

(No Model.)

C. A. PFENNING.
BUTTON MACHINE.

No. 350,211.

Patented Oct. 5, 1886.

Fig. 1.

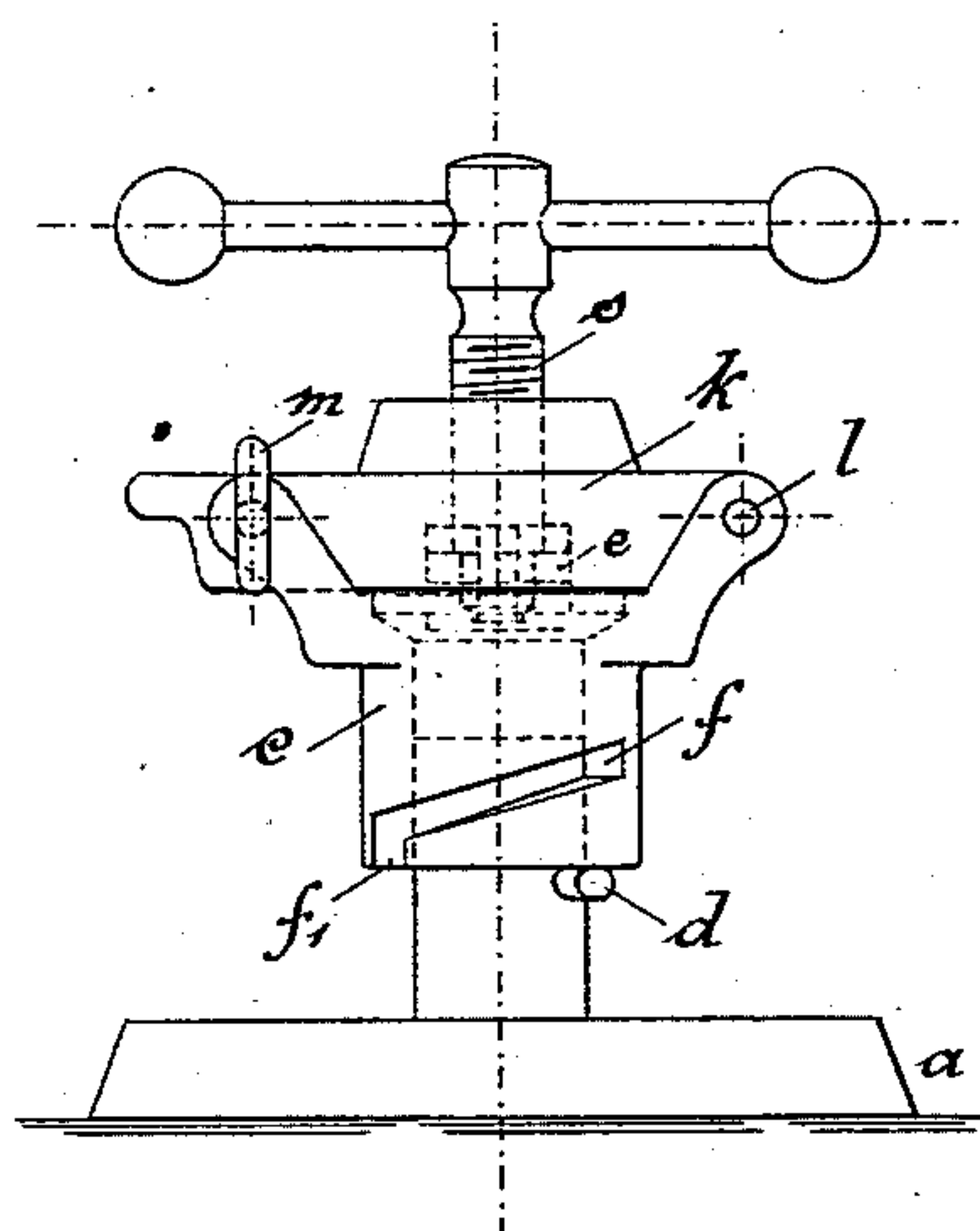


Fig. 2.

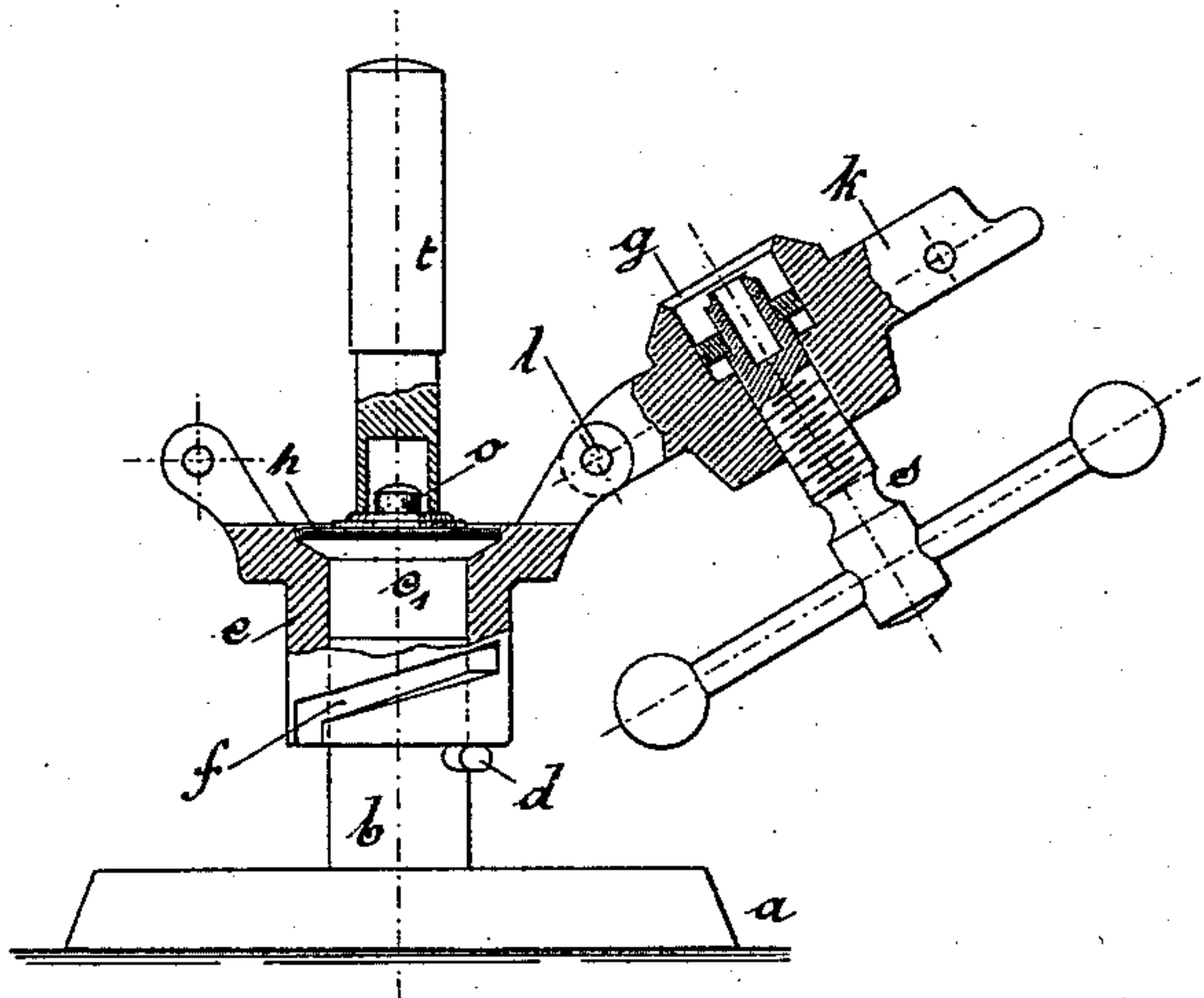


Fig. 6.

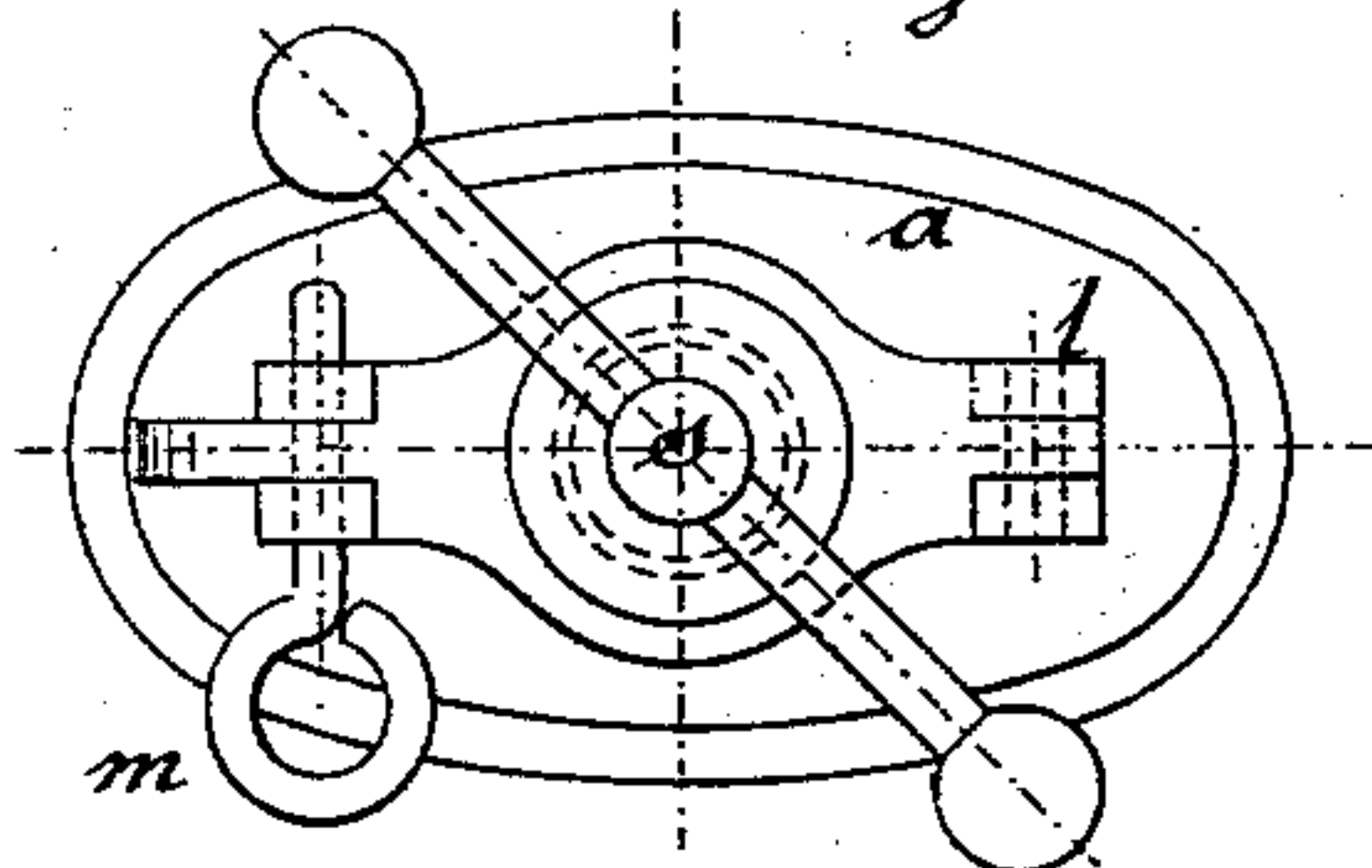


Fig. 5.

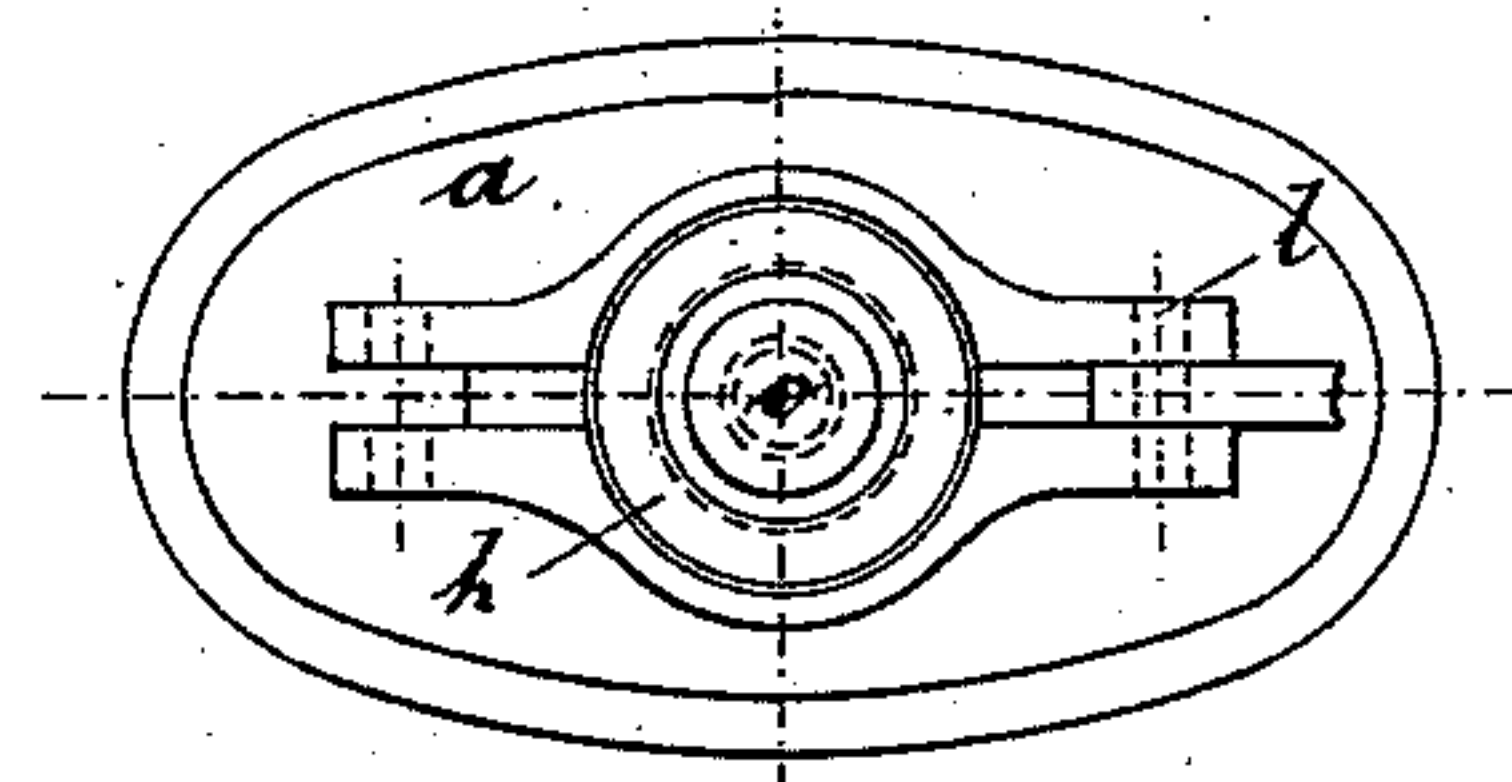


Fig. 3.

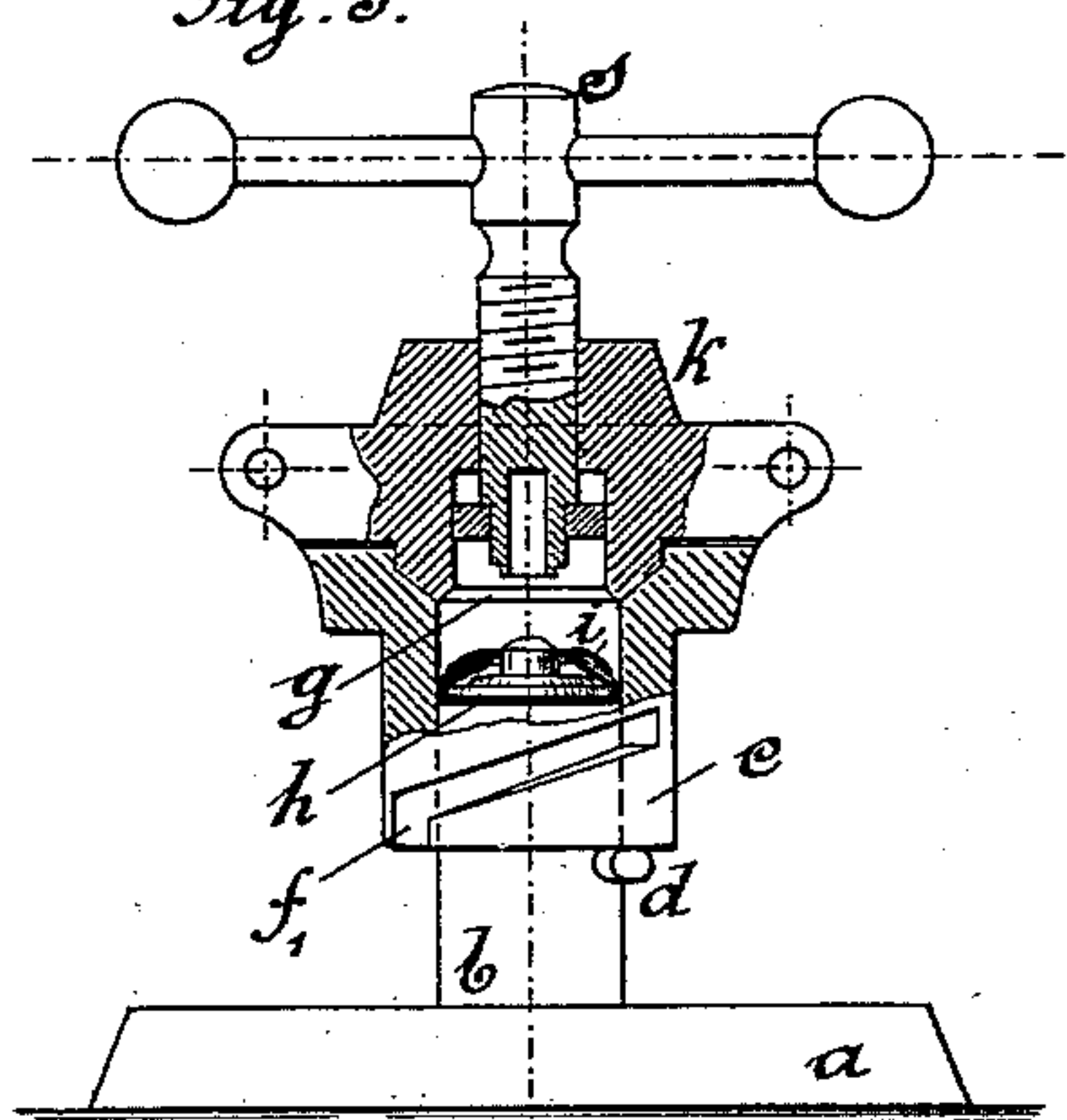
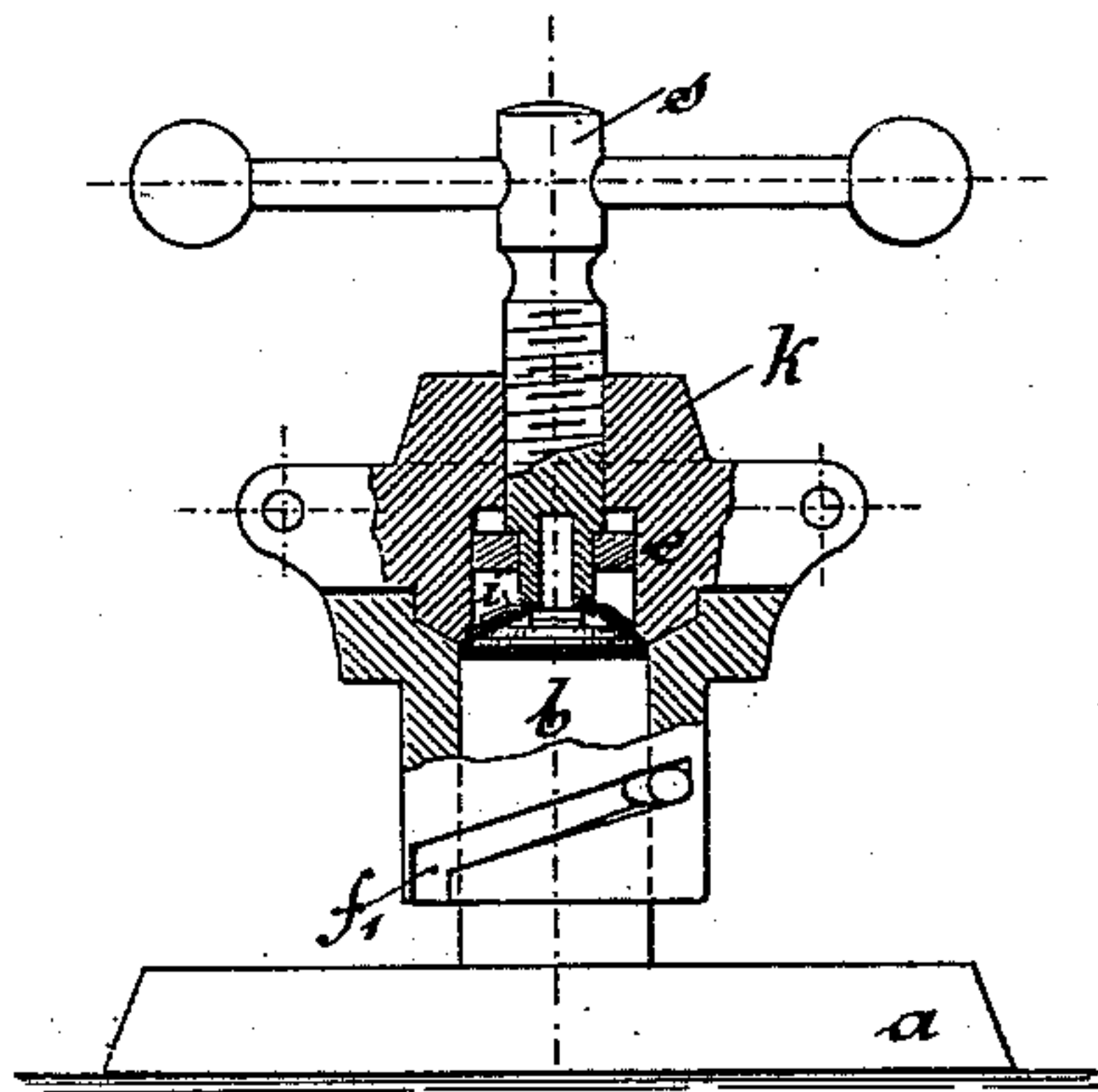


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

CARL AUGUST PFENNING, OF BARMEN-RITTERSHAUSEN, PRUSSIA,
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BUTTON-MACHINE.

SPECIFICATION forming part of Letters Patent No. 350,211, dated October 5, 1886.

Application filed April 28, 1886. Serial No. 200,457. (No model.)

To all whom it may concern:

Be it known that I, CARL AUGUST PFENNING, a subject of the German Emperor, residing at Barmen-Rittershausen, in Rhenish Prussia, Germany, have invented a new and useful Manufacture of Buttons, of which the following is a specification.

My invention relates to the manufacture of buttons with a covering or surface of cloth or stuff, and has for its purpose to allow of the use of a disk or plate for the back or under part of the button smaller than the diameter of the button, so that the latter is provided with a cloth rim. For this purpose reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved machine; Fig. 2, also a side elevation, partly in section, in which the cover *k* is shown folded back for the purpose of introducing the cloth *h* and frame of button *o* into the apparatus by means of the hand-driver *t*; Fig. 3, also a side elevation, partly in section, showing the various parts of the button ready for being fastened together; Fig. 4, also a side elevation, partly in section, showing the working parts in the position they occupy when the button is completed. Fig. 5 is a plan view of Fig. 2 with cover *k* removed. Fig. 6 is a plan view of Fig. 1.

For the purpose of making the buttons, a core, *b*, is fixed to a foot-plate, *a*. This core is provided with a pin, *d*, adapted to be introduced into and slide in the helical slot *ff'* of a tube, *c*, as heretofore used by F. L. Niedermeyer, of Germany, in making buttons. To the top of this tube *c* is secured in any suitable manner, but preferably as shown in the drawings, a cover or flap, *k*, adapted to move on a pivot, *l*, or otherwise, and be secured over the tube *c* by a pin, *m*, or any other suitable device. The cover *k* is provided with a cylindrical space of less diameter than the inner diameter, *c'*, of the tube *c*, and so placed as to rest centrally on the latter. The rim *g* of this recess may, if required, be slightly beveled off to meet the rim of the tube *c'*.

Passing through the cover *k*, and moving vertically and centrally with regard to the

rim *g*, is adapted to slide or screw the pressing spindle or rod *s*, the lower extremity of which is adapted in shape to enter the tube *o* of the button and bend the side thereof outward and downward over the back plate, to secure thereby the various parts of the button.

In order to produce a button with cloth face and rim by means of this machine a circular piece, *h*, Fig. 2, of the cloth is first introduced into the space *c'*. The frame of the button is laid upon this piece of cloth and pressed therewith by means of the hand-driver *t* into the space *c'* of the tube, on to the upper surface of the core *b*, whereby the cloth rim is bent round the upper part, *o*, of the button. The driver *t* is then removed, and the back plate, *i*, of the button introduced. The cover, with rim *g*, is then placed over the opening *c'* and secured by the pin *m*. The pin *d*, now introduced into the slot *ff'*, is guided upward in the slot *f* by turning the tube *c*. Thus the button lying on the core is moved upward and pressed with its outer part against the rim *g*, whereby the turned-up edge of the cloth is strained and pressed over the upper part of the button. Subsequently, by turning down the spindle *s*, the side of the tube *o* is bent outward over the back plate, *i*, of the button, and a firm connection thereby made between the various parts of the button.

I am aware that machines have heretofore been made by Niedermeyer for manufacturing buttons containing a core, *b*, in combination with a foot-plate, *a*, pin *d*, tube *c*, and slit *ff'*. I therefore do not claim these parts; but

What I claim, and desire to secure by Letters Patent, is—

1. In machinery for producing cloth buttons, the combination of a core, *b*, foot-plate *a*, pin *d*, tube *c*, and slot *ff'*, with the cover *k*, adapted to be placed over the orifice of the tube *c*, containing a cylindrical recess of somewhat smaller diameter than the diameter of the interior of the tube *c*, and adapted to form thereby the rim *g* above the tube *c*, together with the pressing-spindle *s*, adapted to move vertically and centrally with regard to

the said rim *g*, and to bend down the rim of the tube *o* of the button, the whole substantially as described and illustrated.

2. The cover *k*, containing the vertical pressing-spindle *s*, and provided also with the rim *g*, substantially as and for the purpose described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CARL AUGUST PFENNING.

Witnesses:

GEO. KOCH,
ERNST THÜRGEN.