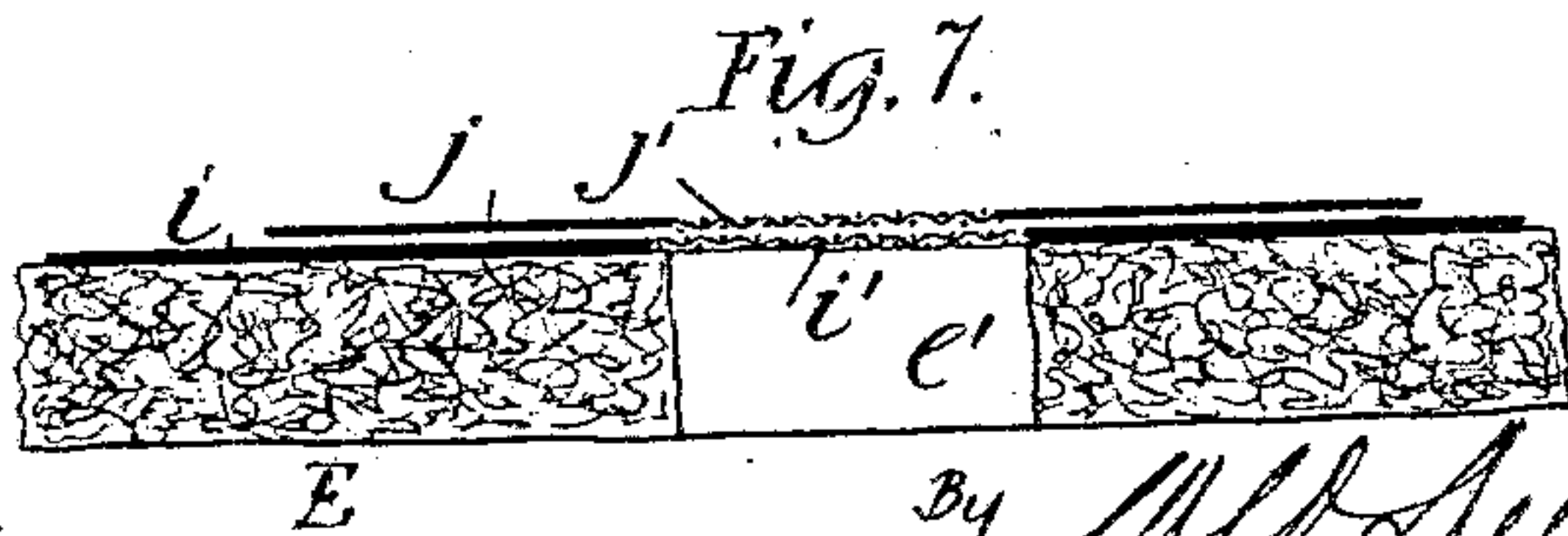
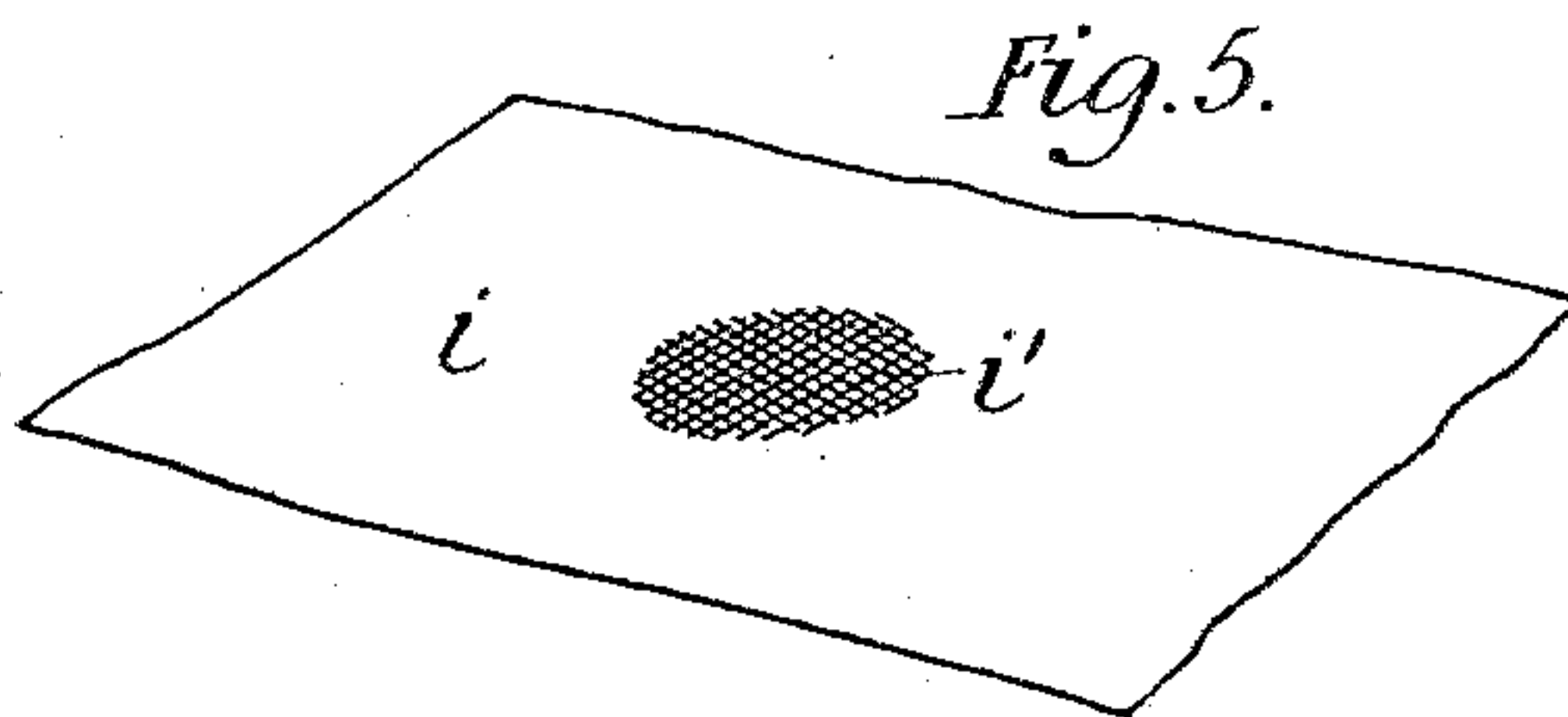
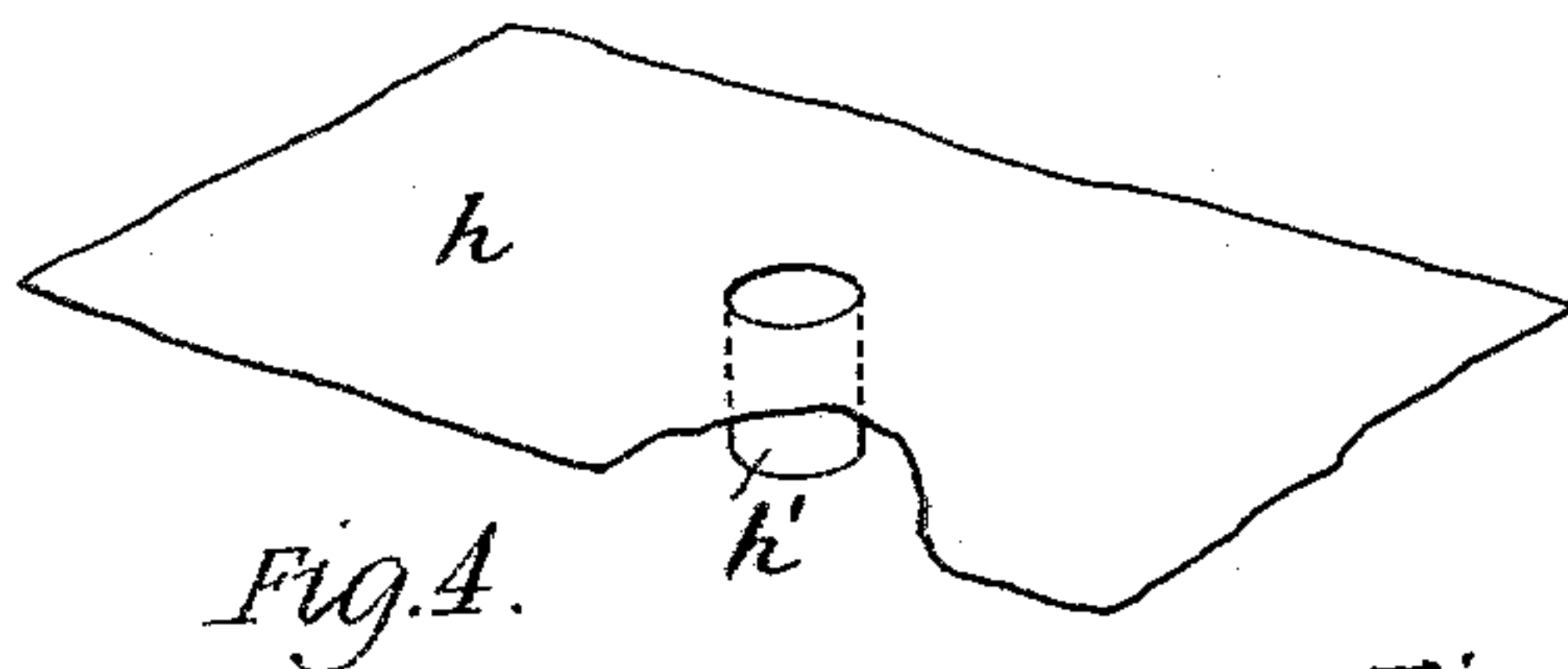
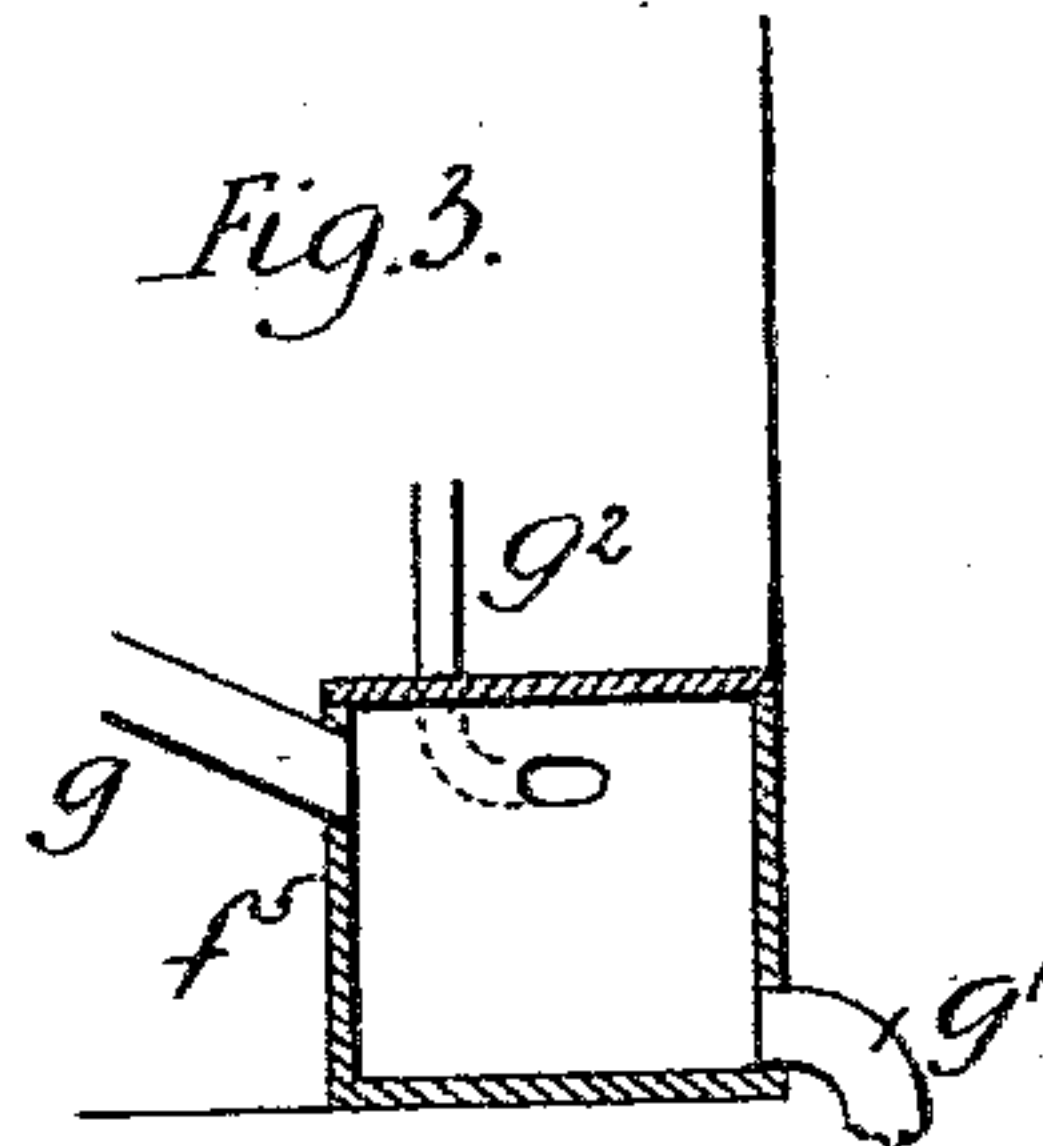
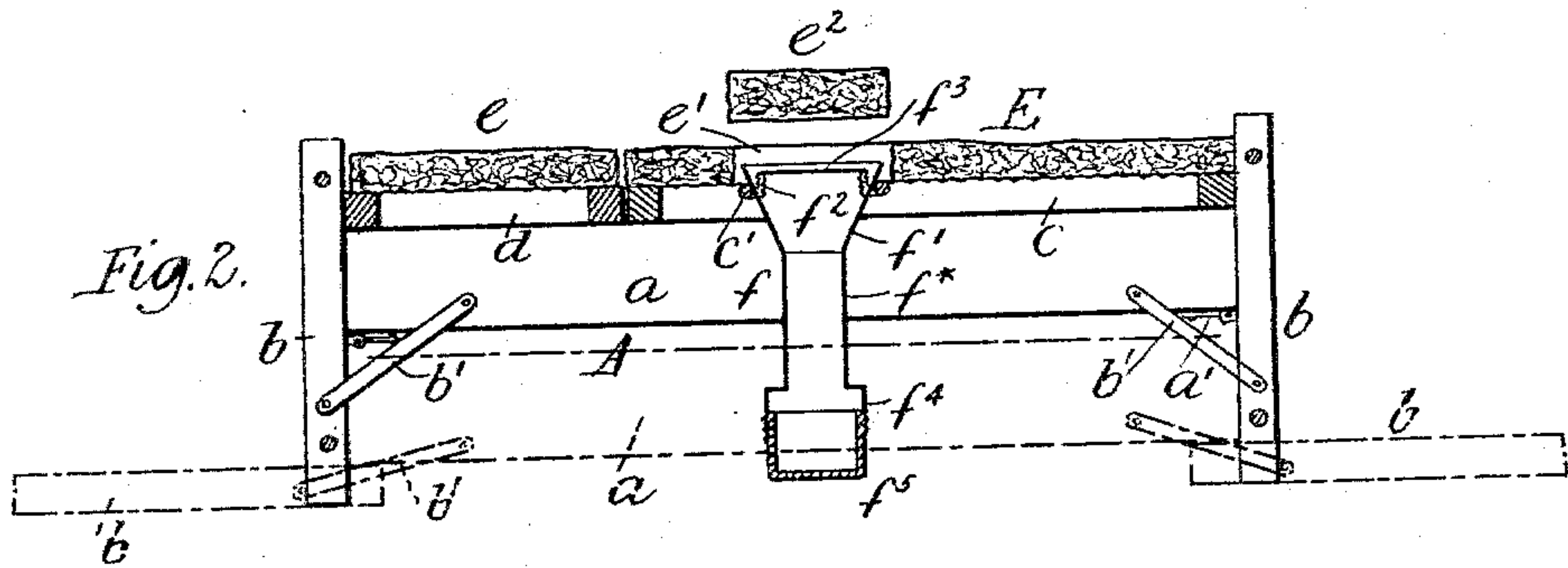
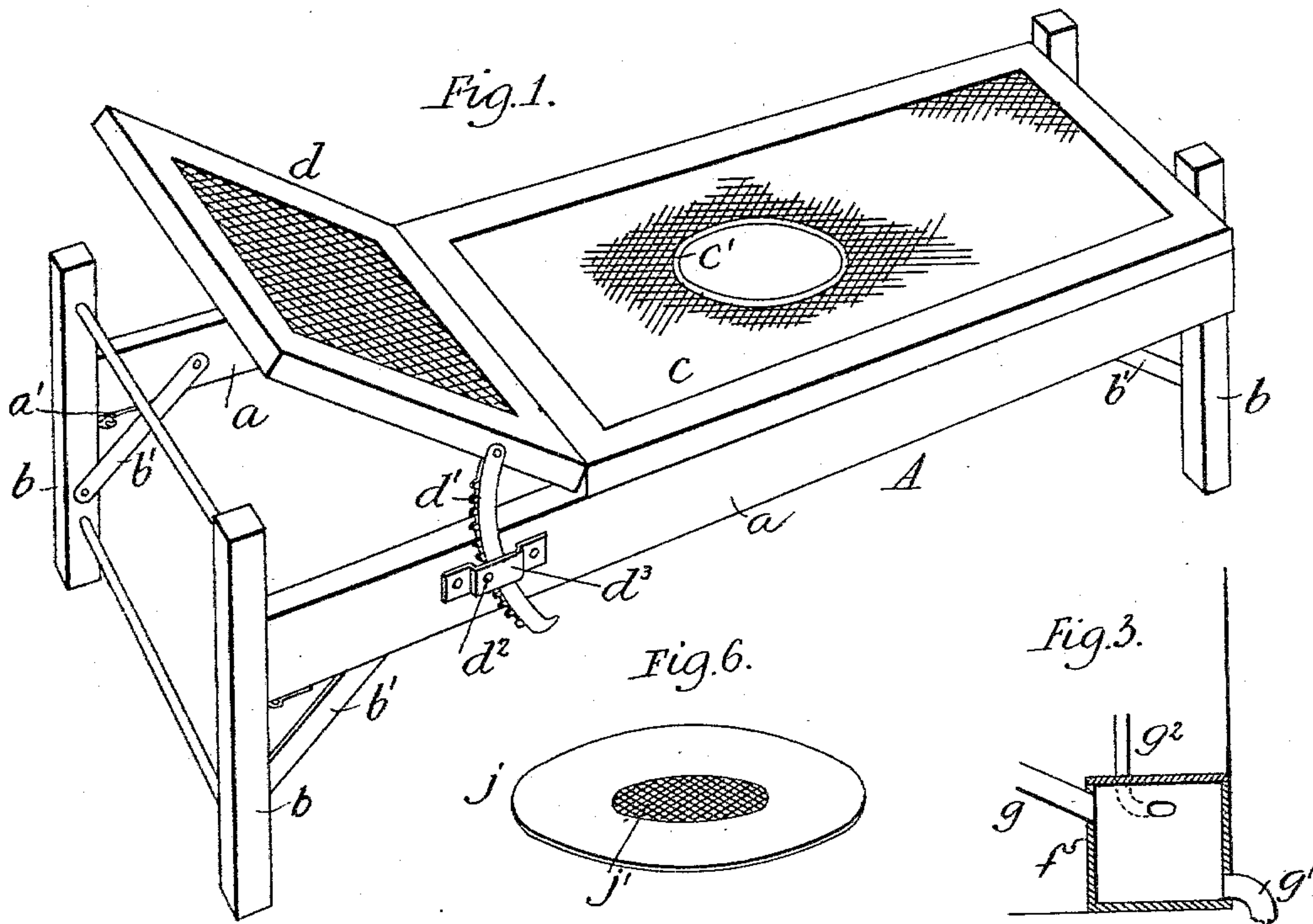


(No Model.)

A. J. CARPENTER.  
SURGICAL APPLIANCE.

No. 566,657.

Patented Aug. 25, 1896.



Witnesses  
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# UNITED STATES PATENT OFFICE.

AUGUSTUS J. CARPENTER, OF LOUISVILLE, KENTUCKY, ASSIGNOR OF ONE-HALF TO ALEXANDER MYERS, OF SAME PLACE.

## SURGICAL APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 566,657, dated August 25, 1896.

Application filed March 28, 1896. Serial No. 585,296. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUSTUS J. CARPENTER, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Surgical Appliances; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention is directed to improvements in surgical appliances, and while my improvements are susceptible of general utilization the same are designed more especially for use in hospitals and other like institutions for the treatment of patients.

The object of my invention is the production of simple and comparatively inexpensive appliances for surgical and kindred uses by which the operations attendant upon the care of patients are greatly facilitated and involve less labor than heretofore on the part of the attendants, with proportionately less discomfort on the part of the patient.

Another object is the promotion, by the use of my invention, of neatness and cleanliness, by which the danger of infection from contagious disease is greatly lessened.

The nature of my invention will be fully apparent from a reading of the following detailed description, when taken in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of an improved bed or cot forming a part of my invention. Fig. 2 is a longitudinal sectional view of the same, showing in full lines the position of the parts when the bed is raised for occupancy and in dotted lines the position of the parts when the bed is lowered for the placing or removal of a patient; also showing an improved form of mattress and an improved commode adapted for use in connection with the bed and forming a part of my invention. Fig. 3 is a sectional view of a modified form of construction of commode. Fig. 4 is a perspective view of one type of rubber covering to be employed in connection with the bed and commode. Fig. 5 is a perspective view of another type of covering. Fig. 6 is a perspective view of a perforated supporting-plate to be employed in connection with the latter covering, and Fig. 7 is a sectional view showing the arrangement during use of the latter covering and plate.

Referring to the said drawings by letter, A denotes my improved bed or cot, which consists of the side rails *a a* and foldable legs *b b*, which latter are pivotally connected to the side rails *a* through rods *b' b'*, which allow of the legs being manipulated to elevate or lower the bed, as best shown in Fig. 2. When elevated, the structure is secured by means of hooks *a'* on the rails, which engage eyes on the legs. The bed-bottom is shown at *c* and is composed of woven wire, and centrally or thereabout is a ring *c'*, by which is provided an opening for a purpose to be presently explained. The head-board *d* is pivoted at its inner end to the bed-bottom and may be arranged horizontally or given an incline, the different degrees of inclination being maintained by means of a curved rack-bar *d'* on each side of the head-board, which rack-bar removably engages a pin *d<sup>2</sup>*, arranged in a guide-strap *d<sup>3</sup>*, in which latter the bar is moved.

In connection with the head-board I employ an ordinary pillow *e*, but the mattress *E* is of peculiar construction, being provided at or near its center with an opening *e'*, which registers with the opening in the bed-bottom. This opening in the mattress is normally covered by a cushion *e<sup>2</sup>*, which, when in place, gives an even surface to the mattress. The commode is shown at *f* and consists of a funnel-shaped top *f'*, the greatest diameter of which is in excess of the diameter of the opening in the bed-bottom, whereby the ring *c'* of the latter will support the commode, as shown in Fig. 2. This top *f'* has an inner screw-threaded flange *f<sup>2</sup>*, which receives a removable screw-threaded cap or cover *f<sup>3</sup>*. Below the top is a tube *f<sup>4</sup>*, which terminates in an enlarged screw-threaded flange *f<sup>1</sup>*, to which latter is secured the screw-threaded upper end of a receptacle *f<sup>5</sup>*.

In Fig. 3 I have shown a modification of the commode, which modification extends only



to the receptacle  $f^5$ . In said figure the receptacle  $f^5$  is shown as located some distance away from the bed, as, for instance, against the adjacent wall, and connection is made between it and the tube  $f^*$  by a pipe  $g$ , which leads to the interior of the receptacle, and on the opposite side of the latter is an opening from which leads a pipe  $g'$ , having connection with the sewer or other drain. At  $g^2$  is shown a pipe leading from a flushing apparatus to the receptacle, the apparatus being of usual construction and not necessary to be here shown or described.

In Figs. 4 and 5 are shown two rubber coverings, the first of which,  $h$ , is provided with a central depending open-ended chute  $h'$ , which in practice is lowered into the top of the commode, while the second covering,  $i$ , has a central opening covered by a piece  $i'$ , of gauze or other material, having a porosity sufficient to allow of the ready passage therethrough of a liquid. In connection with this latter covering I employ the plate  $j$ , (shown in Fig. 6,) which is of sufficient strength to bridge the opening in the mattress and support the weight of the patient. This plate has an opening in the center which is covered by a stout wire or other netting.

The operation of my improved bed or cot having been previously set forth, I will now explain the uses and operations of the other parts of my invention.

In the event of a necessity arising for the commode the patient is caused to move away from the opening, the cushion is withdrawn, and the commode inserted, its cover removed, and the covering  $h$ , or the covering  $i$  and plate  $j$ , dependent upon the use of the commode, are placed in position, and the patient returned to his or her central position.

In the event of the employment of the first described commode the manipulations just described are, after the completion of the operation, reversed, and afterward the commode is covered and removed, the receptacle is unscrewed and detached and emptied.

Where the modified form of commode is used, the operations are similar to those of an ordinary flushing-closet, as the flow of water

from the apparatus will cause the proper cleansing of the receptacle and pipes.

From the foregoing it will be noted that, aside from the efficiency of my improved appliances and the arising increased facility with which the parts may be manipulated to the comfort of the patient and the decrease of labor to the attendants, the use of my invention promotes the greatest possible degree of cleanliness and neatness, with the result of hastening the recovery of the patient, due to the healthy condition of the surrounding air, and of precluding the spread of disease from the unclean methods now employed.

My improved appliances, although very efficient, are comparatively very simple in construction and operation and may be produced at comparatively small cost.

I claim as my invention—

1. A surgical appliance comprising a bed-bottom provided with an opening, a head-board provided with means for adjusting its inclination, means for elevating and lowering said bed-bottom, a mattress having an opening registering with the opening in the bottom, a removable cushion therefor, a supporting perforated plate to cover the openings, a covering for the mattress and a plate having a porous center, and a commode removably arranged beneath the registering openings.

2. In combination with a bed and its mattress provided with openings, a commode having a funnel-shaped upper end fitting the bed-opening and provided with a closure, a depending tube, and a receptacle removably secured to the bottom of the latter.

3. In combination with a commode for invalid-beds, a receptacle having pipe connection therewith and with the drain or sewer, and a water-flush pipe leading to said receptacle.

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

AUGUSTUS J. CARPENTER.

Witnesses:

ARTHUR BROWNING,  
W. T. NORTON.