

(No Model.)

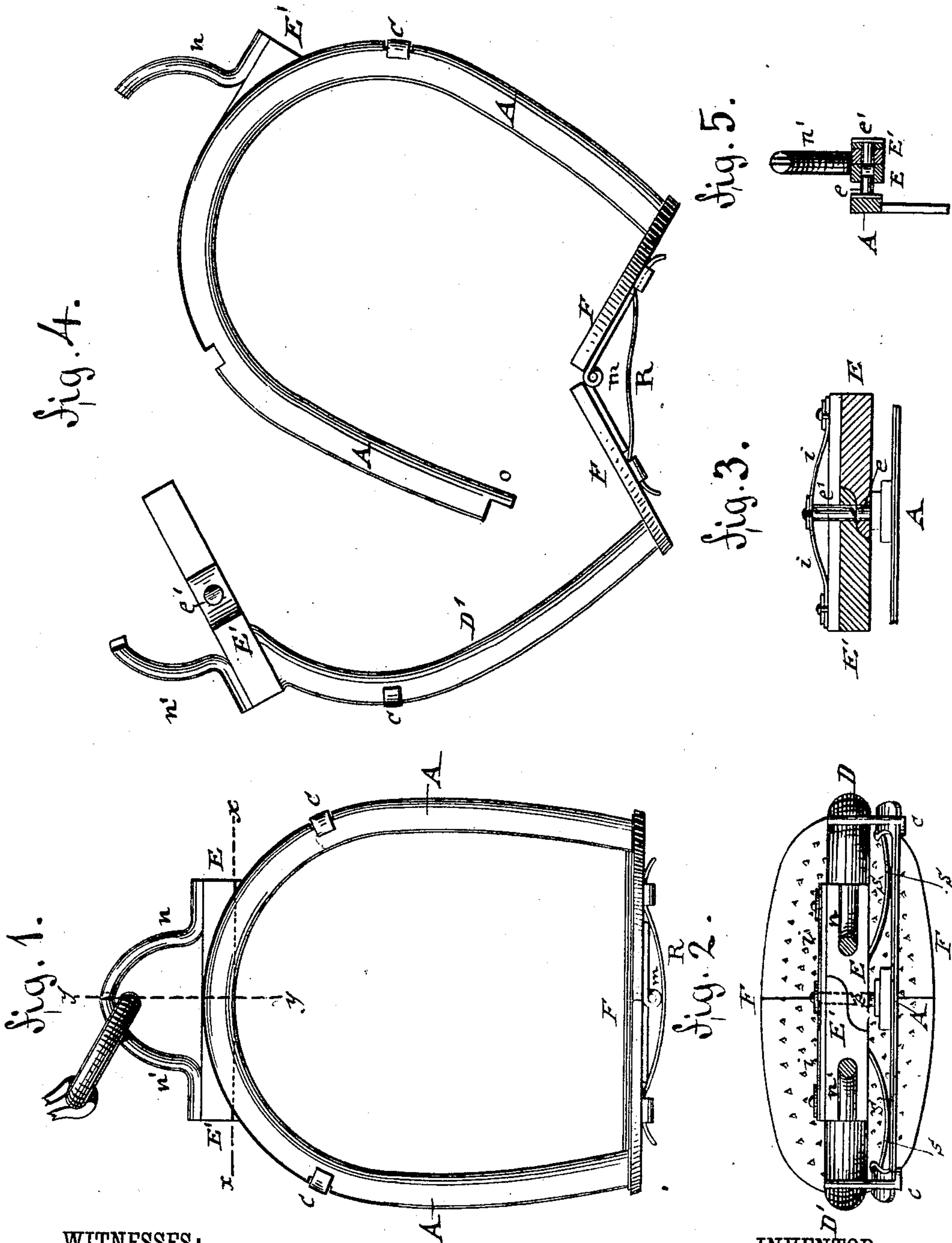
2 Sheets—Sheet 1.

F. LEHMANN.

STIRRUP.

No. 300,986.

Patented June 24, 1884.



WITNESSES:

*For. H. Rosenbaum.*  
*Henry Mann*

INVENTOR

*Fritz Lehmann*  
BY *Joseph P. Pagenier*  
ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

F. LEHMANN.

STIRRUP.

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fig. 8.

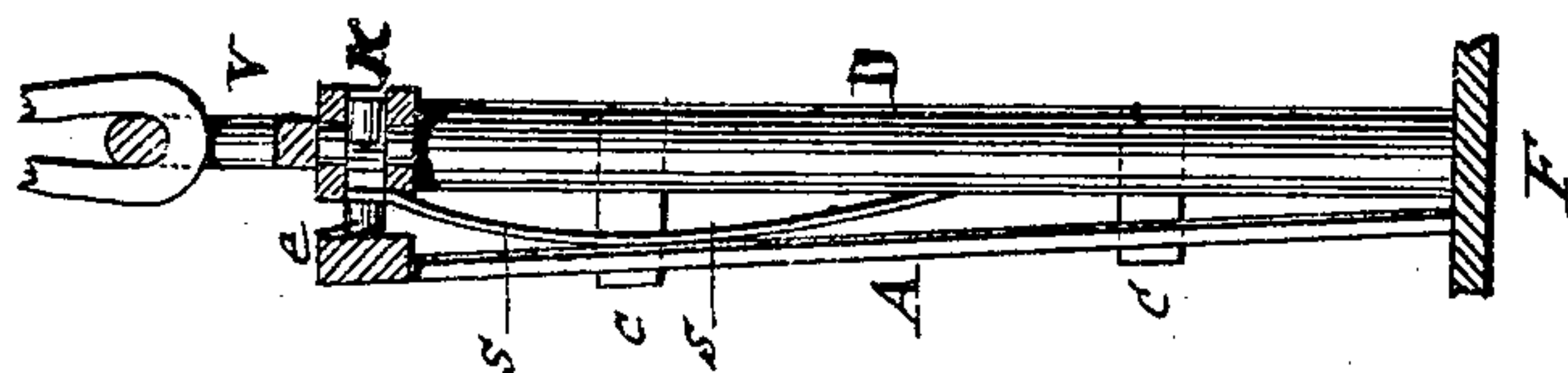


fig. 11.

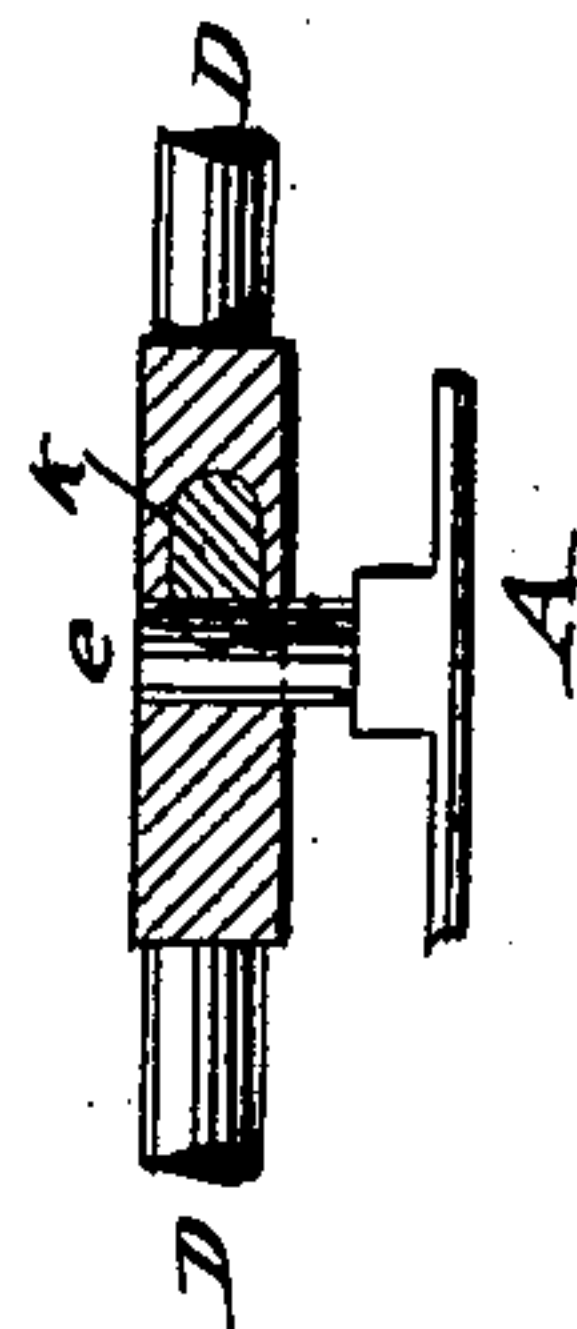


fig. 7.

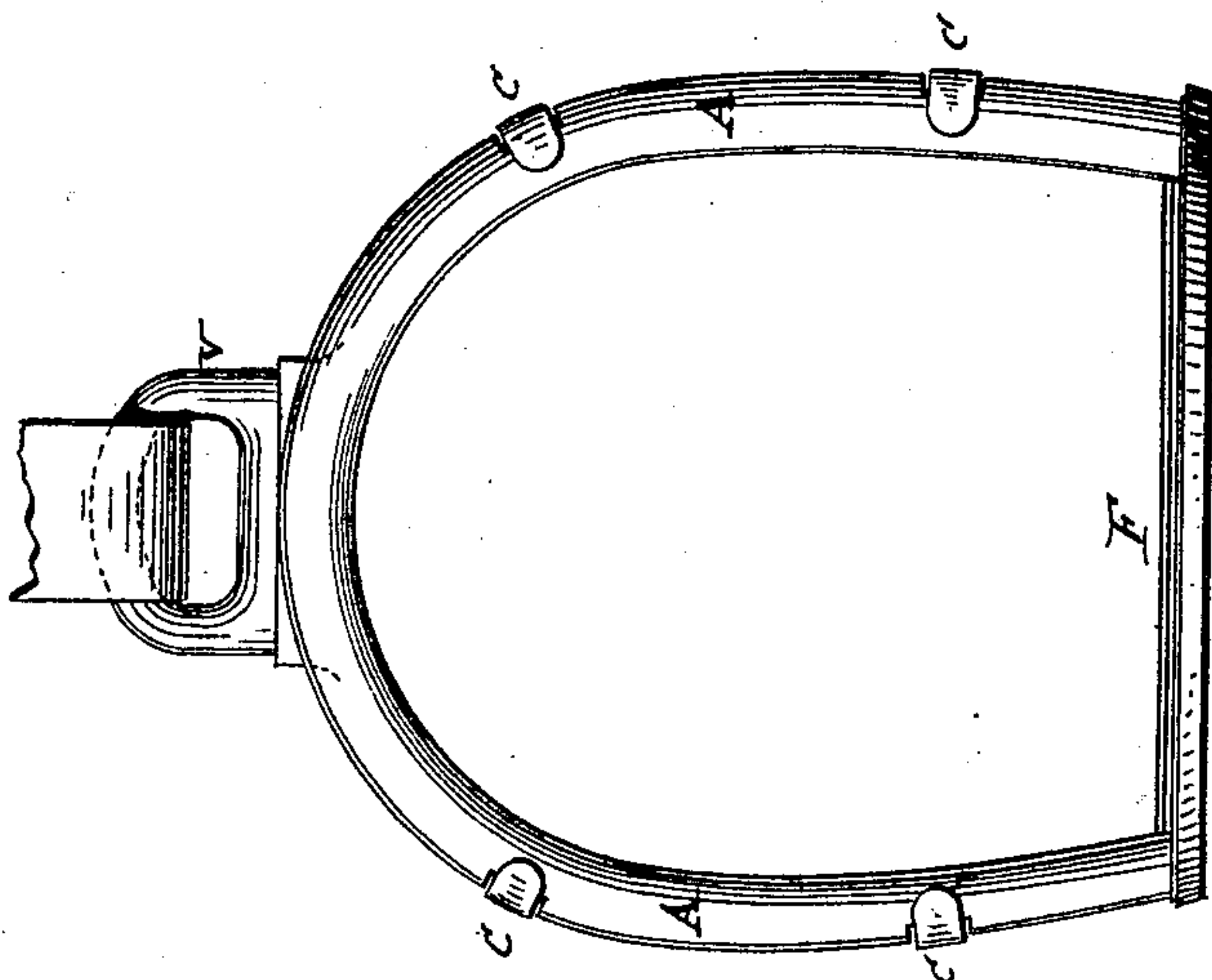


fig. 10.

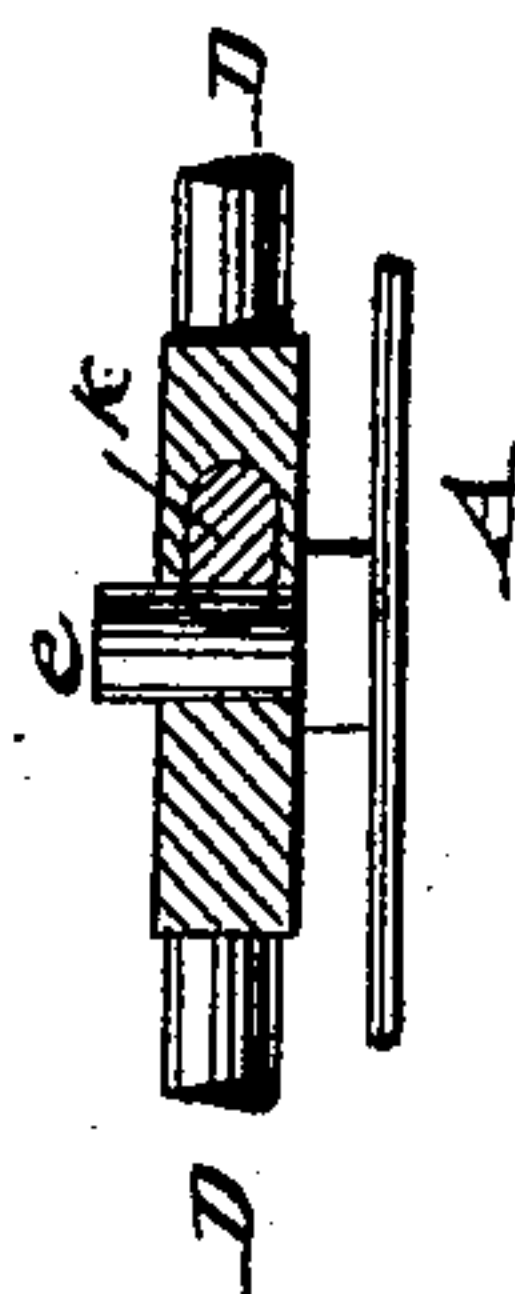


fig. 6.

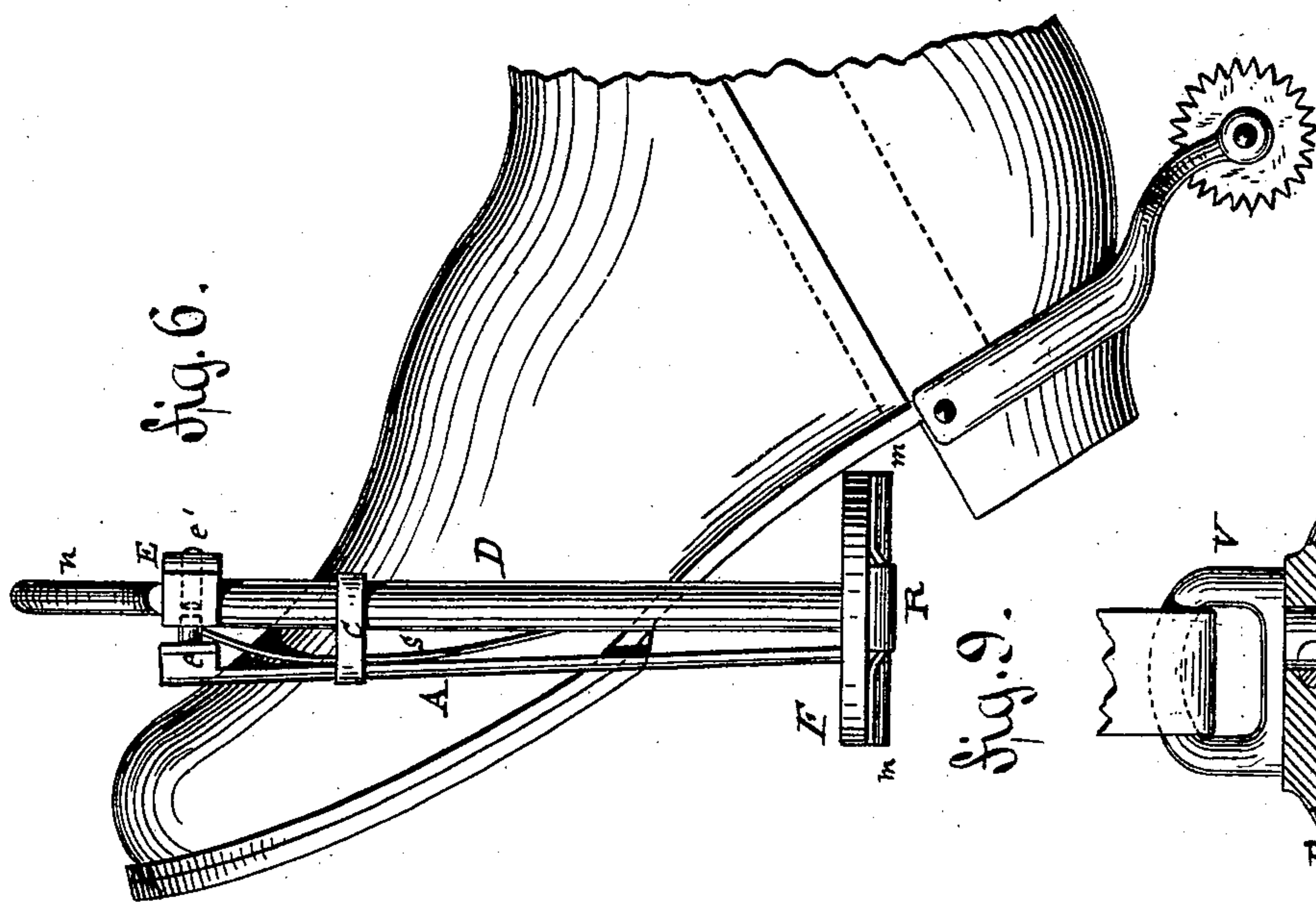
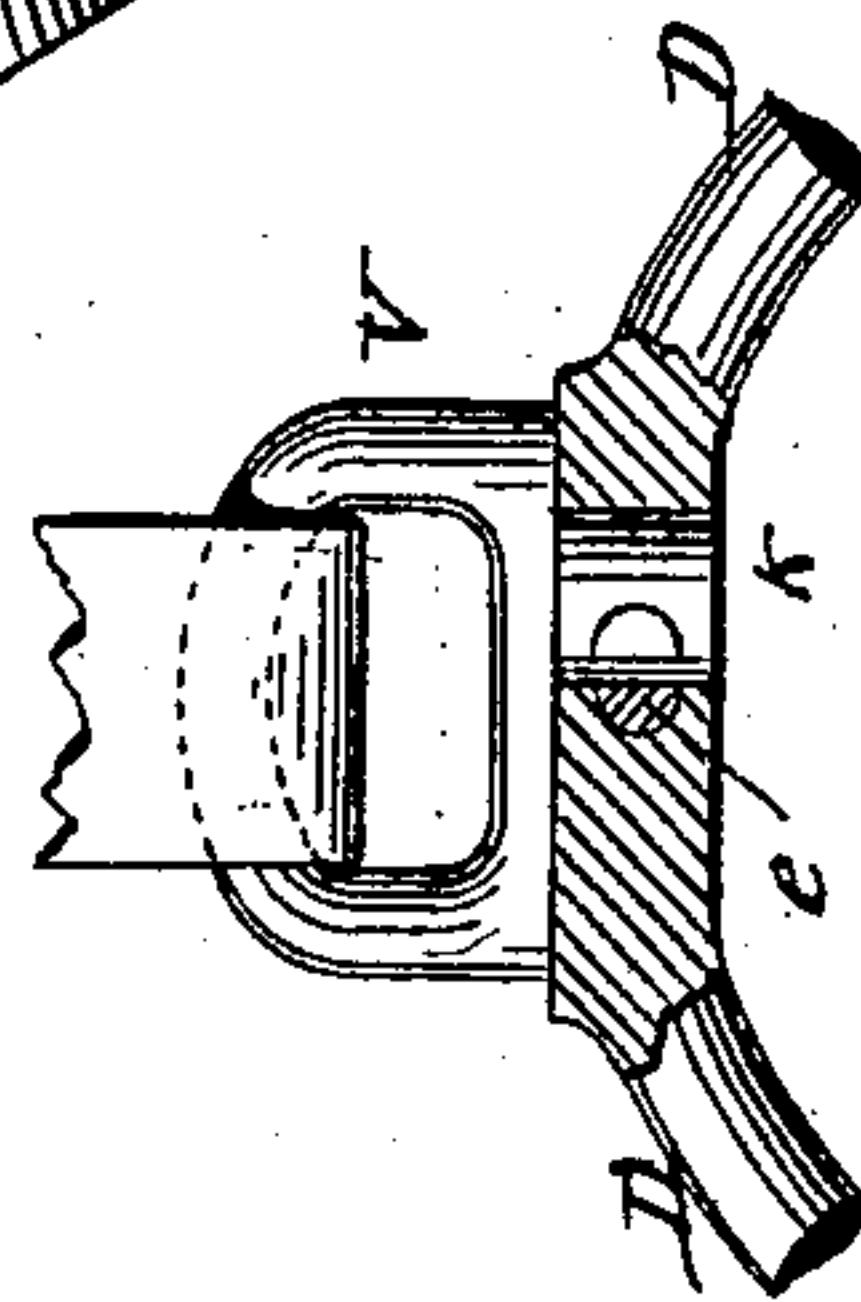


fig. 9.



WITNESSES:

Jos. H. Rosenbaum.  
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# UNITED STATES PATENT OFFICE.

FRITZ LEHMANN, OF TANGERHÜTTE, NEAR MAGDEBURG, PRUSSIA,  
GERMANY.

## STIRRUP.

SPECIFICATION forming part of Letters Patent No. 300,986, dated June 24, 1884.

Application filed November 6, 1883. (No model.) Patented in Belgium September 30, 1882, No. 58,985; in France November 27, 1882, No. 150,937, and in Germany February 21, 1883, No. 21,106.

*To all whom it may concern:*

Be it known that I, FRITZ LEHMANN, of  
Tangerhütte, near Magdeburg, in the King-  
dom of Prussia and Empire of Germany, have  
5 invented certain new and useful Improvements  
in Stirrups, (which have been heretofore pat-  
ented to me by the Government of Germany  
under date of February 21, 1883, No. 21,106;  
by the Government of Belgium under date of  
10 September 30, 1882, No. 58,985, and by the  
Government of France under date of Novem-  
ber 27, 1882, No. 150,937,) of which the fol-  
lowing is a specification.

The object of my invention is to make a stir-  
15 rup which will protect the rider against being  
caught in the stirrup in falling and being  
dragged on the ground by the horse.

The invention consists in so arranging the  
stirrup that as soon as the rider's foot is caught  
20 in it in falling it will become disengaged from  
the strap and from the foot by providing the  
stirrup with suitable releasing mechanisms,  
which will be fully described hereinafter.

I attain these objects by the arrangement  
25 illustrated in the accompanying drawings, in  
which similar letters refer to similar parts  
throughout the several views.

Figure 1 represents a front elevation of the  
stirrup when locked; Fig. 2, a top view with  
30 the eye for the strap in section; Fig. 3, a hori-  
zontal section on line *x x*, Fig. 1; Fig. 4, a front  
elevation of the stirrup when released; Fig. 5,  
a vertical transverse section on line *y y*, Fig. 1;  
Fig. 6, a side view showing the foot in the act  
35 of releasing the stirrup, and Figs. 7 to 11 rep-  
resent a modified construction of the inven-  
tion.

The body of the stirrup, Figs. 1 and 2, is  
formed of two symmetrical sections, *D D'*,  
40 which are hinged at the center point, *m*, of the  
stirrup-base *F*, and locked at the top by a  
pin, *e*, passing into the overlapping parts *E*  
*E'* at the upper ends of the stirrup-sections *D*  
*D'*. Each half *D* of the stirrup carries one-  
45 half of the eye for the strap, which halves are  
marked, respectively, *n* and *n'* in the draw-  
ings. A strong spring, *R*, that is attached to  
the under side of the centrally-hinged base-  
sections of the stirrup, forces the two halves

of the stirrup apart at the moment when the 50  
pin *e* at the upper end of the face-frame *A*  
releases the pin *e'*. The face-frame *A* is made  
in the shape of a horseshoe, and is inserted by  
its end pins, *o*, into corresponding holes in the  
base-plate.

Between the stirrup-sections *D D'* and the 55  
sides of the face-frame *A* are interposed  
springs *s s*, which force the frame and stir-  
rup apart until held by the stops *c c*, which are  
fastened to the sections *D D'*, and fit into cor- 60  
responding notches of the face-frame *A*. The  
pin *e* is firmly attached to the upper part of  
the face-frame *A*, and fits into a hole in the  
plate *E*. The spring *i* is attached to the rear  
of the plate *E'*, and presses the pin *e'* through 65  
the hole of the plate *E'*, and far enough into  
the hole of the plate *E* to lock the two halves  
of the stirrup together. When the pin *e* of  
frame *A* is pushed in, it forces the pin *e'* back  
so that it releases the plate *E*, and the halves 70  
of the stirrup come apart. When the stir-  
rup is in use, the face-frame *A* is held away  
from the body of the stirrup by the springs  
*s s*, and thus the pin *e* is in a position which  
allows the spring *i* to force the pin *e'* nearly 75  
through both plates *E E'* at the upper part  
of the stirrup, thus holding the two sections  
*n n'* of the strap-eye firmly together, as shown  
in Fig. 1. When pressure is applied to the  
face-frame *A* by the foot of the rider, as shown 80  
in Fig. 6, the pin *e*, which projects back from  
the upper end of the same in the length of  
the hole of the plate *E*, forces back the pin *e'*  
far enough to allow the two sections, *D D'*, of  
the stirrup to separate through the action of 85  
the spring *R* at the base of the stirrup, where-  
by the eye *n n'* will open, as shown in Fig. 4,  
and the stirrup be detached from the strap  
and dropped to the ground.

In the modification represented in Figs. 7 90  
to 11 the stirrup *D* and the base-plate *F* form  
one piece, to which the spring-actuated face-  
frame *A* is connected, as before described.  
The strap-eye *v* is made of a detachable  
piece, and so connected to the upper part of 95  
the stirrup *D* that when the face-frame *A* is  
pressed back by the foot of the rider the stir-  
rup becomes detached from the strap-eye and



drops to the ground. The eye *v* has an enlarged shank, *k*, fitting into a corresponding vertical perforation or socket in the top of the stirrup. The pin *e'*, attached to the upper part of the face-frame A, passes horizontally through the top of the stirrup D, the perforation for the shank *k* partially intersects with the guide-hole of the pin *e*, both the shank *k* and the pin *e* being recessed at points facing each other, so that when the face-frame A is in its normal position the shank *k* is rigidly locked by the pin *e*, which passes through the recess of the shank; but when the pin *e* is pushed in, its notch will be in line with that of the shank and allow the latter to be withdrawn. Thus, when, by the foot of the rider, the frame A is pressed in, the stirrup will detach itself from the eye and drop to the ground.

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

1. The combination of a stirrup, a spring-cushioned face-frame connected thereto, means, substantially as described, by which the stirrup is detachably connected to its strap, and means whereby the strap is released by the action of the face-frame and the stirrup dropped, substantially as set forth.

2. The combination of a stirrup having horizontal side stops, a spring-cushioned face-frame connected thereto, means whereby the stirrup is detachably connected to its strap, and means, substantially as described, secured to the face-frame, whereby the stirrup is disconnected from the strap when the face-frame

is pushed toward the stirrup, substantially as specified.

3. The combination of the stirrup-sections D D', hinged together at their base and overlapping at the top, a strap-eye formed of overlapping parts *n n'* at the spring-cushioned top of the stirrup, a spring-cushioned face-frame, A, connected to the base-plate of the stirrup and retained by side stops, *c c*, of the stirrup, a locking-pin, *e'*, passing through the overlapping top parts of the stirrup-sections, and a releasing-pin, *e*, at the upper end of the face-frame A, substantially as and for the purpose set forth.

4. The combination of the hinged and spring-actuated stirrup-sections D D', having fixed side stops, *c c*, and overlapping top parts, E E', having overlapping parts *n n'*, forming the strap-eye, a spring-cushioned face-frame, A, having a releasing-pin, *e*, at its upper part, a locking-pin, *e'*, applied to a transverse spring, *i*, of the overlapping part E', said locking-pin being in line with the releasing-pin of the face-frame, so as to unlock the overlapping parts E E' whenever the face-frame A is pressed back, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

FRITZ LEHMANN.

Witnesses:

B. ROI,

G. H. SMITH.