

(No Model.)

2 Sheets—Sheet 1.

G. K. HEIST.
Commode.

No. 231,040.

Patented Aug. 10, 1880.

Fig. 1.

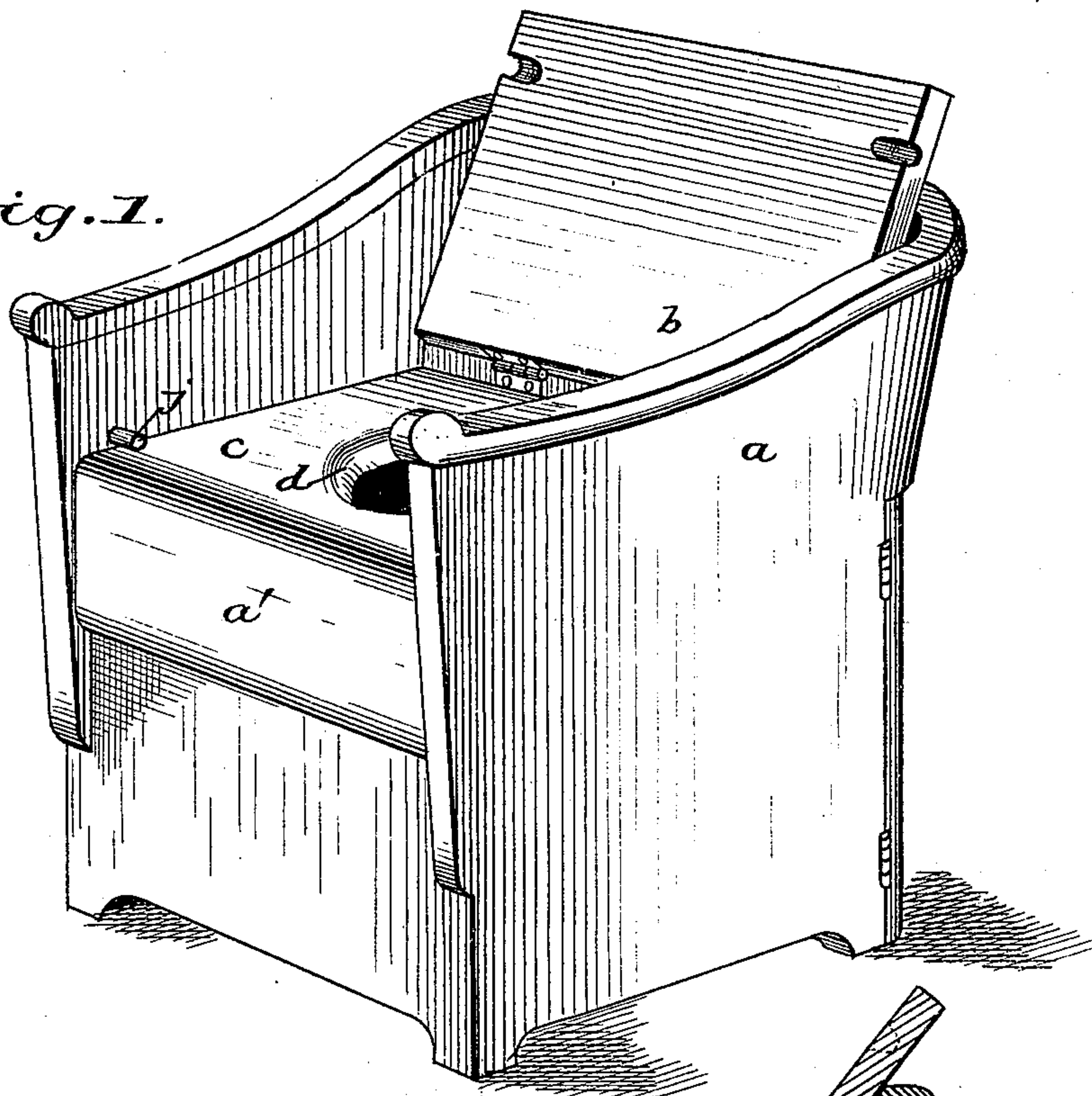
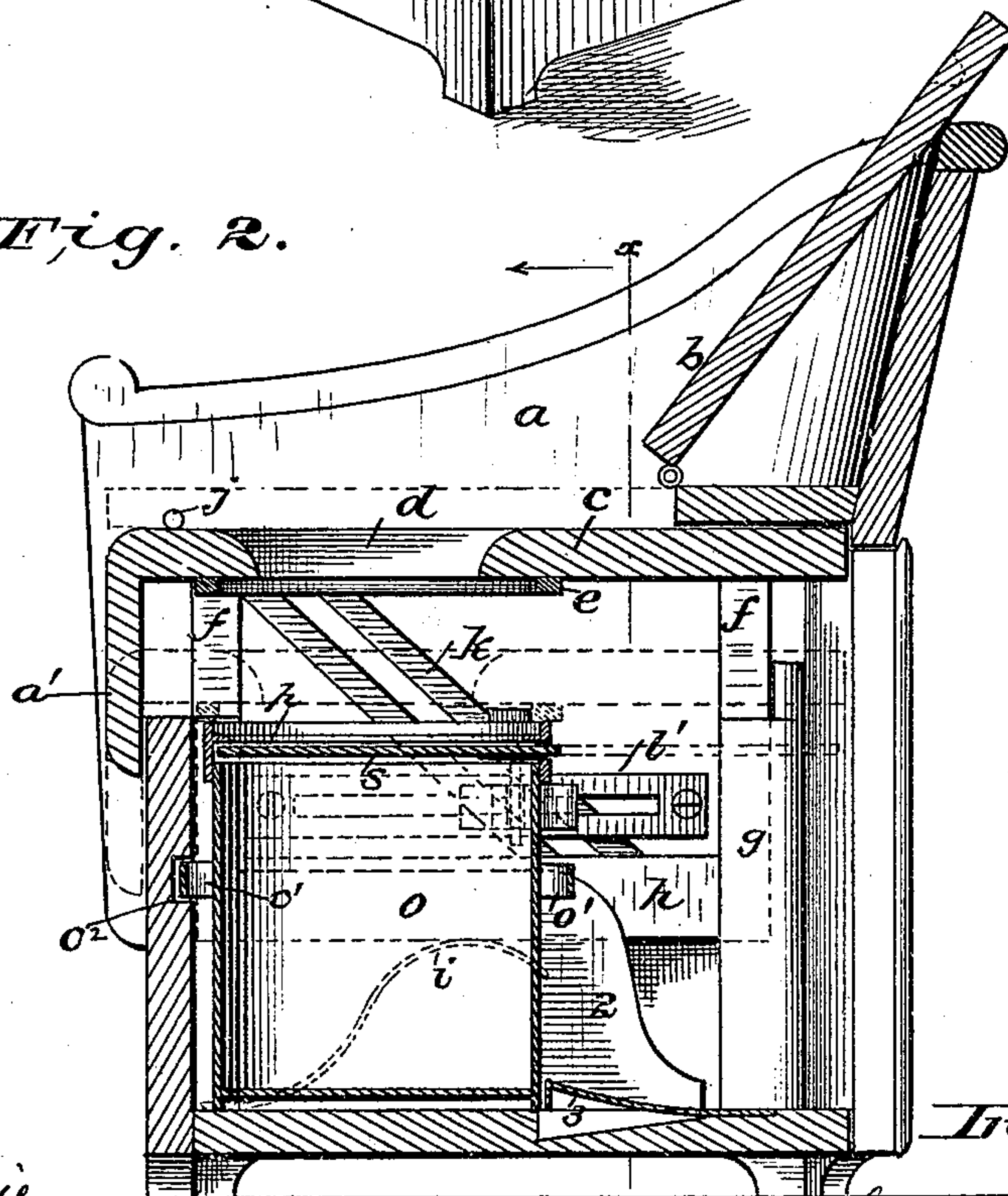


Fig. 2.



Attest:

H. D. Perrin,

Geo. M. Finckel.

Inventor.

George K. Heist.
by his attorney,
Geo. M. Finckel.

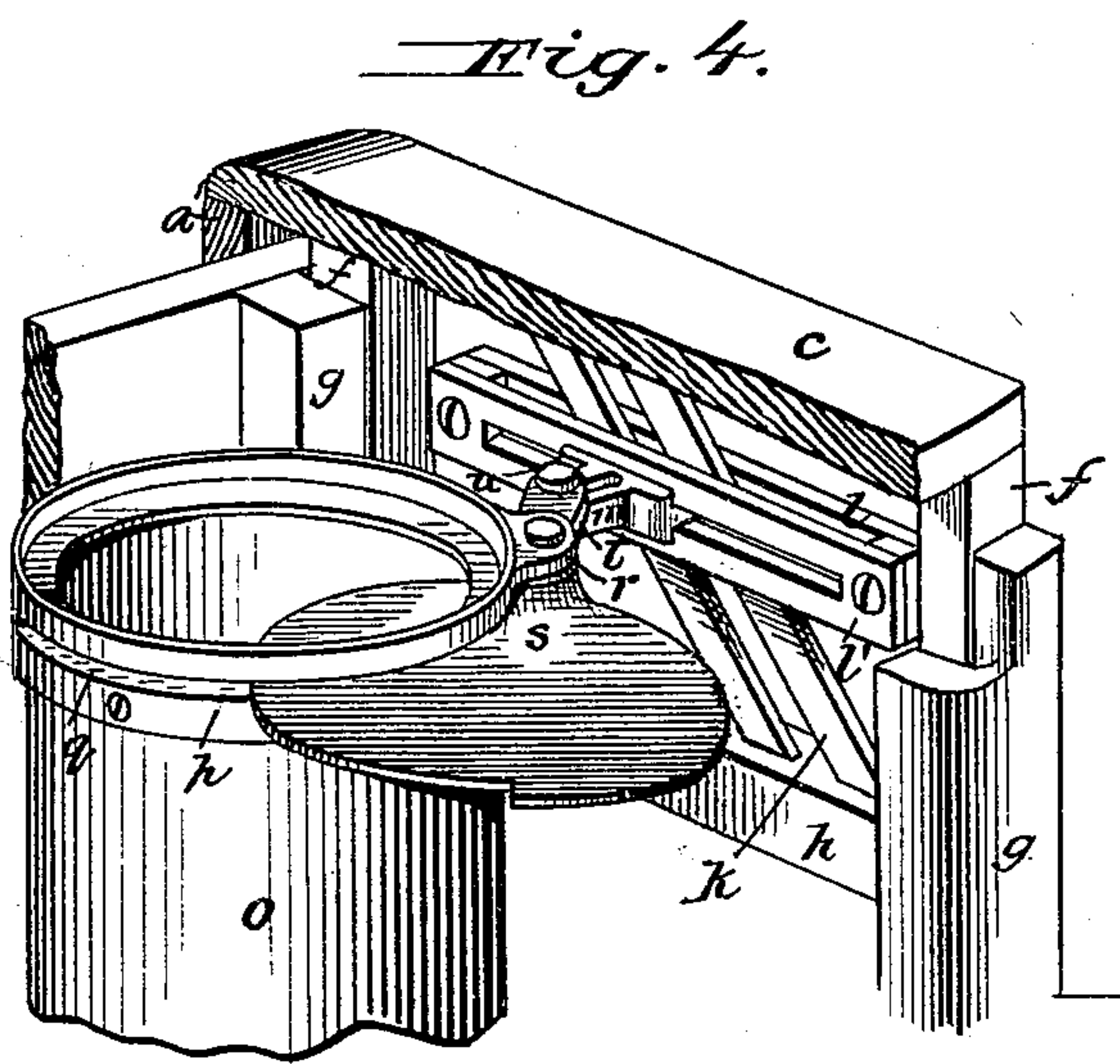
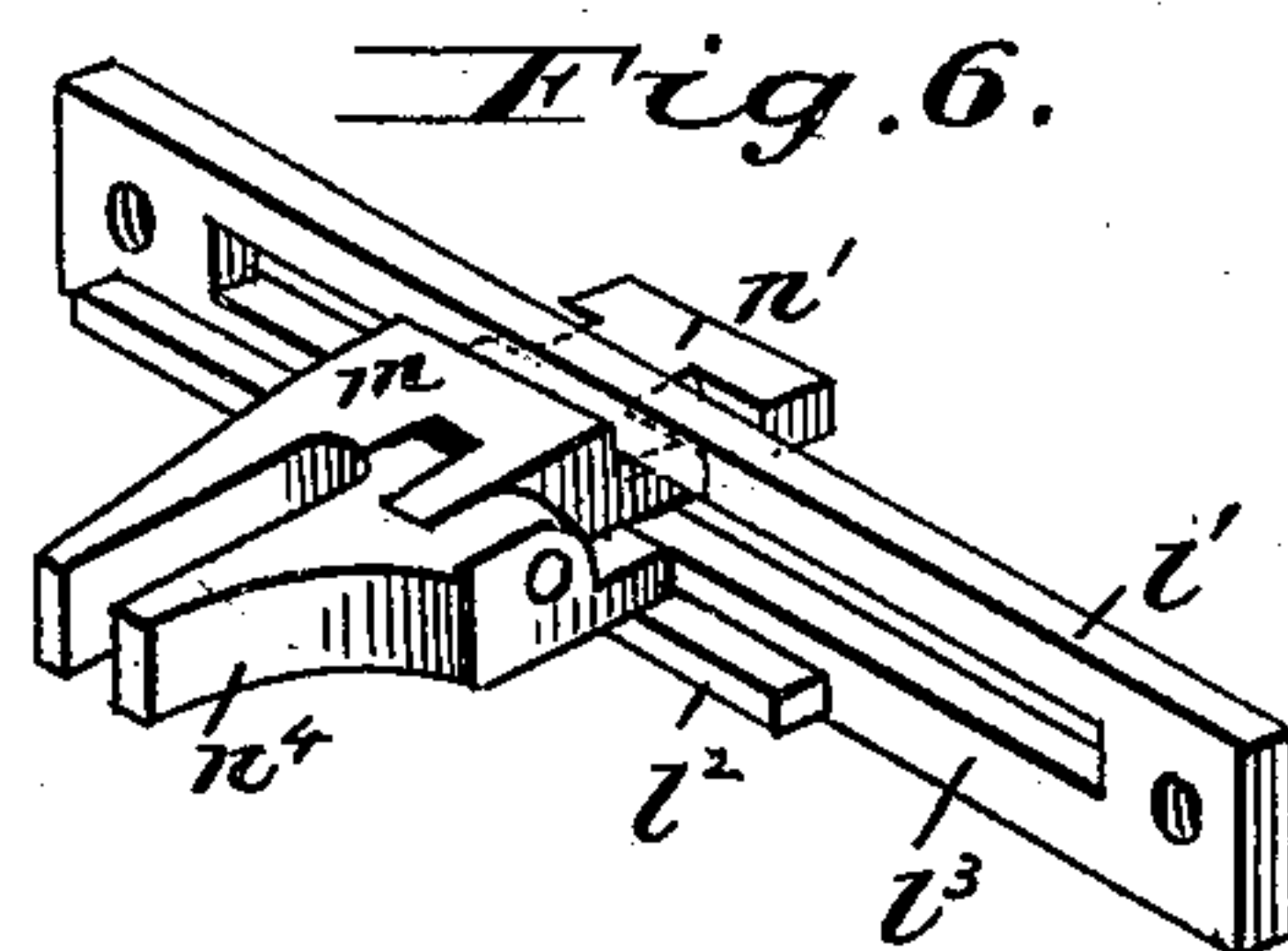
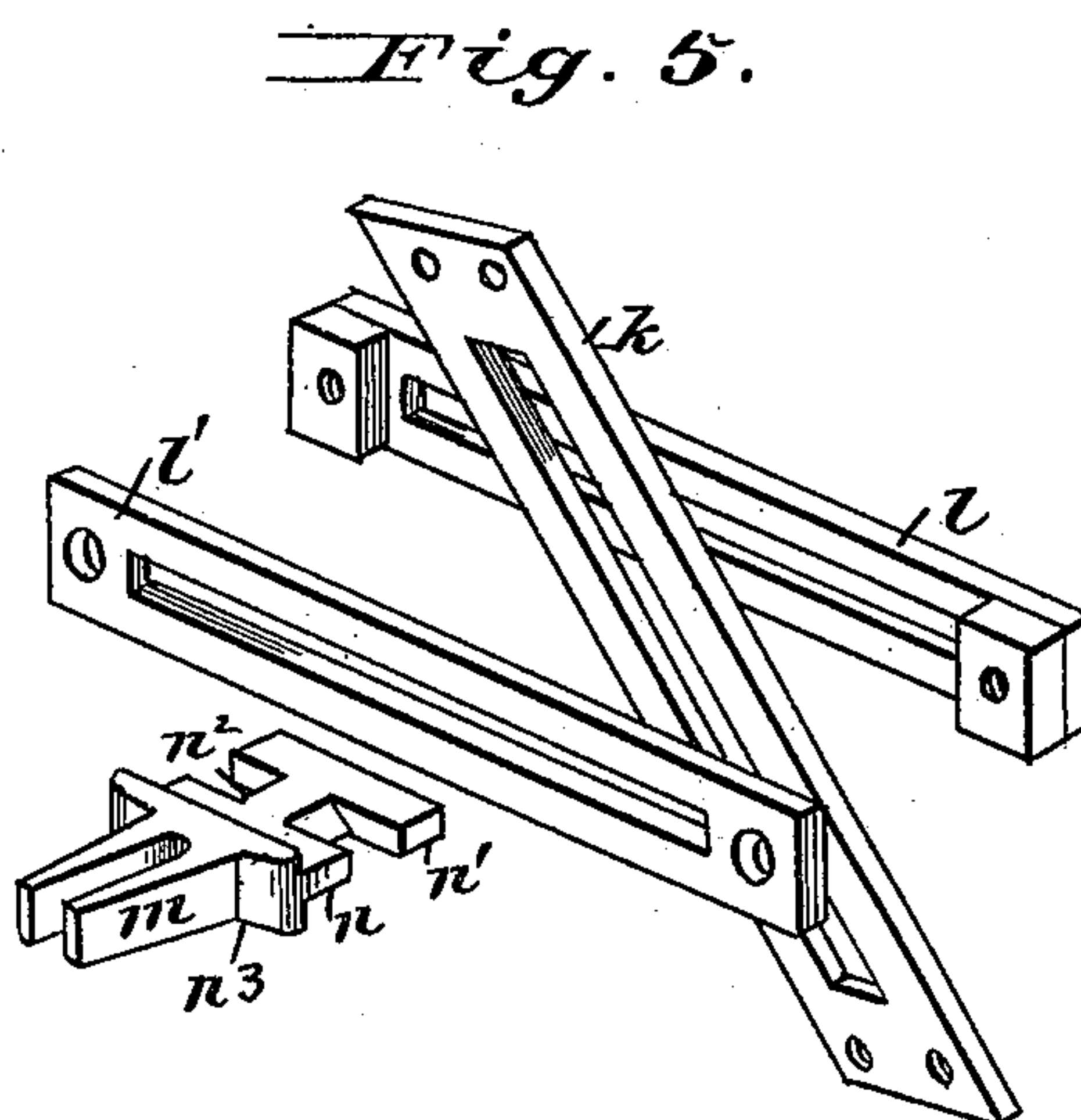
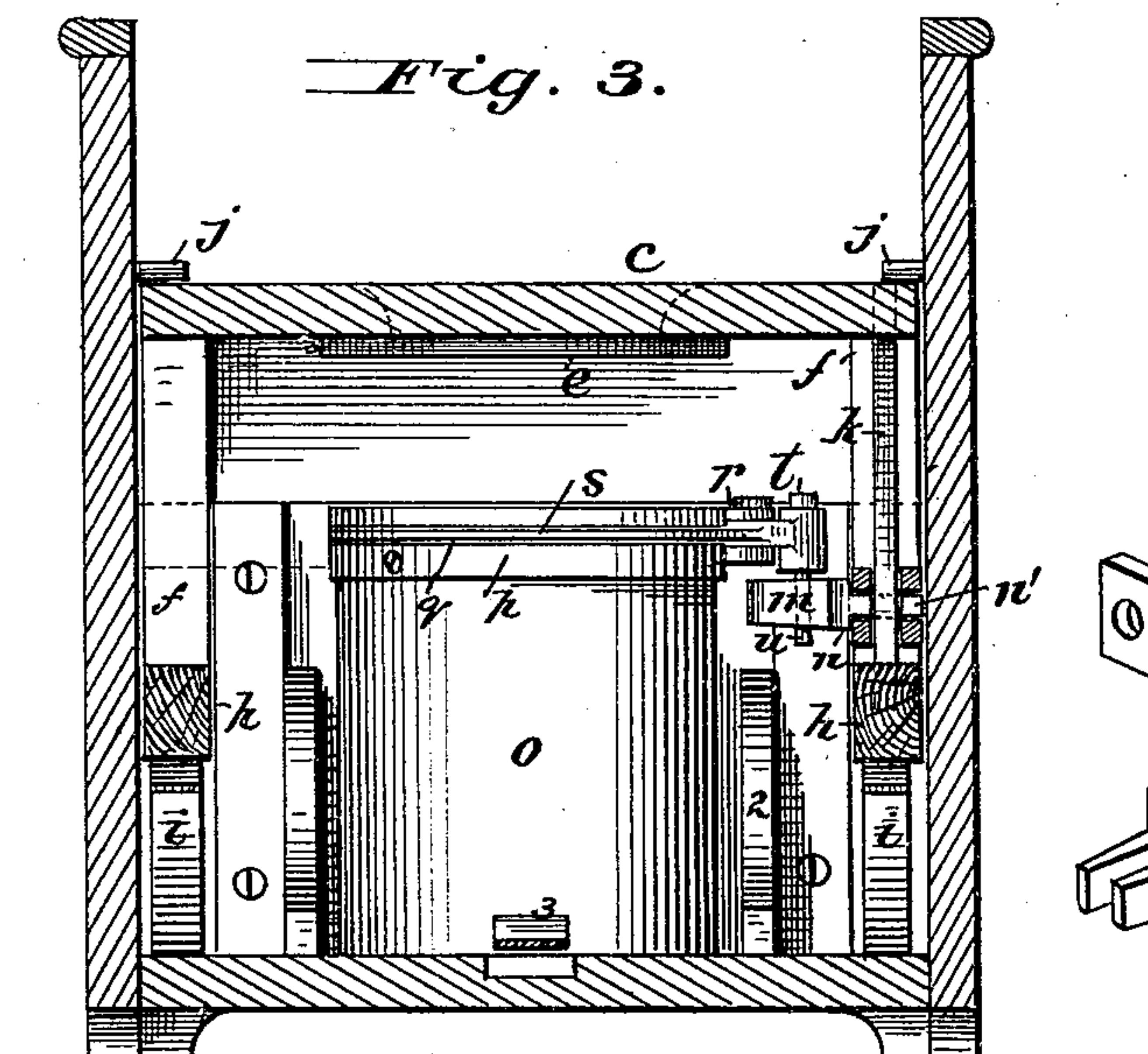
(No Model.)

2 Sheets—Sheet 2.

G. K. HEIST.
Commode.

No. 231,040.

Patented Aug. 10, 1880.



Attest:
H. L. Perrine
Geom. Engineer

Inventor.
George K. Heist.
by his attorney,
Wm. F. Finckel

UNITED STATES PATENT OFFICE.

GEORGE K. HEIST, OF WINCHESTER, VIRGINIA.

COMMODOE.

SPECIFICATION forming part of Letters Patent No. 231,040, dated August 10, 1880.

Application filed June 7, 1880. (No model.)

To all whom it may concern:

Be it known that I, GEORGE K. HEIST, a citizen of the United States, residing at Winchester, in the county of Frederick and State of Virginia, have invented certain new and useful Improvements in Commodes; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification.

This invention is in the nature of improvements in that class of commodes having a removable sealed excrement-vessel, the cover of which is operated automatically.

The improvements consist in the construction and arrangement of a spring-seat, in combination with an excrement-receptacle having a swinging cover automatically operated by downward pressure upon the seat to open the receptacle for the inflow of excrement, all as hereinafter specified and claimed.

In the drawings representing my invention, in the several figures of which like parts are similarly designated, Figure 1 is a perspective view. Fig. 2 is a central longitudinal vertical section. Fig. 3 is a transverse vertical section on line *x x* of Fig. 2. Fig. 4 is a perspective view of the parts serving to connect the seat and the lid or cover of the excrement vessel, the latter being also in position. Fig. 5 is a perspective view of the seat and cover connecting parts detached and in detail, and Fig. 6 is a perspective view of a modification of these parts.

a designates a casing of any ordinary or approved form, having a seat-cover, *b*, hinged thereto and a seat, *c*. This seat has the usual hole *d* in it, and on the under side this hole is encircled by a strip of suitable soft packing, *e*. The seat is supported upon posts *f*, working in suitable guide-sockets *g* in the frame or casing *a*, and these posts are connected at their lower ends by horizontal bars *h*, also guided by the sockets *g*. Between the bottom of the casing and the bars *h* are arranged flat curved springs *i*, (see dotted lines, Fig. 2,) which tend

to raise and serve to yieldingly support the seat.

Other springs might be used; but I have found that the flat springs recover most readily and are best adapted to properly raise the seat. The upward movement of the seat is limited by suitable stops *j* on the casing.

The space at the front of the commode, between its casing and the seat, is covered by a downwardly-projecting flange, *a'*. The seat *c* and one of the bars *h* are connected by a slotted brace, *k*, preferably of cast metal, and set at an incline. Fixed horizontally to the casing is a slotted bar, *l*, in rear of the brace *k*, and in front of such brace is a similar bar, *l'*. (See details, Fig. 5.)

m is a forked tongue arranged to be slid back and forth in the slotted bars *l l'*, which form guideways therefor, by the movement of the seat. This tongue has an *H* at one end, whereby it is held in the bars *l l'*.

The connection is made by first inserting the tongue horizontally in the slot in bar *l'* until its part *n* rests in said slot, next turning the part *n'* at an incline to pass through the slot in brace *k*, and then again turning it horizontally and inserting it in the slot in bar *l*. The throat *n²* will now be in the slot in brace *k*, and the parts *n* and *n'* will rest in the slots in bars *l'* and *l*, respectively, and these parts *n n'* being crosswise of the brace, as indicated in Fig. 3, it follows that the tongue *m* will be securely held in place. The tongue is further provided with a vertical shoulder, *n³*, abutting against the bar *l'*, to aid in keeping it steady.

The vertical movement of the seat will, through its connected brace *k*, serve to impart a horizontally-reciprocating movement to the tongue in the slotted bars *l l'*.

o is an excrement-vessel of any suitable material and shape, and of a height to stand in the casing within the downward limit of the play of the seat.

Partitions 1 2 may be erected in the casing to form a compartment therein for the vessel *o*, and said vessel may be retained against displacement therein by a spring-catch, 3. Handles *o'* are also attached to the vessel to facilitate manipulating it. This vessel is provided with a removable flanged rim or top, *p*, fitting

closely thereon. This rim is provided with a slot, q , and a slotted or forked boss, r , which receives a pivoted swinging cover or lid, s . This cover s is constructed with an arm, t , which is
 5 provided with a pin, u , which enters the fork in the tongue m , so that when said tongue is reciprocated it will carry the cover s with it, and either open or close the vessel o , according as the seat is respectively depressed, as by a person
 10 desiring to use the commode, or raised by the user in rising.

It will be observed that the vessel o is positively opened for the user automatically, and similarly closed.

15 When in use the packing e rests upon the rim p of the vessel, as indicated in dotted lines, Fig. 2, and thus is insured a gas-tight joint to prevent the escape of effluvia. The pin u is disconnected from the forked tongue, in order
 20 to permit the removal of the vessel o , by simply raising said pin in the arm t , and said pin is so connected with the cover-arm, as by a slightly upset end or a washer, as to prevent its being lost out of the arm; or the pin may
 25 be fast in this arm, and one branch of the forked tongue, as at n^4 , Fig. 6, may be hinged so that it may be turned up to permit the free egress of such pin. When so hinged the forked tongue plays on a flange, l^2 , on the bar
 30 l' , whereby the hinged branch is retained in the horizontal to embrace the pin; but said flange is cut away at l^3 to permit the hinged branch to be moved to free the pin.

It is obvious that many expedients may be
 35 adopted for connecting the tongue and vessel-cover which possess the features of easy disconnection and permanency or insurance against loss.

40 The vessel o is removable from the casing in order to permit the emptying of its contents, and it will be noticed that its cover s is in its place thereupon when so removed, so as to prevent the escape of odors. When removed the vessel alone may be used as a commode.

45 In emptying or cleaning the vessel o the rim p may be removed, so as to avoid fouling it. The vessel may be held in its compartment

by the spring 3 only, or by it and one of the handles o' , entering a notch, o^2 , in the casing, as indicated in Fig. 2.

What I claim is—

1. In a commode, the combination of a spring-seat, a removable excrement-vessel, and its swinging cover with means for detachably
 55 connecting said seat and cover, substantially as and for the purpose described.

2. An excrement-vessel for commodes, provided with a slotted flanged rim to receive the cover, a forked boss, and a swinging cover
 60 pivoted in said boss, and constructed and arranged to be connected with and disconnected from the seat of the commode, substantially as and for the purpose specified.

3. In a commode, the combination of a movable seat, a slotted brace connected therewith,
 65 and stationary guideways with an excrement-vessel, a swinging cover therefor, and a tongue to connect said brace, guideways, and cover, whereby, by the vertical movement of the seat, the cover is swung off and on the excrement-
 70 vessel, substantially as and for the purpose described.

4. In a commode, the combination of a movable seat, a slotted brace, k , guideways $l l'$, and a forked tongue, m , with an excrement-vessel
 75 having a pivoted cover provided with a connecting-pin, substantially as specified.

5. In a commode, a removable excrement-vessel provided with handles, in combination with a notched casing and a catch, substan-
 80 tially as specified.

6. In a commode, a movable spring-seat, in combination with a connected slotted brace, k , fixed guideways $l l'$, and a tongue reciprocating in said guideways for operating the
 85 cover of the excrement-vessel, substantially as described.

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

GEO. K. HEIST.

Witnesses:

T. T. WALL,
 J. R. MESMER.