

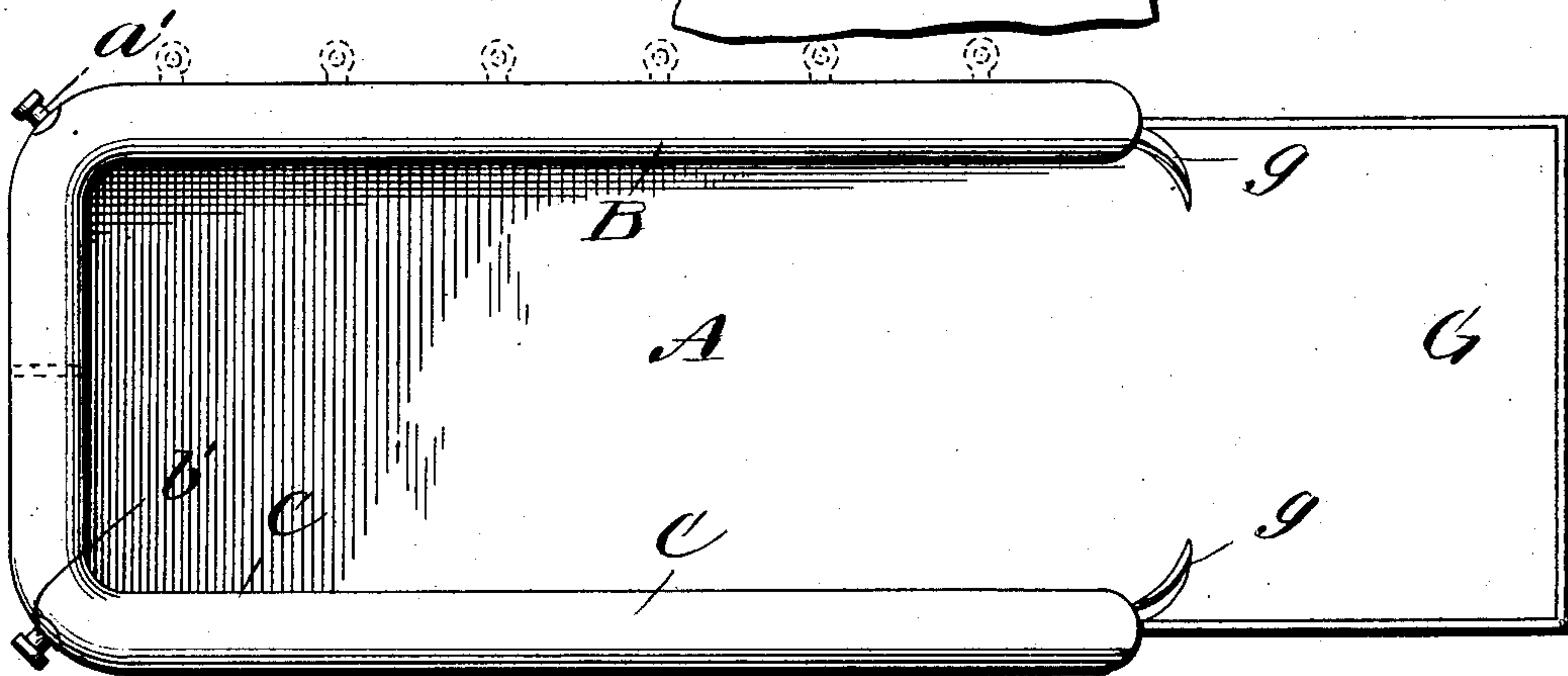
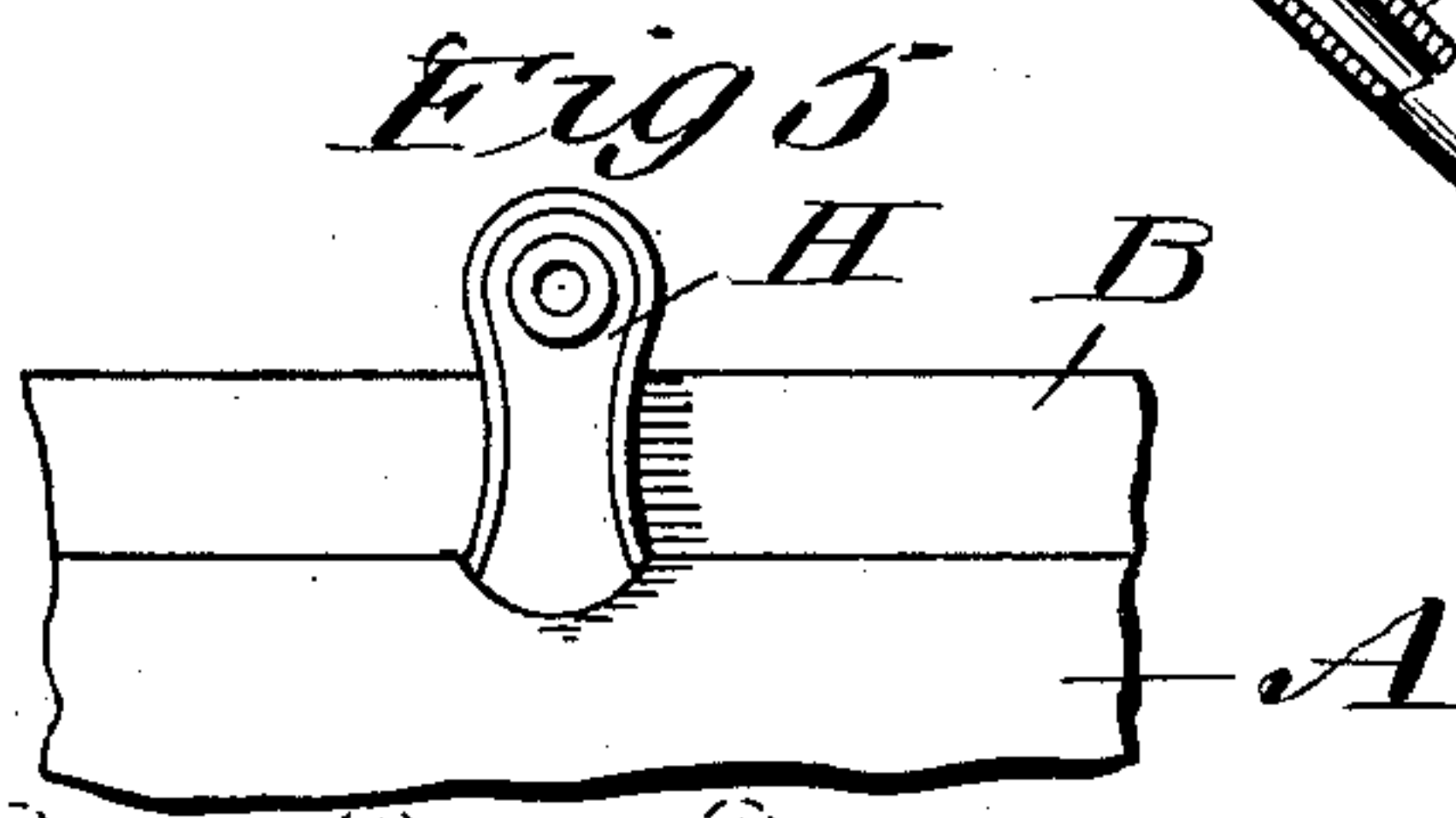
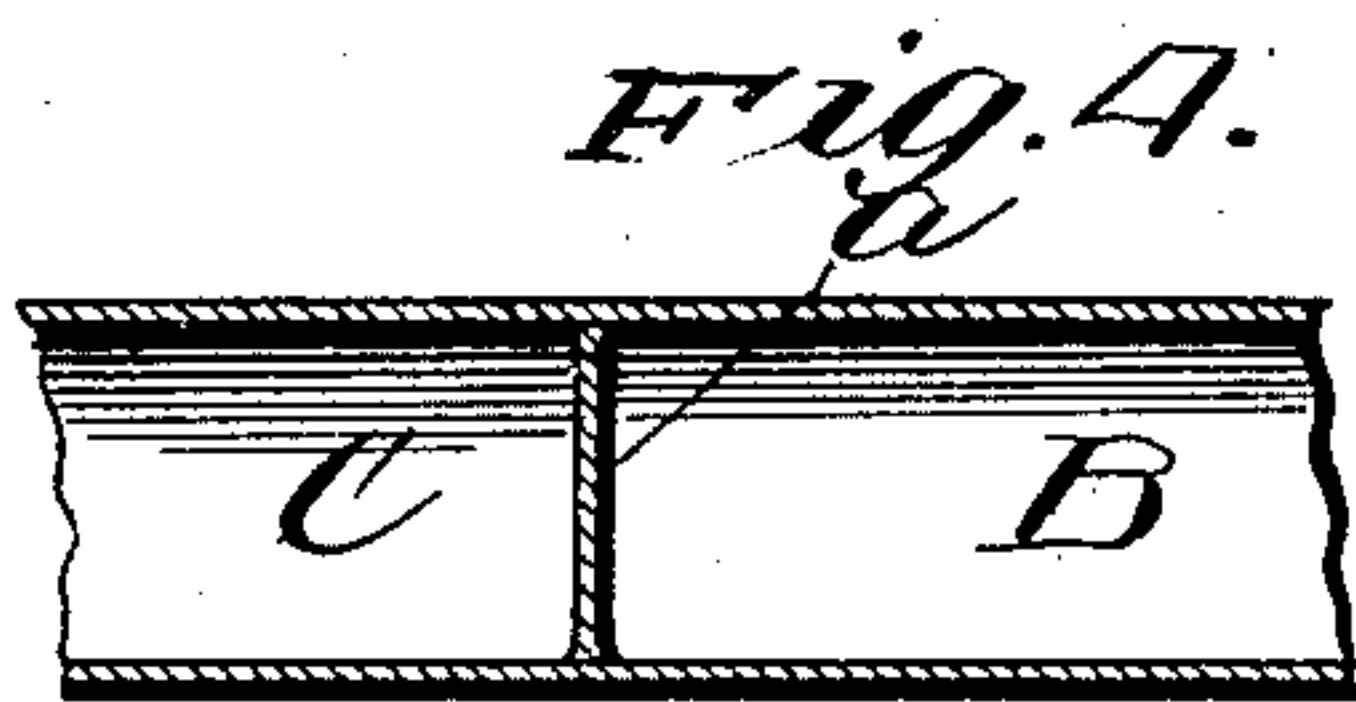
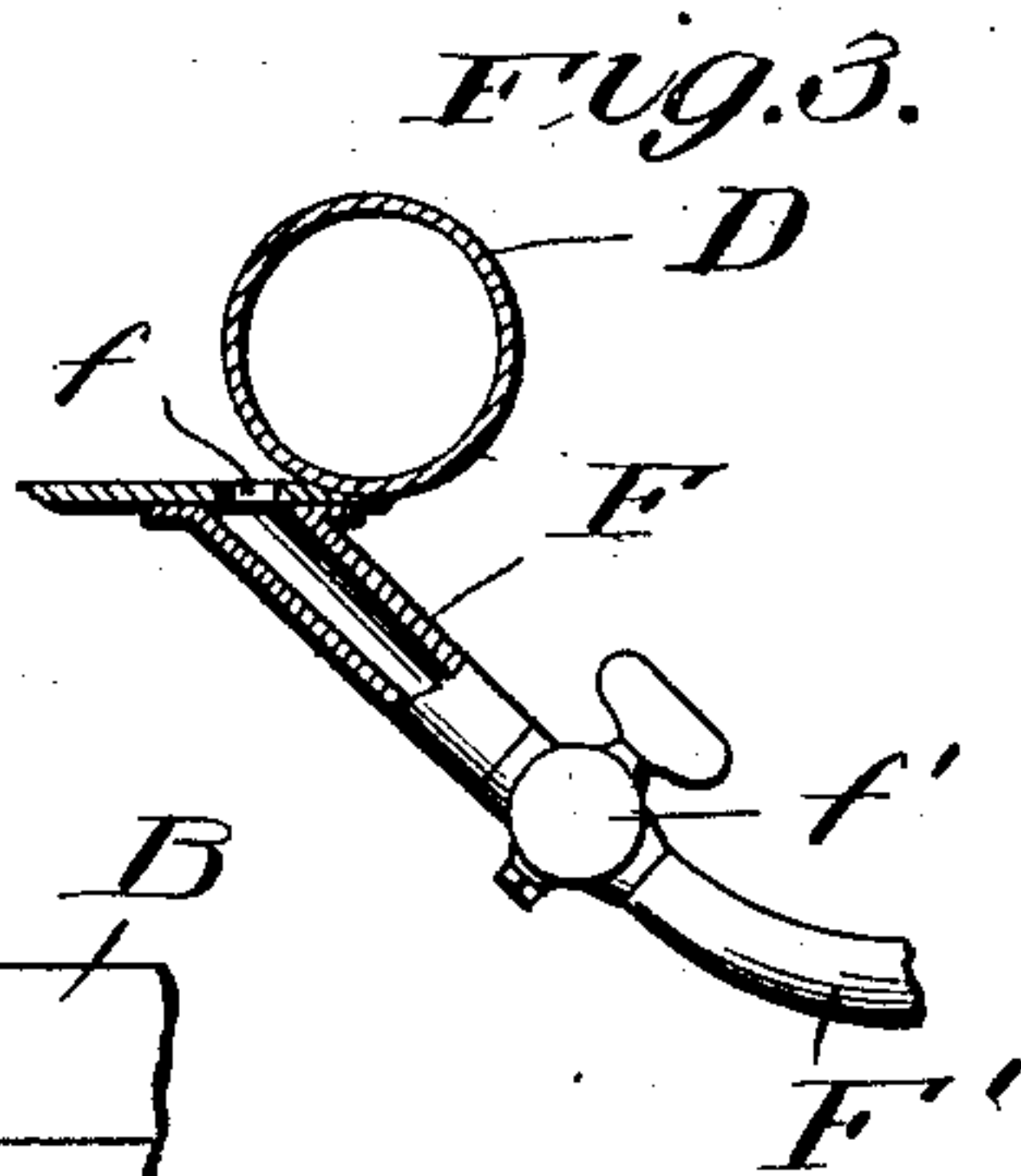
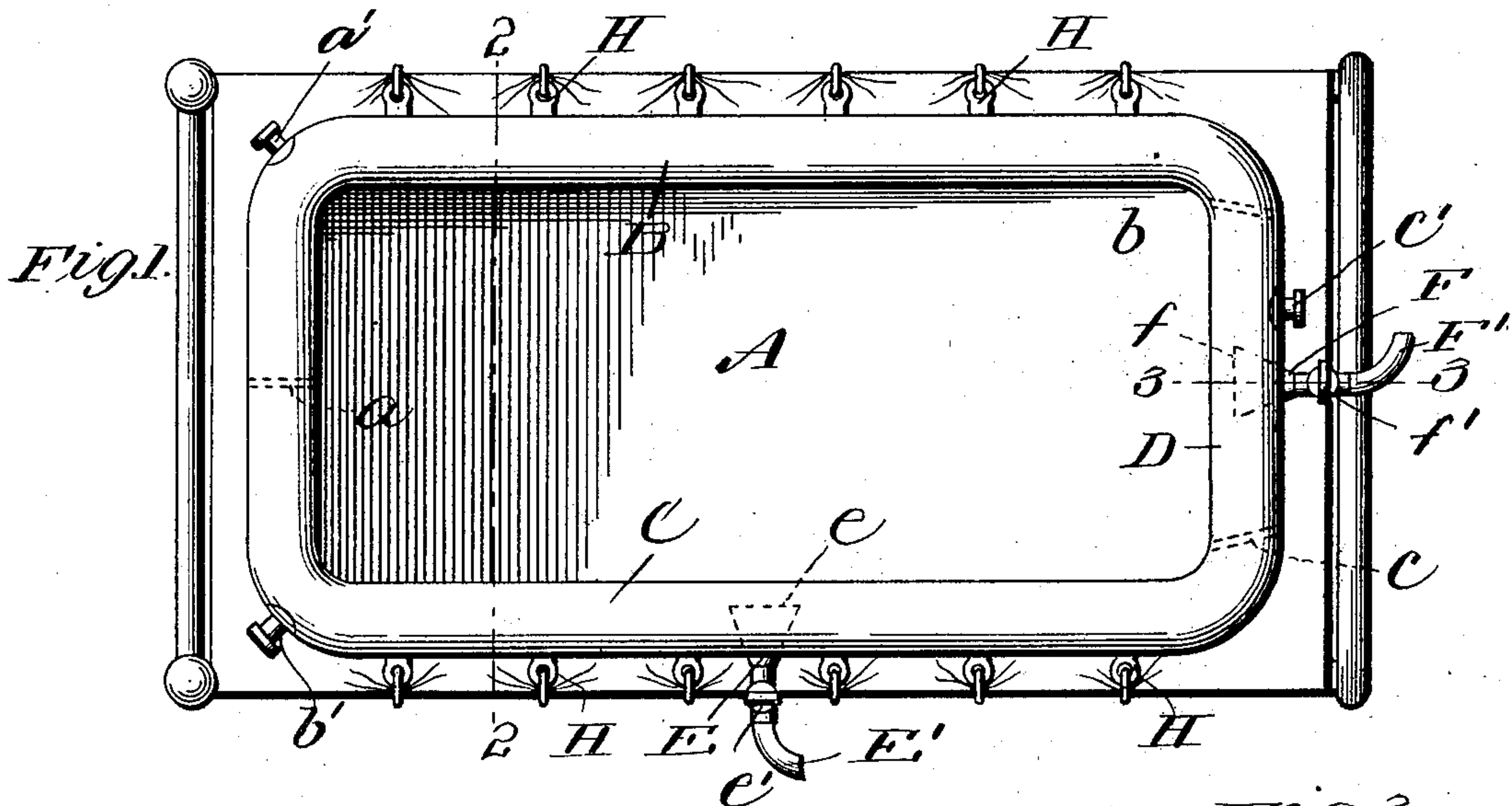
No. 736,089.

PATENTED AUG. 11, 1903.

L. V. GRAY.
PORTABLE BATHING APPARATUS.

APPLICATION FILED MAY 2, 1903.

NO MODEL.



WITNESSES
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Fig. 6. INVENTOR
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UNITED STATES PATENT OFFICE.

LIDA VIRGINIA GRAY, OF TARBORO, NORTH CAROLINA.

PORTABLE BATHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 736,089, dated August 11, 1903.

Application filed May 2, 1903. Serial No. 155,369. (No model.)

To all whom it may concern:

Be it known that I, LIDA VIRGINIA GRAY, of Tarboro, in the county of Edgecomb and State of North Carolina, have invented certain new and useful Improvements in Portable Bathing Apparatus; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is a portable folding bathing appliance, tub, or fever-pad especially designed for use in administration of baths to invalids without necessarily removing them from their beds and with the least possible lifting or moving of the patients. It is especially designed for hospital, private houses, and military-camp use; and it consists in the novel features of construction and arrangement of parts hereinafter claimed, and described with reference to the accompanying drawings, in which—

Figure 1 is a view of the complete apparatus in position for use upon a bed. Fig. 2 is a transverse section thereof on line 2 2, Fig. 1, showing one side tube inflated, the other deflated. Fig. 3 is a detail section on line 3 3, Fig. 2, showing the connection of the drainage-funnel. Fig. 4 is a detail section showing one of the partitions in the air-tubes. Fig. 5 is a detail bottom plan view showing the fastening-straps. Fig. 6 is a view of a modification of the apparatus.

The tub or pad is made out of rubber cloth or other material impervious to water and is of a length and width sufficient to allow the patient to lie comfortably therein when placed on the bed. Around the outer edges of the body is an inflatable air-tube, also formed of waterproof material, said tube being made in sections or divided into sections, as hereinafter explained, so that parts of it can be inflated or deflated independently of other parts thereof. It is also provided with suitable drainage devices whereby the water can be run off after the bath before the tub or pad is removed from the bed.

Referring to the drawings, A represents a sheet of waterproof material of a width and length sufficient to permit a patient to lie extended at full length thereon. To the edges of this sheet are attached an inflatable air-

tube made or formed in sections B C D, said sections together entirely surrounding the sheet, as shown in Fig. 1. These sections are preferably formed of one continuous tube, divided into sections by internal partitions *a b c*, as indicated in the drawings, the tube being made in or divided into sections for the purpose of enabling one or more of such sections to be inflated or deflated without affecting other sections, thus facilitating the placing of a patient in or removing the patient from the tub or pad. Each section is connected to the sheet A by a water-tight joint and in such a manner that when the tube is inflated it will stand entirely above the sheet and not uplift the latter, the tube-sections partially overlapping the edges of the sheet, as shown in Fig. 2. The tub or pad, therefore, has a full depth at all points equal to the diameter of the tube-sections when inflated. Each tube-section is provided with a suitable nipple-valve *a' b' c'* for connection with an air-pump or other inflating device, as well understood.

When the air-tube sections are all inflated, a perfect shallow bath-tub is formed, as is obvious. To facilitate the emptying of the tub after use, I have shown in Fig. 1 a side funnel E and an end funnel F. It is not necessary to provide both funnels, however. Either may be dispensed with, as preferred. These funnels are formed of waterproof material, and their mouths are water-tightly secured around slits *e f* left between the sheet A and tube, as indicated in the drawings, so that the water will pass out under the tube. The funnels may be provided with nipple-stopples *e' f'*, which can be connected with a drain-hose E' F', if desired.

In some cases instead of drawing off the water through funnels it may be drawn off even more quickly by deflating one of the tube-sections. For example, in the construction shown in Fig. 1 if the foot-end tube-section D is deflated the water can be rapidly run off at that end of the tub or pad by tilting the bed so as to elevate the other head end of the tub. In the modification shown in Fig. 6 the foot-section D of the tub or pad is omitted, and instead the sheet A is extended, as at G, beyond the side tube-sections B C, and this portion G may be elevated while the tub or

pad is in use by placing a pillow thereunder, so as to retain the water in the tub. Webs *g* are placed between the extremities of tube-sections B C and adjacent portions of part 5 *G*, so as to retain the water in the tub while it is in use. The extension *G* can be folded and dropped, so as to form a drain-funnel to allow the water to pass off into a suitable receptacle at the foot of the bed.

10 The sheet *A* may be provided on its side edges beneath the tube-sections B C with eyeleted straps *H*, which afford means for securing the tub in position on the bed in cases where the patient might be violent, and ropes 15 could be passed through these eyelets, so that the tub could be used as a stretcher for moving patients or facilitating administering the bath, the ropes passing through the eyelets and around an iron frame of proper size.

20 Operation: When it is desired to bathe a patient, one side section of the tub-tube is inflated and the tub laid on the bed beside the patient, who is lifted onto the sheet *A*, next the inflated portion of the tube. Then the 25 sheet is spread out under the patient and the other section or sections of the tube inflated, so that the patient lies in a shallow tub. The proper amount of water can then be placed in the tub and the patient bathed. Then the 30 water is run off, the tube deflated, and readily slipped from beneath the patient. The patient may thus be bathed readily without being removed from the bed, or may be removed in the tub from the bed to the floor or operating-table and returned to the bed, the apparatus forming both a portable tub and a 35 convenient stretcher. Another advantage of having the air-tube inflatable in sections is that one or more sections can be inflated before the patient need be troubled at all, and

when the bathing is finished one section can be deflated and the tub removed, the other sections being subsequently deflated, if desired. Thus time is saved in handling the patient and in setting up and taking down 45 the apparatus.

The advantages and utility of this device, particularly when very ill persons have to be handled, will be manifest, and further explanation is unnecessary. 50

Having thus described my invention, what I therefore claim as new, and desire to secure by Letters Patent thereon, is—

1. A portable bathing apparatus, for invalids, comprising a sheet of waterproof material, having an inflatable tube at its edges said tube being inflatable and deflatable in sections for the purpose and substantially as described. 55

2. A portable bathing apparatus for invalids, comprising a sheet of material impervious to water, and a sectional inflatable air-tube attached to the edges of said sheet, said tube being inflatable and deflatable in sections, and adapted to stand above the sheet 65 when inflated, substantially as described.

3. A portable bathing apparatus for invalids comprising a sheet of waterproof material, an inflatable air-tube connected to the edges of said sheet and inflatable and deflatable in sections, and a drainage-funnel attached to the sheet at the lower side of the tube substantially as described. 70

In testimony that I claim the foregoing as my own I affix my signature in presence of 75 two witnesses.

L. VIRGINIA GRAY.

In presence of—

MARTHA V. WEATHERSBEE,
JAS. R. GASKILL.