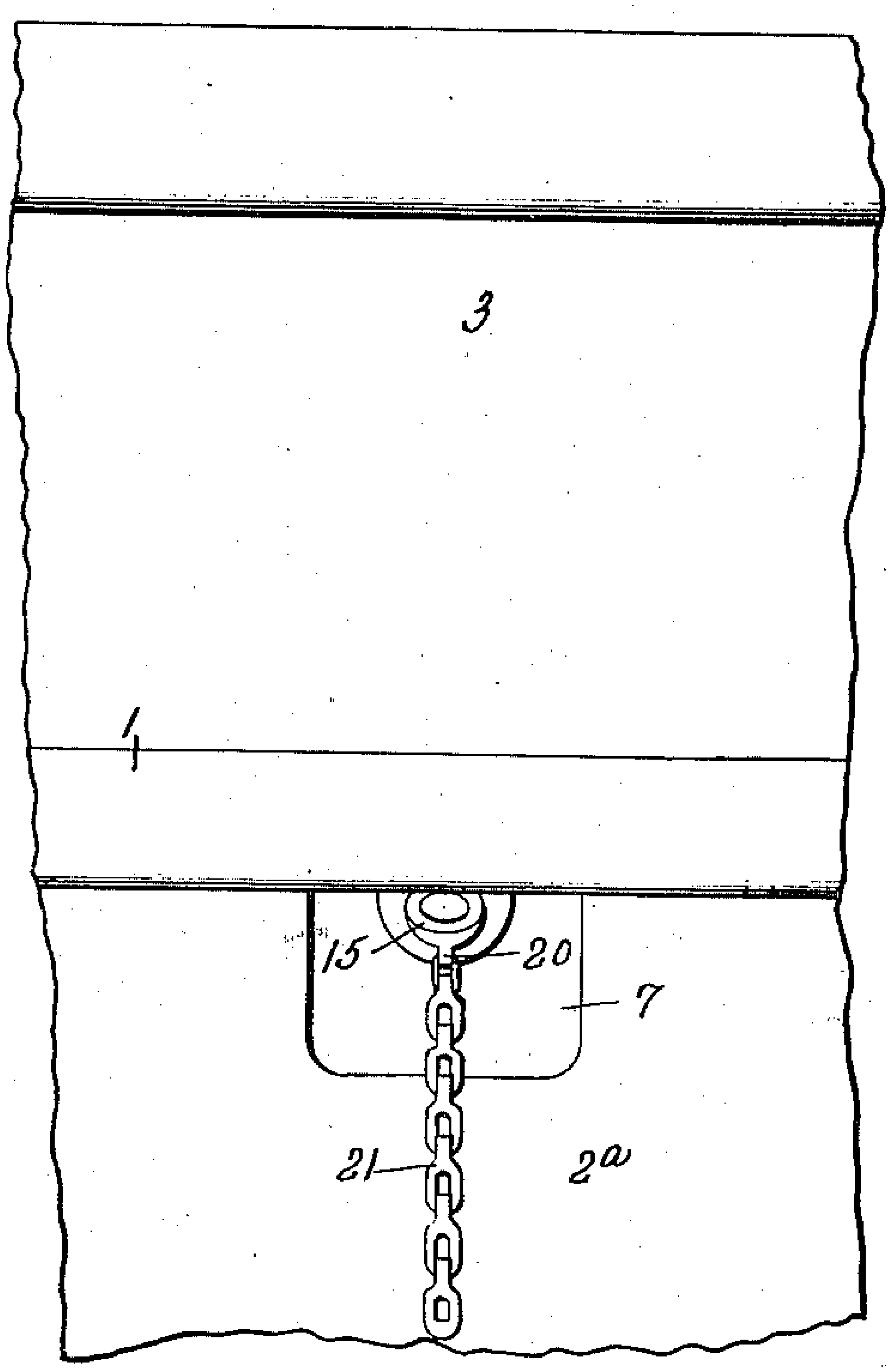
3 SHEETS—SHEET 2.

Fig 3.



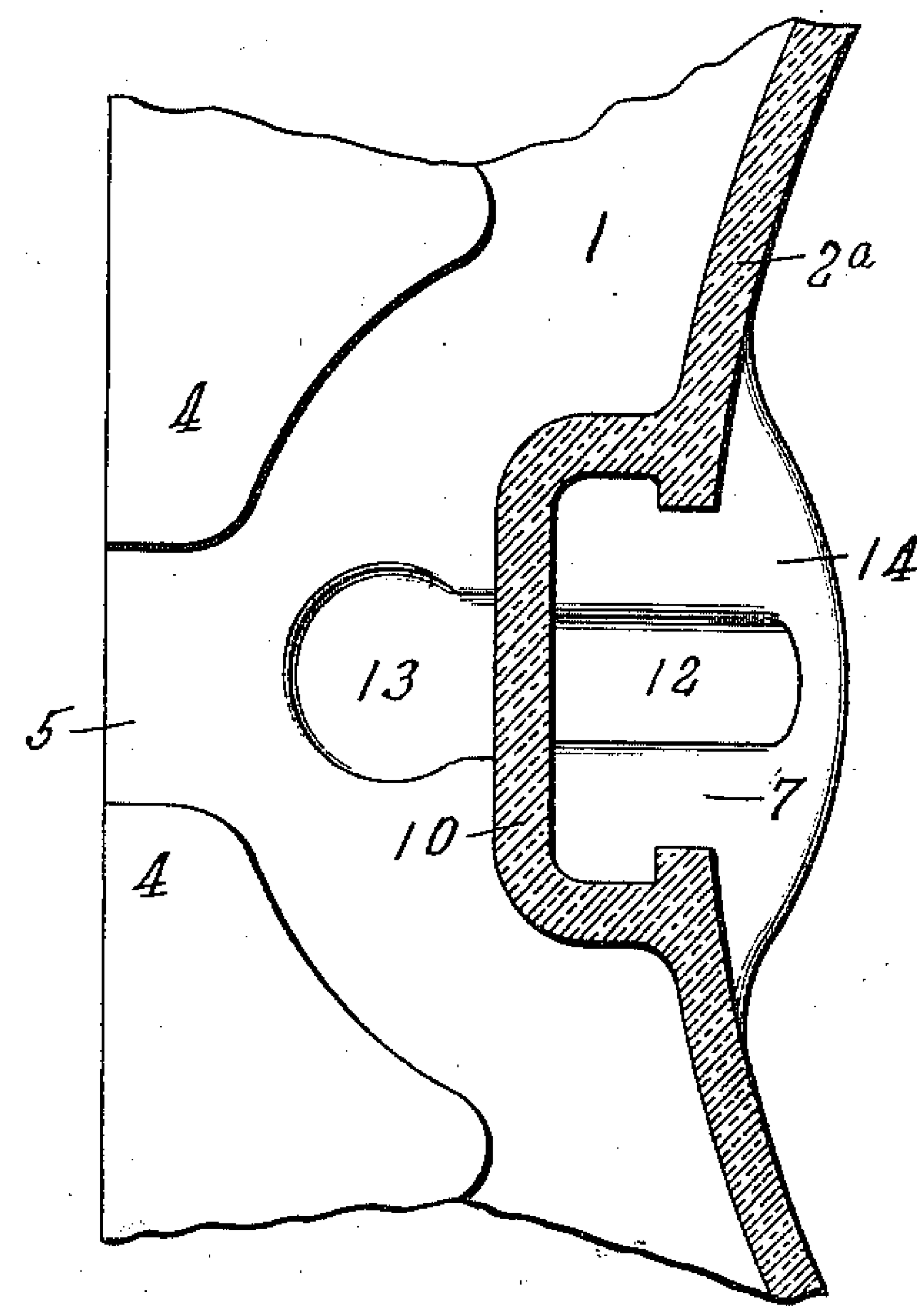


Fig 5

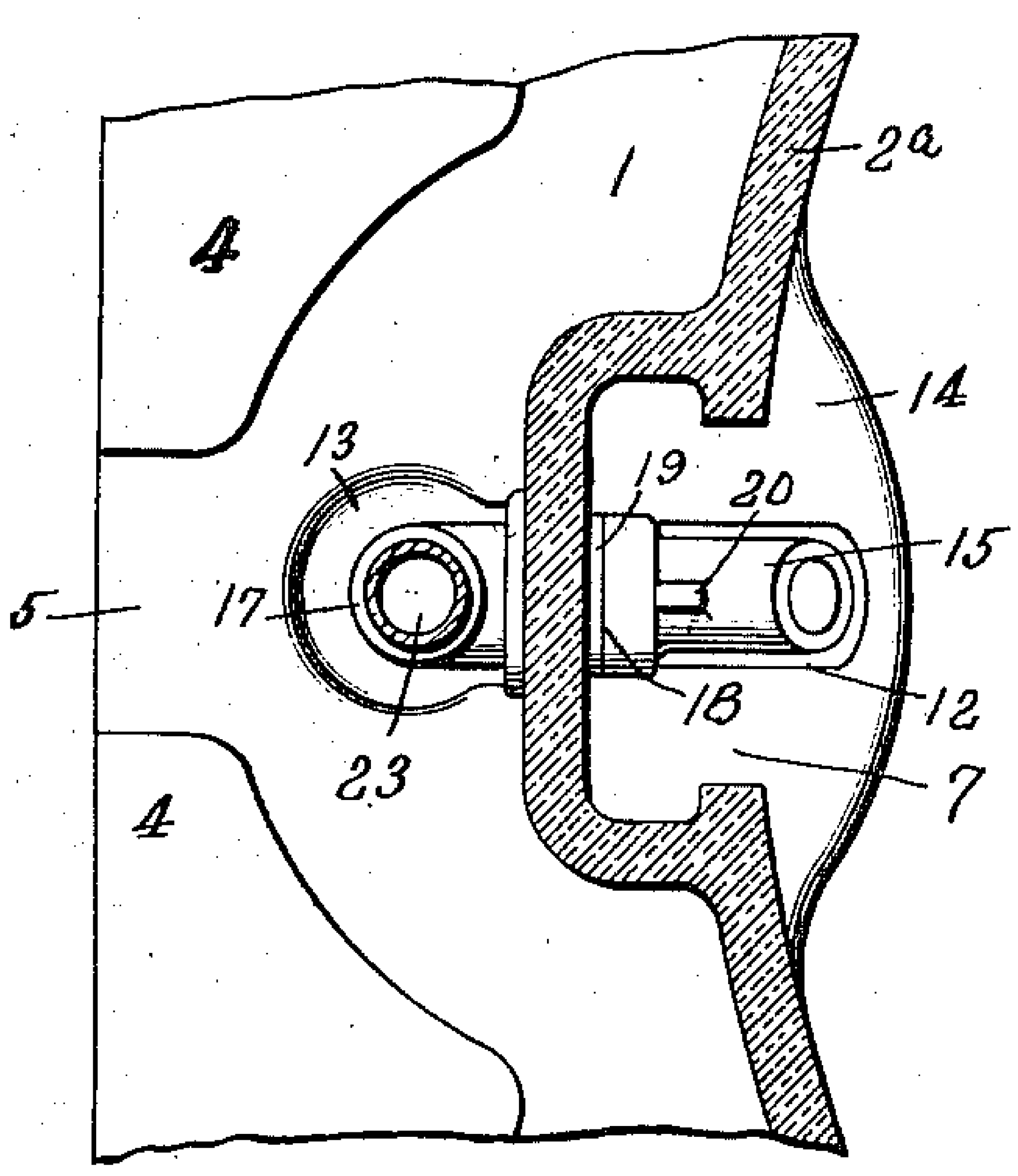
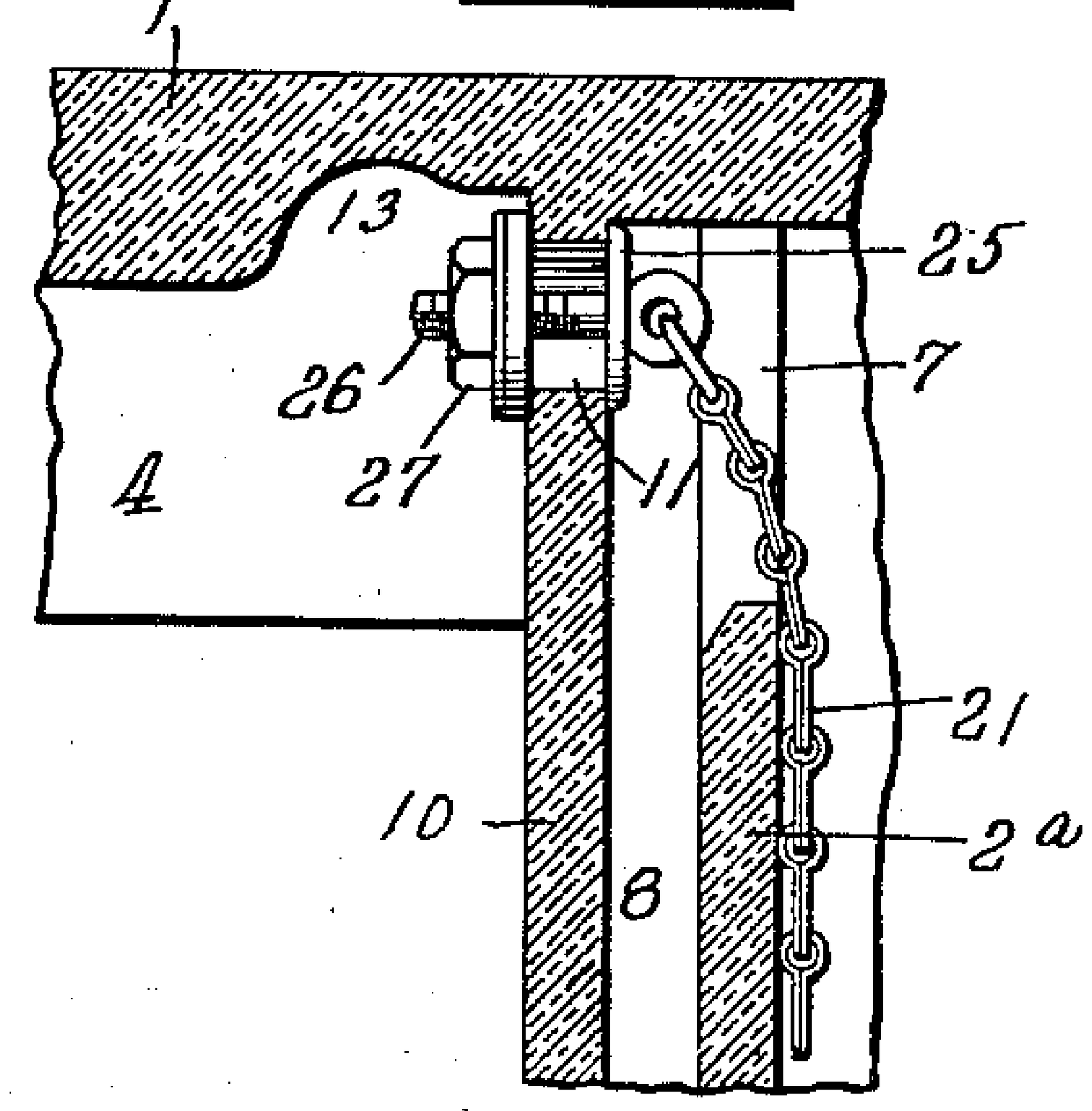


Fig 4

Fig 6



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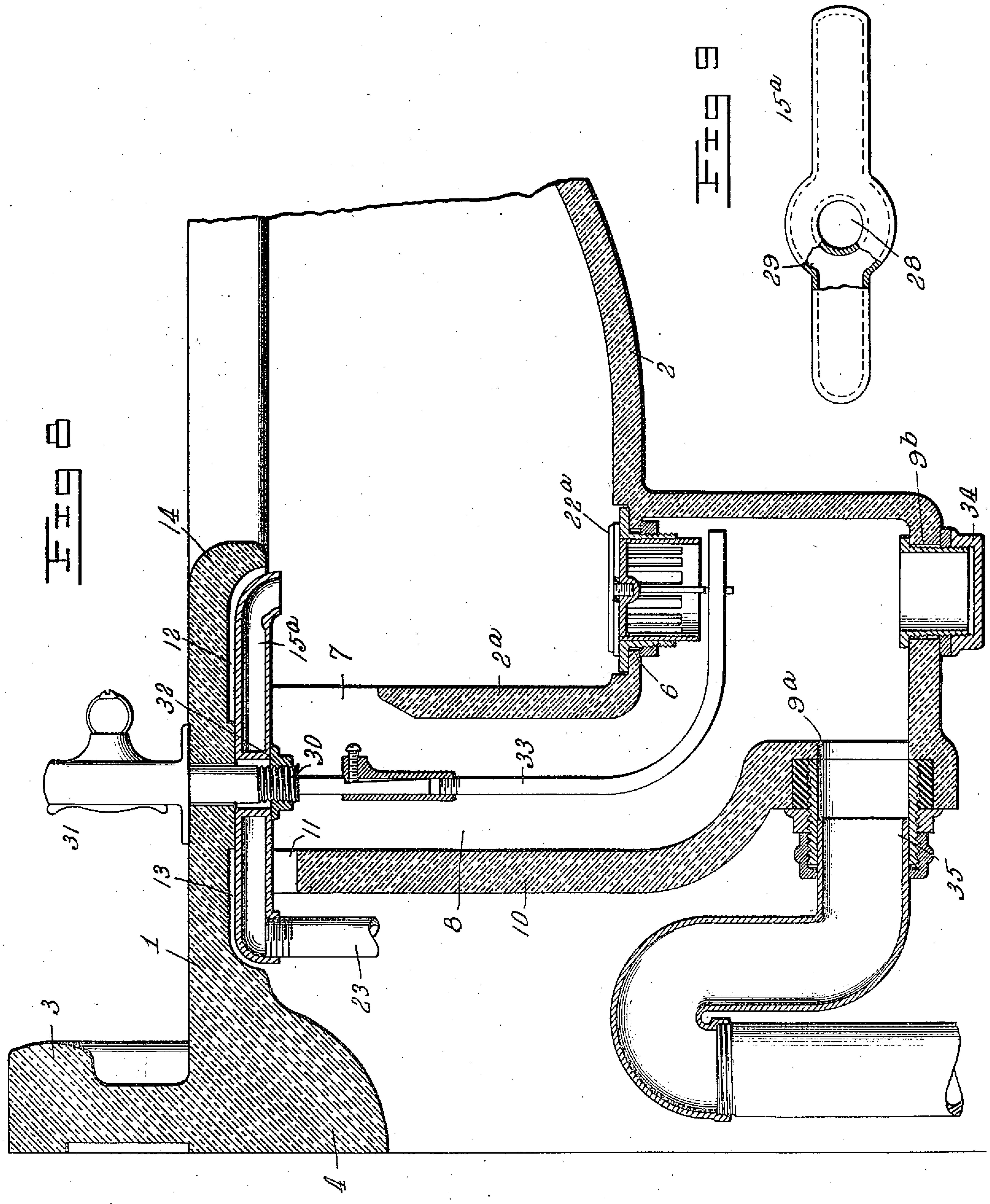
3 SHEETS—SHEET 3.

Fig. 9

Fig. 8



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UNITED STATES PATENT OFFICE.

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LAVATORY.

989,816. Specification of Letters Patent. Patented Apr. 18, 1911.

Application filed February 17, 1910. Serial No. 544,461.

To all whom it may concern:

Be it known that I, JOSEPH W. SHARP, Jr., a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Lavatories, of which the following is a specification.

This invention relates to lavatories or wash basins, and has for its object to provide a lavatory in which the basin, top and back are made of molded porcelain or earthenware or other material in one piece, including the walls of a suitable overflow channel at the rear of the basin and extending upwardly to the underside of the lavatory top. The lavatory has suitable overflow and waste openings leading to the overflow channel, and openings in the channel wall for the trap and clean-out connections. There is also an opening in the channel wall where it joins the top for the water inlet nozzle, while in the underside of the top are preferably formed suitable recesses to receive said nozzle and, under certain conditions, an ell coupling for the water pipe leading thereto. A lavatory thus designed presents a flat unobstructed top, disclosing no metal fittings thereon such as faucets and chain post, which several parts being polished are more or less troublesome to keep clean and bright, and as the top overlaps the basin at the rear, the nozzle and overflow are rendered invisible.

A further object of the invention is to provide a lavatory of integral formation and simple convenient design whereby the water inlet nozzle or nozzles can be easily and quickly secured in position below the top slab by means of the water pipe connection, or by the fitting which operates the waste plug.

With these and other objects in view, the invention consists of the novel construction, combination and arrangement of parts hereinafter described and claimed and illustrated in the accompanying drawings, in which:—

Figure 1 is a top plan view of a portion of a lavatory embodying the invention; Fig. 2, a vertical sectional view on the line *x*—*x* Fig. 1; Fig. 3, an elevation of the same looking toward the rear from within the basin; Fig. 4, a horizontal sectional view on the line *a*—*a* of Fig. 2 looking upward; Fig. 5, a similar view with the nozzle and inlet pipe removed; Fig. 6, a sectional view similar to Fig. 2 illustrating a modification; Fig. 7, a detail view in section of a further modification; Fig. 8, a sectional view similar to Fig. 2 showing a different arrangement of the parts and means for fastening the nozzle in place, and Fig. 9, a top view of the form of nozzle, partly broken away, represented in Fig. 8.

The same reference characters are used for like parts on all the figures.

In the drawings, 1 indicates the horizontal top of a lavatory, molded, or otherwise formed integral with a basin 2 and a back slab 3 perpendicular to the top 1. Depending from the outer edge of the top 1 at the front, back and sides is the usual skirt or apron 4 in one piece with the top, said skirt at the rear of the slab being notched at 5 for a purpose hereinafter described.

The basin 2 has, preferably, a straight vertical rear wall 2^a from the bottom of which basin the other walls of the basin curve upwardly to the top slab 1. The waste opening 6 in the bottom of the basin is placed near its rear wall 2^a, and the overflow opening 7 formed through said wall just below the top 1, which at this point projects or overhangs the rear wall of the basin as at 14. The waste and overflow open into a channel or passage-way 8 formed on the outside of the rear wall 2^a of the basin 2 and integral therewith and with the top 1, said channel or passage-way extending from the top 1 down the back of and below the basin as far forward as the waste opening 6, in line with which opening is an opening 9, Fig. 2, to receive the waste pipe connection leading to the trap.

Through the rear wall 10 of the overflow channel 8, immediately below the top slab 1,

is formed a hole 11, in line with which and with the center of the notch 5 in the apron 4 are two recesses 12 and 13 both in the underside of the top slab 1. The recess 12 extends from the wall 10 nearly to the edge of the projection 14 on the top 1 overhanging the basin for a short distance. The recess 13 lies on the rear side of the wall 10 and is made deeper than the recess 12 as shown. Instead of placing the nozzle in a recess it may rest against the under surface of the top 1, see Fig. 7, but the former construction is preferred.

Seated in the recess 12 is a nozzle 15 through which water flows into the basin 2. The nozzle 15 has a straight stem curved downwardly at its outlet end at a suitable angle to direct the flow of water into the basin, and has an offset rear end 16 extending through the hole 11 and finished with a thread to receive one end of an ell coupling 17. The juncture of the offset 16 with the body of the nozzle 15 forms a shoulder 18 between which and the wall 10 is placed a washer 19 the compression of which when the ell coupling 17 is screwed tight holds the nozzle rigidly in position and prevents water from the basin escaping therethrough. The projection 14 overlying the end of the nozzle effectually conceals said nozzle and the outlet opening from sight without in any way interfering with the flow of water or use of the basin. To permit the coupling 17 being screwed on the offset 16 with little trouble, the recess 13 is made deeper as described, and for the same purpose the rear apron 4 is notched at 5 and its inner face curved as shown. A lug 20 is cast on the underside of the nozzle just forward of the shoulder 18 for fastening one end of the chain 21 attached to the waste plug 22, said chain passing through the overflow 7 which is preferably without grating or cover of any kind.

Screwed into the ell coupling 17 is a pipe 23 through which water passes to the nozzle 15. Cocks for controlling the flow of water, both hot and cold, through said pipe may be placed in the wall above the back slab 3, at the sides of the lavatory, or below the floor with pedals above to be operated by the feet, such arrangements being well known and forming no part of this invention are not illustrated in the drawings.

If at any time it becomes necessary or desirable to use the ordinary hot and cold water cocks on the top of the slab 1, holes may be made through said slab at the dotted lines 24, Fig. 1, for their insertion. Under these conditions it will be advantageous to close the hole 11 through which the nozzle 10 projects. For this purpose, a plate 25, see Fig. 6, larger than the hole, is provided having a central stem 26 on one face which extends through and beyond said hole and there fitted with a nut 27 and suitable washers for clamping the plate tightly over the hole. The face of the plate 25 is provided with an eye 28 for the waste plug chain 21.

Instead of making the nozzle 15 with an offset rear end, it may be made straight as in Fig. 7, and a flange or collar 18^a formed thereon to fit or bear against the wall 10 in a manner similar to the shoulder 18 of the preferred form.

The construction hereinabove described is quite satisfactory and sufficient in lavatories using a chain for securing the waste plug, but in that type of lavatory in which the waste plug is operated positively by a rigid connection to a fitting on the top slab 1, a modified construction is preferred, as illustrated in Figs. 8 and 9. As there shown, the nozzle 15^a instead of being clamped for support to the wall 10 of the outlet passage 8 by an ell coupling 17, is held in place by the waste plug fitting as will be described. The nozzle 15^a as here shown has a threaded opening at its rear end and on its under side for the attachment of the inlet pipe 23 which is provided with valves or cocks as previously described. The opposite end of the nozzle is curved downwardly slightly to direct the outflowing water into the basin 2. Between its ends the nozzle has a hole 28 formed therethrough around which hole the nozzle curves to form channels or passages 29 for the water. The underside of the top 1 is, in the present instance, formed with recesses 12 and 13 on opposite sides of the wall 10 to receive the nozzle, but these recesses may be omitted and the nozzle placed directly in contact with the smooth under face of the top. The nozzle 15^a is secured in position by passing its rear end through the hole 11 in the wall 10 and then, after seating it in the recesses 12 and 13, or pressing it against the under side of the top 1, the stem 30 of the waste plug fitting 31 is passed through a hole in the top 1 and the hole 28 in the nozzle and the two parts made fast to the top by a nut 32 screwed onto the threaded stem. This may be conveniently done through the overflow opening 7. An adjustable rod 33, attached to the waste plug 22^a extends from the same up the outlet channel 8 and through the stem of the fitting 31 to the operative handle in the well known way. The outlet channel 8 may be provided with a clean-out opening 9^b below the waste outlet 6 and closed by a cap 34. The trap connection 35 may also be secured in the opening 9^a in the rear wall 10 of the channel 8 instead of in the opening 9, as in the first described form.

A lavatory, constructed as described, presents to the eye a neat and simple appear-

ance, and one that can be kept clean with the least trouble. There are no metal parts visible except the chain and the waste plug and its socket in the first form of the invention and in the second form, the waste fitting on the top and the plug and its socket in the basin will be visible. By making the top and back slab and basin a homogeneous structure, great rigidity and firmness are secured and the separation of these several parts rendered impossible. The water inlet to the basin is very simple and may be fastened in place before the lavatory is set in position. The overflow opening is large and unobstructed and thereby wholly eliminates the danger of flooding the basin, and finally because of the recess 12 in the underside of the top slab, the nozzle is raised sufficiently high to prevent its outlet being seen, and when the ell coupling is screwed in place thereon, the recess prevents rotation of the nozzle.

What I claim is:

1. In combination with a lavatory having a top slab and a basin formed with an overflow channel and an overflow opening leading from said basin into the channel, of a removable nozzle fitted in a recess on the under side of said top slab and projecting through said overflow opening into the basin, said nozzle extending across the overflow channel and through an opening in the wall thereof, and means for attaching an inlet pipe to the nozzle on the outside of said wall.

2. A lavatory comprising a top and a basin, said top having a horizontal swell overhanging the basin and a recess formed in the under side of said top and swell, an overflow channel on the rear of said basin and an opening leading from the basin into the channel beneath said swell, a removable nozzle extending from within said basin through said opening across said channel and through a hole in the rear wall of said overflow channel, a shoulder on said nozzle for limiting its outward movement through said hole, and a coupling means outside the basin for fastening the nozzle in position and onto an inlet pipe.

3. A lavatory comprising a top slab and basin provided with an overflow channel on the rear thereof, and an opening leading from said basin to said channel, a removable nozzle on the underside of said top slab and extending through the overflow opening, the rear end of said nozzle being offset and projecting through an opening in the basin, and means for connecting said nozzle to the basin and to an inlet pipe.

4. A lavatory comprising a top and a basin integrally formed, said top having a swell overhanging the basin with a recess formed in the under side thereof for a nozzle, and a second recess formed in the under side of the top on the outside of said basin, a removable nozzle fitted in the recess of the overhanging swell and projecting rearwardly from an opening in the basin into the second recess, and a coupling for the inlet pipe screwed on the nozzle end to hold the nozzle in place, the outer recess being sufficiently large to permit rotation of the coupling.

5. A lavatory comprising a top and a basin, the latter provided with an overflow channel on the rear thereof, an opening leading from said basin into said channel, a removable nozzle fitted in a recess on the underside of said top and extending forwardly through the overflow opening, the rear end of said nozzle being offset and projecting from the opening in the basin, a shoulder on said nozzle adapted to bear against the wall of the overflow channel, and a coupling for an inlet pipe adapted to screw on the projecting end of the nozzle for holding the latter in fixed position on the lavatory.

6. A lavatory comprising an integral top, back slab and basin provided with an overflow channel on the rear thereof and an opening leading from said basin into said channel, said top having a swell overhanging the basin with a recess formed in the underside thereof, and a second recess formed in the underside of said top on the outside of said basin, said recesses being connected by a hole through a wall of the basin.

7. A lavatory comprising an integral top, back slab and basin provided with an overflow channel on the rear thereof, and an opening leading from said basin into said channel, said top having a swell overhanging the basin with a recess formed in the underside thereof, and a second recess formed in the under side of said top on the outside of said basin, said recesses being connected by a hole through the wall of the overflow channel, a water outlet nozzle seated in said recesses and terminating within said swell so as to be hidden from view and extending rearwardly through the hole in the overflow channel wall for connection to a supply pipe, and a coupling for making such connection and holding said nozzle in fixed position.

8. A nozzle provided with an offset intermediate its ends to form a shoulder and a screw thread on its inlet end, said end adapted to pass through a lavatory wall and be secured thereto by means of said shoulder and a pipe coupling screwed on the projecting end.

9. In an apparatus of the character described, a nozzle therefor, offset intermedi-

ate its ends to form a bearing shoulder and provided on one end with means whereby said nozzle may be attached to a water pipe and having a curved outlet at the opposite end, an eye being formed on the nozzle below said curved end for the attachment of the waste plug chain.

10. In an apparatus of the character described, a nozzle therefor having an intermediate offset between its ends and means in connection with said offset for securing the nozzle in fixed position.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH W. SHARP, JR.

Witnesses:
MORTIMER A. JONES,
RAYMOND MCCLELLAND.