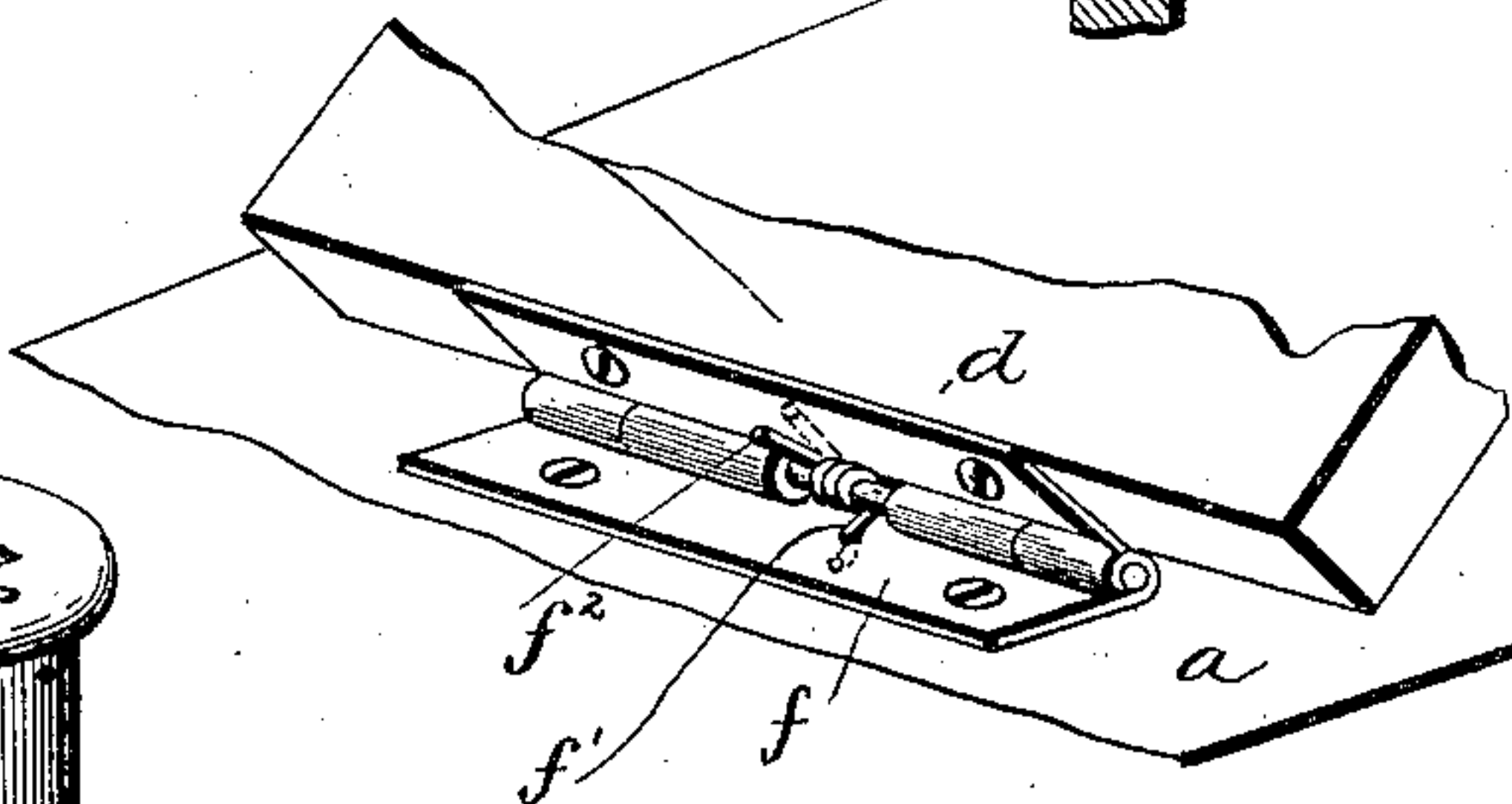
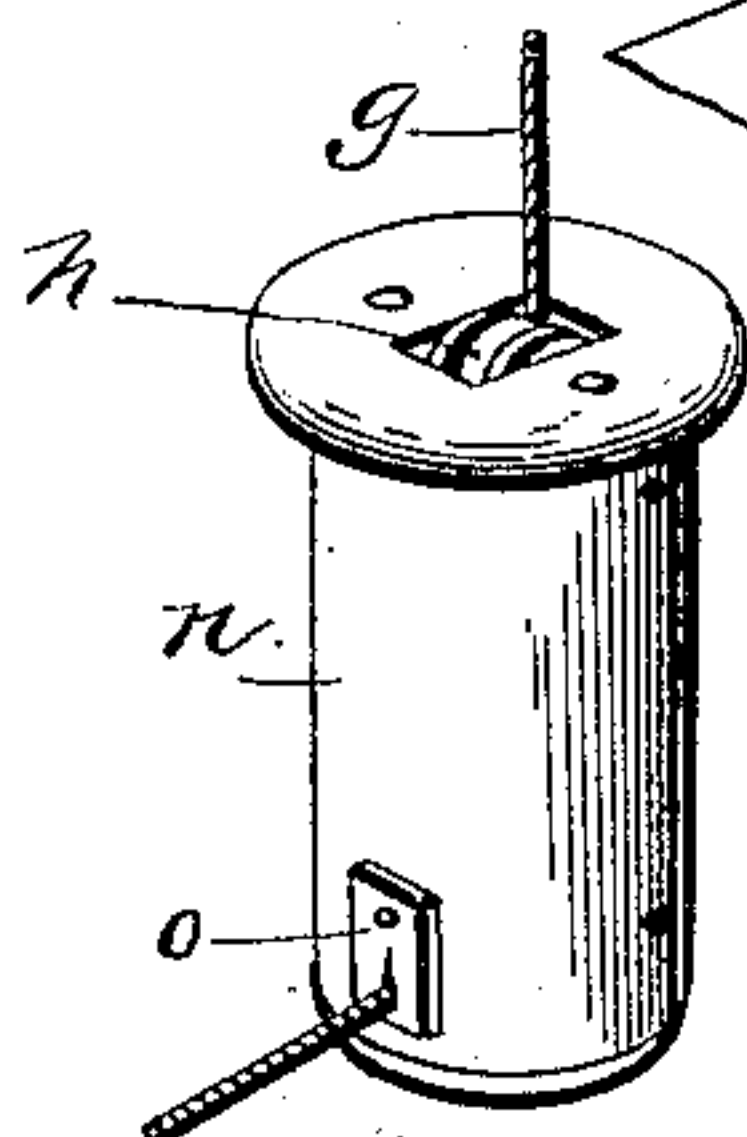
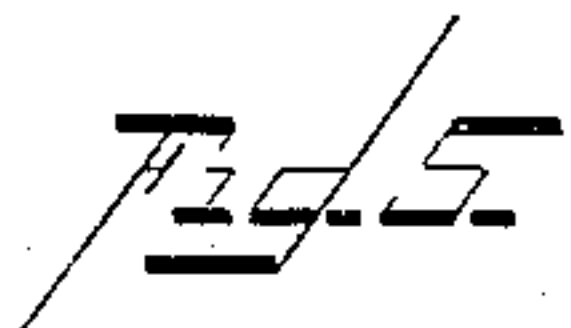
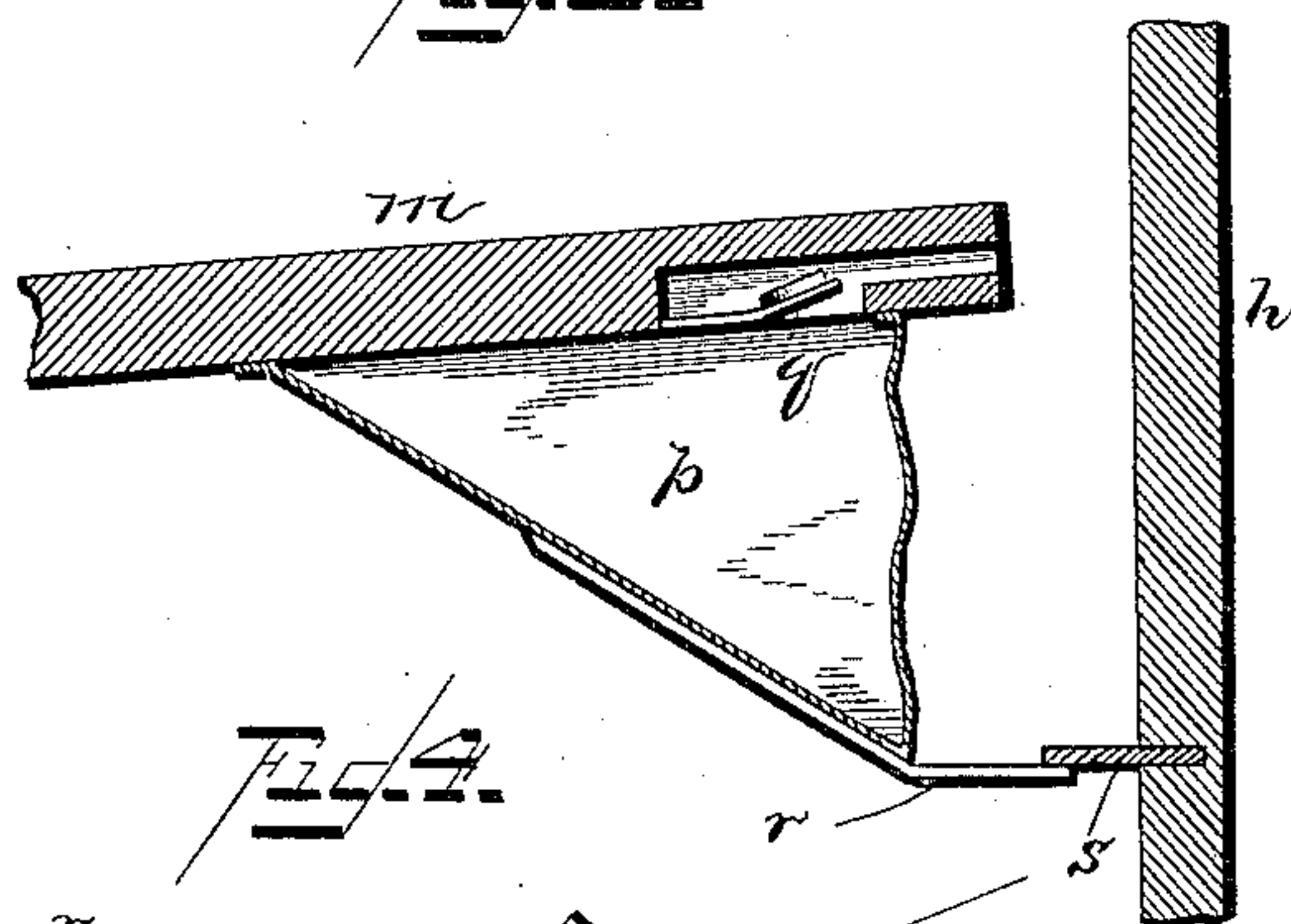
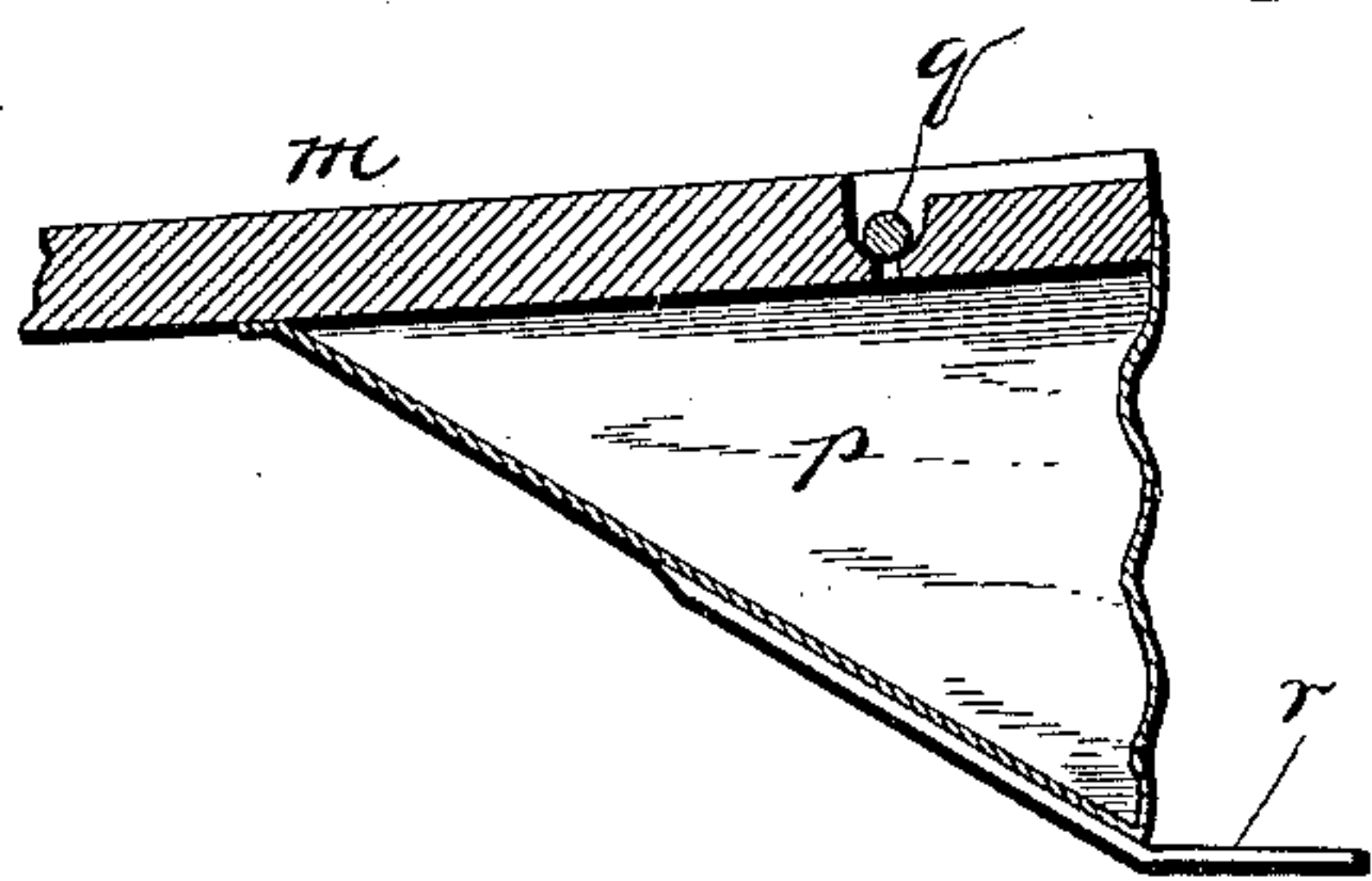
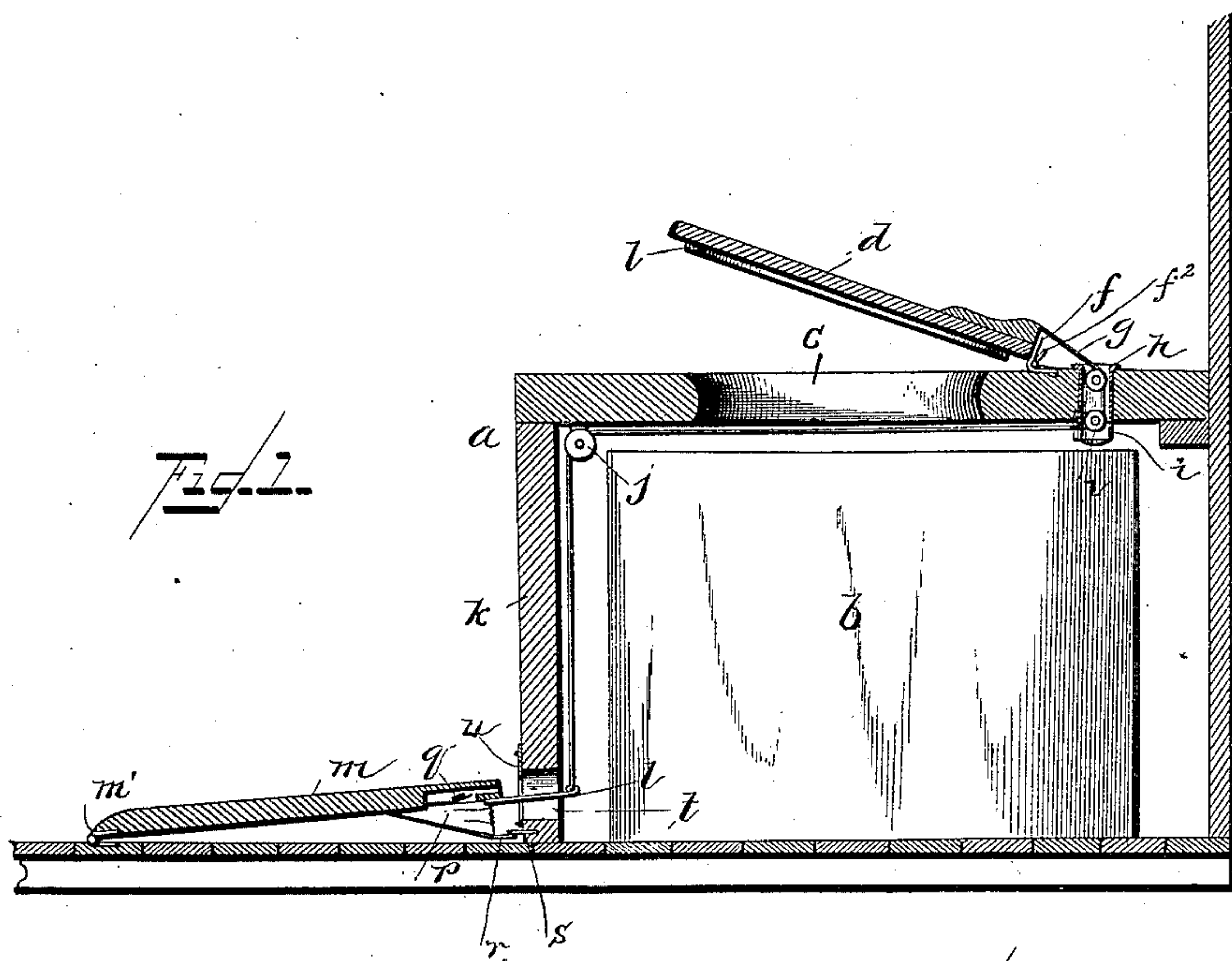


(No Model.)

J. A. KALEY.  
PRIVY SEAT.

No. 428,001.

Patented May 13, 1890.



*WITNESSES*

E. A. Finnerell.  
J. M. Copenhaver.

*INVENTOR*

John A. Kaley  
by Wm. V. Finckel  
his Attorney



# UNITED STATES PATENT OFFICE.

JOHN A. KALEY, OF CARSON CITY, MICHIGAN.

## PRIVY-SEAT.

SPECIFICATION forming part of Letters Patent No. 428,001, dated May 13, 1890.

Application filed December 11, 1889. Serial No. 333,327. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. KALEY, a citizen of the United States, residing at Carson City, in the county of Montcalm and State of Michigan, have invented a certain new and useful Improvement in Privy-Seats, of which the following is a full, clear, and exact description.

This invention relates to means for operating the cover or lid of the seat-hole in an ordinary box or pit privy, a water-closet, earth-closet, or other like apparatus wherever used.

The invention consists in a hinged cover or lid connected with a moving platform upon which a person must needs stand in order to reach the seat, and whereby the lid is raised, combined with automatic devices for lowering the lid without noise, as I will proceed now to set forth, and finally claim.

In the accompanying drawings, in the several figures of which like parts are similarly designated, Figure 1 is a vertical section showing my invention applied to a box-privy. Fig. 2 is a sectional detail; Fig. 3, a section of a modified form of bellows-valve; Fig. 4, a perspective view of the spring-hinge, and Fig. 5 a perspective view of a stench-tight pulley-box for the lid.

The seat *a* may be of usual construction and adapted to receive a box *b* or be erected over a pit or receive a chamber-vessel.

*c* is the hole, and *d* is a cover for the hole. The cover is provided with a strip *e* of felt or other soft or yielding material which fits around the hole when the lid is closed and prevents the escape of stench, and which also renders the closing of the lid noiseless. The lid is secured to the seat by a suitable number of hinges *f*, and I prefer to use spring-hinges—such, for example, as shown in Figs. 1 and 4, which operate to throw forward the raised lid to a point beyond the center of gravity and so close it. In the example of spring-hinge shown the spring *f'* is coiled about the pin of the hinge, and one end is made fast to the hinge, while the other end *f''* is free to act upon the lid when it is in or in the rear of a vertical plane, and when the lid passes forward of the vertical plane the free end of the spring becomes inert. I do not confine the invention, however, to a spring-hinge for the lid, or indeed to any kind of hinge or to

any particular kind of spring. A cord, chain, or other flexible connection *g* is attached by one end to the hinged end of the lid, and extends thence over pulleys *h i* to and beneath the seat, and thence forward under the seat to a pulley *j*, and thence downward along the riser *k* to a projection *l* of the trap or platform *m*, so that by depressing the platform the cover will be raised, and by allowing the platform to rise the lid will fall. The pulleys *h* and *i* are arranged in a casing *n*, whereby they may be applied to the seat by boring a single hole in it, thus decreasing stench-escapes; and the opening in the bottom of this casing for the passage of the connection *g* is protected against escape of stench by means of a rubber or other flexible covering *o*. Instead of a round casing there may be used a casing of other shape, and instead of two pulleys in the casing only one may be used.

The platform or trap *m* is pivoted to the flooring, as at *m'*, by pins, screws, hinges, or other mediums, and under its free end is arranged a bellows or other equivalent resilient or yielding medium *p*, which will retard the rise of the platform, so as to retard the fall of the lid, and hence prevent its slamming.

In the case of the bellows, it may be made with a flap-valve *q*, venting through the platform, or with a ball-valve, Fig. 3, similarly venting. The bellows is provided with a finger *r*, which upon the release and rising of the platform and the descent of the lid or cover catches against a projection *s* on the riser to insure the retarding of the rising of the platform, and so effect the easy and noiseless closing of the lid, or a strap may be used for the same purpose.

The projection *l* of the platform plays in a slot *t* in the riser, and this slot is covered with a piece of flexible stuff *u* to prevent the escape of stench.

Instead of arranging the bellows or its equivalent under the platform, it might be arranged under the lid or interposed in the connection *g*.

What I claim is—

1. The combination, with a privy or water-closet seat, of the hinged lid or cover, a hinged platform or trap, a flexible connection between the lid and platform, and a resilient medium, such as a bellows, interposed be-

tween the trap and cover, and having an arresting device, such as the finger *r* and projection *s*, to intercept its movement before the cover closes to arrest the sudden and undue descent of the cover or lid, substantially as described.

2. The combination, with a privy or water-closet seat, of a cover, a spring-hinge normally acting to throw the lid past its center of gravity and so start its fall, a platform, a cord and pulleys supporting it for connecting the platform and lid, a bellows arranged be-

neath the platform, a finger *r* on the bellows, and a fixed stop *s*, engaged by said finger, just before the lid completes its fall, thereby to ease the descent of the lid, substantially as described.

In testimony whereof I have hereunto set my hand this 25th day of November, A. D. 1889.

JOHN A. KALEY.

Witnesses:

Z. B. HOYT,

C. H. HOYT.