

(No Model.)

2 Sheets—Sheet 1.

S. FRANKEN, Jr.
POWDER DUSTER FOR CYCLES.

No. 545,475.

Patented Sept. 3, 1895.

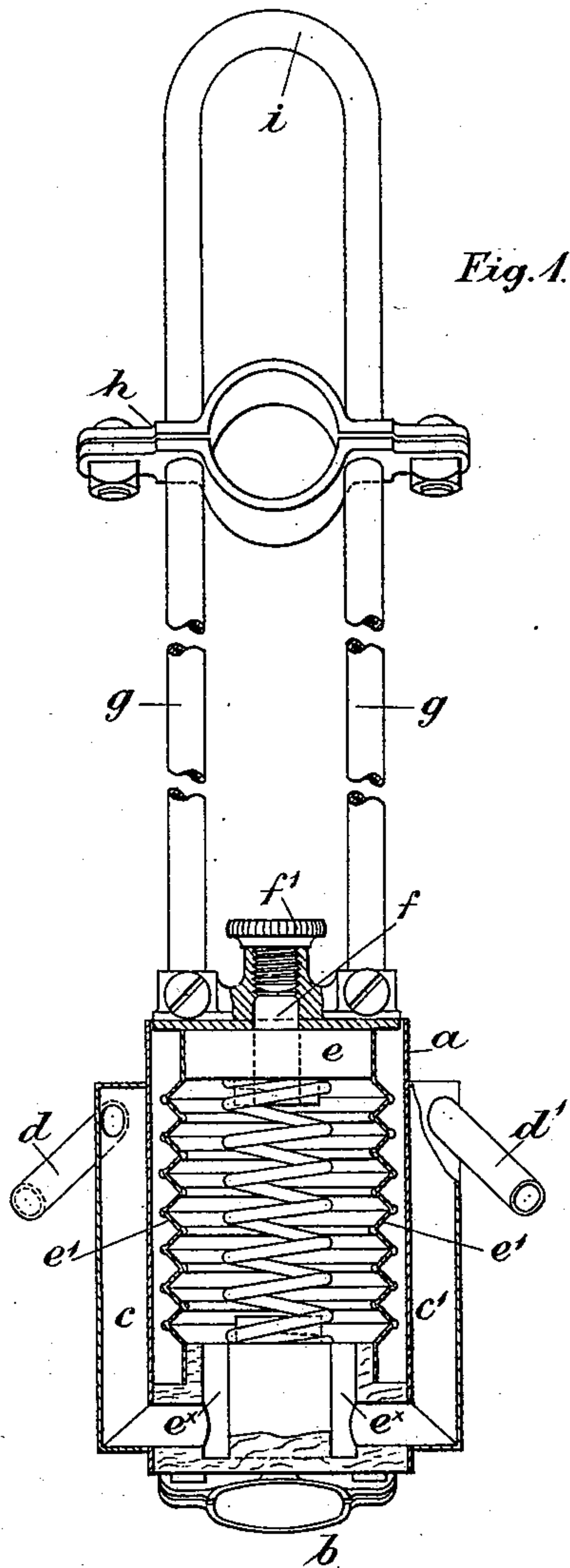


Fig. 1.

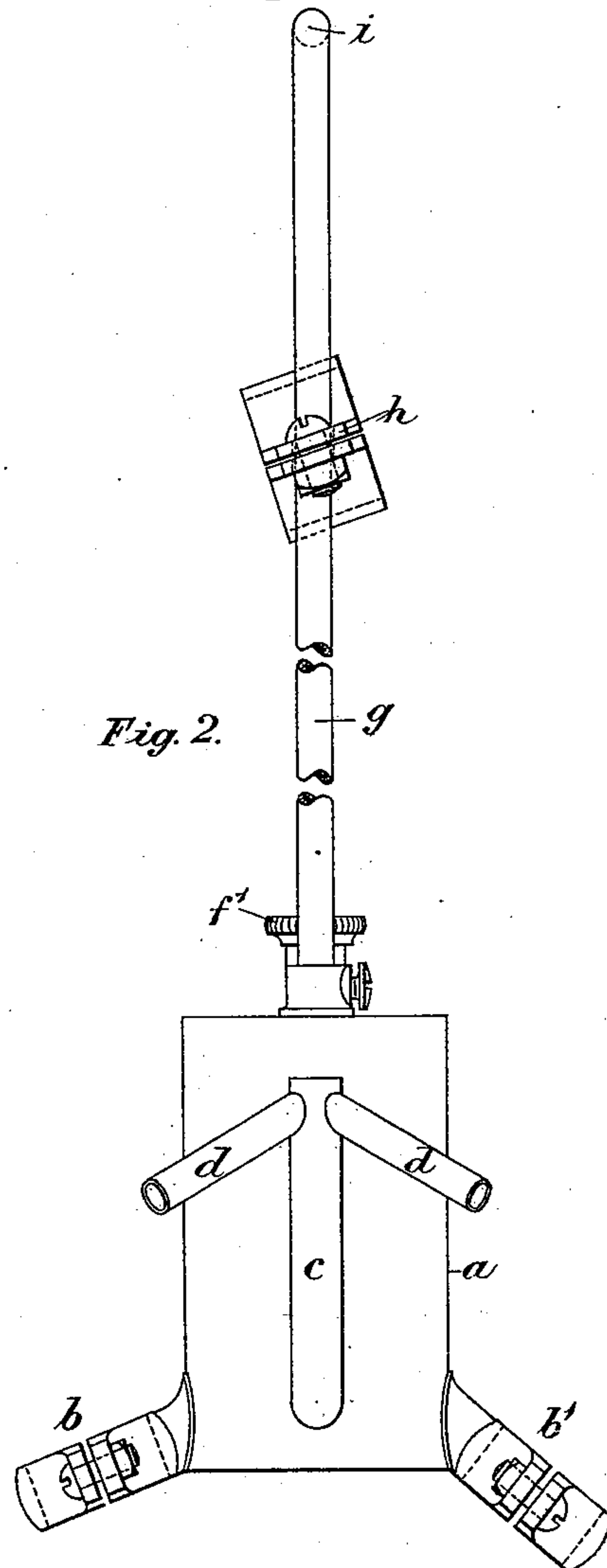


Fig. 2.

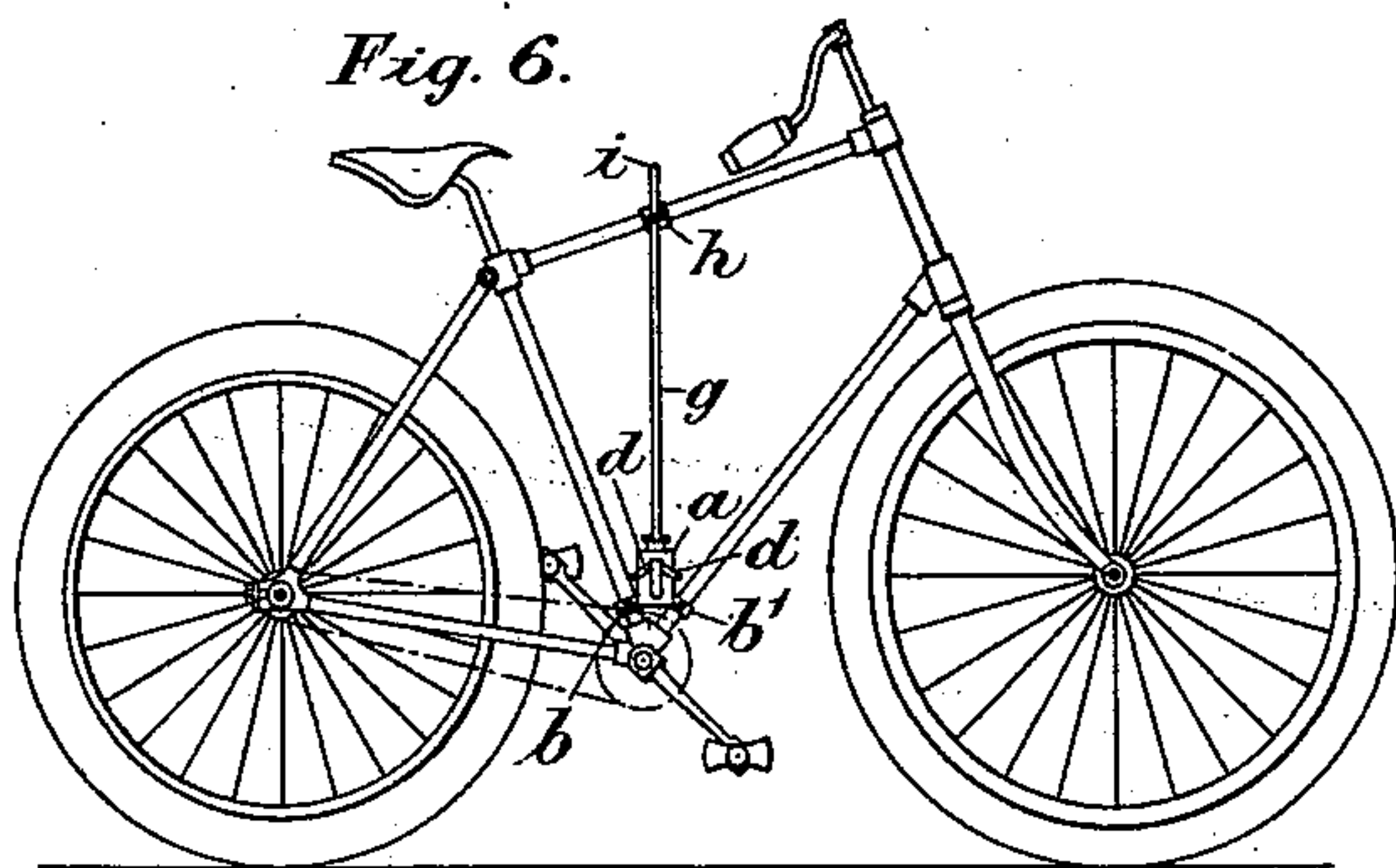


Fig. 6.

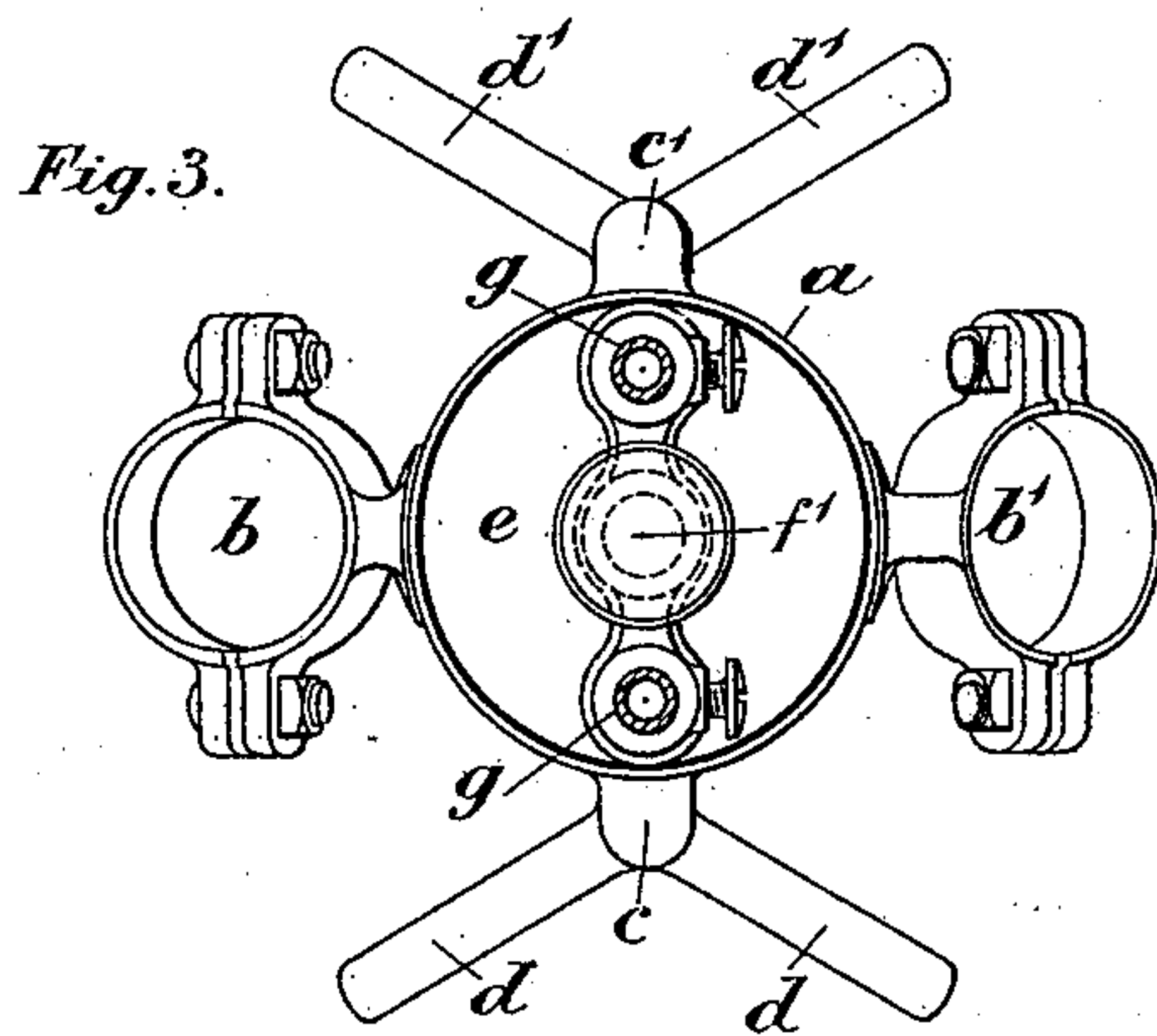


Fig. 3.

Witnesses.
August Dieckmann
Edolf Franken

Inventor.
Helig Franken

(No Model.)

2 Sheets—Sheet 2.

S. FRANKEN, Jr.
POWDER DUSTER FOR CYCLES.

No. 545,475.

Patented Sept. 3, 1895.

Fig. 4.

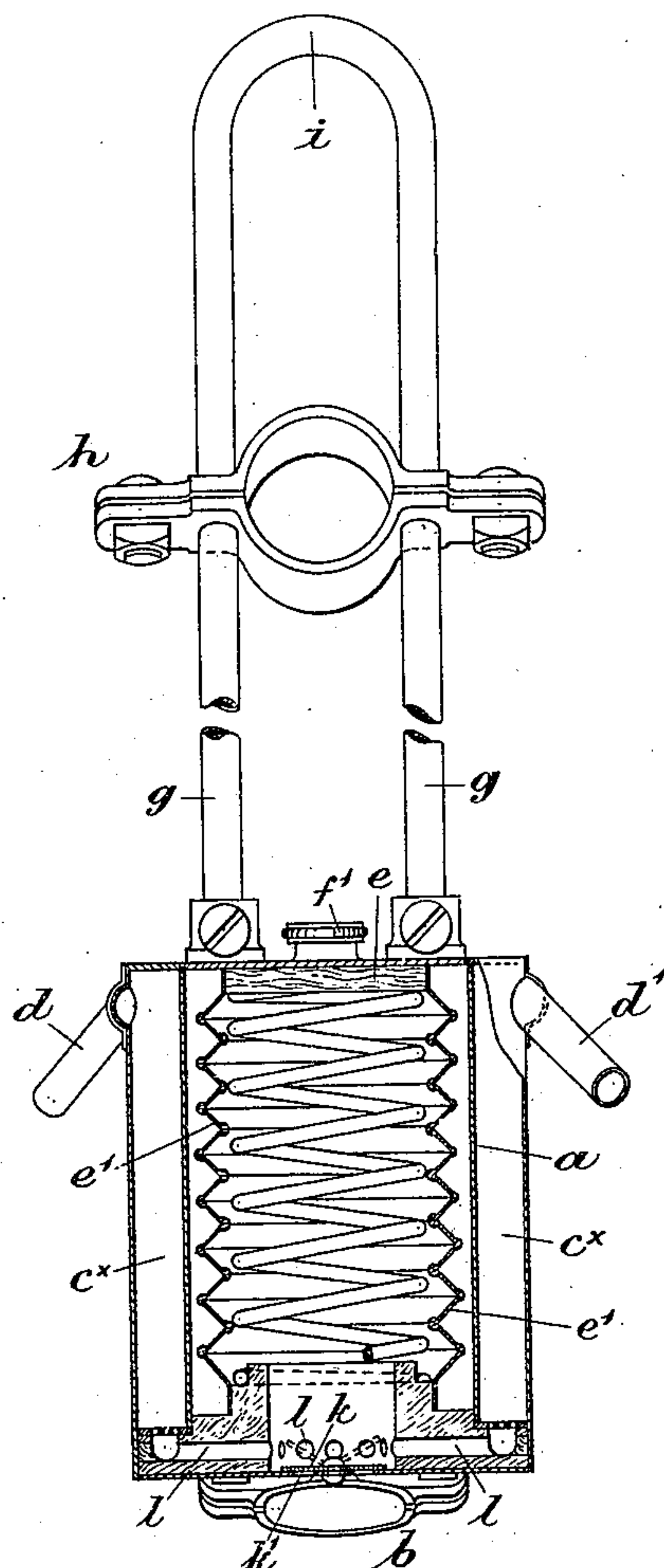
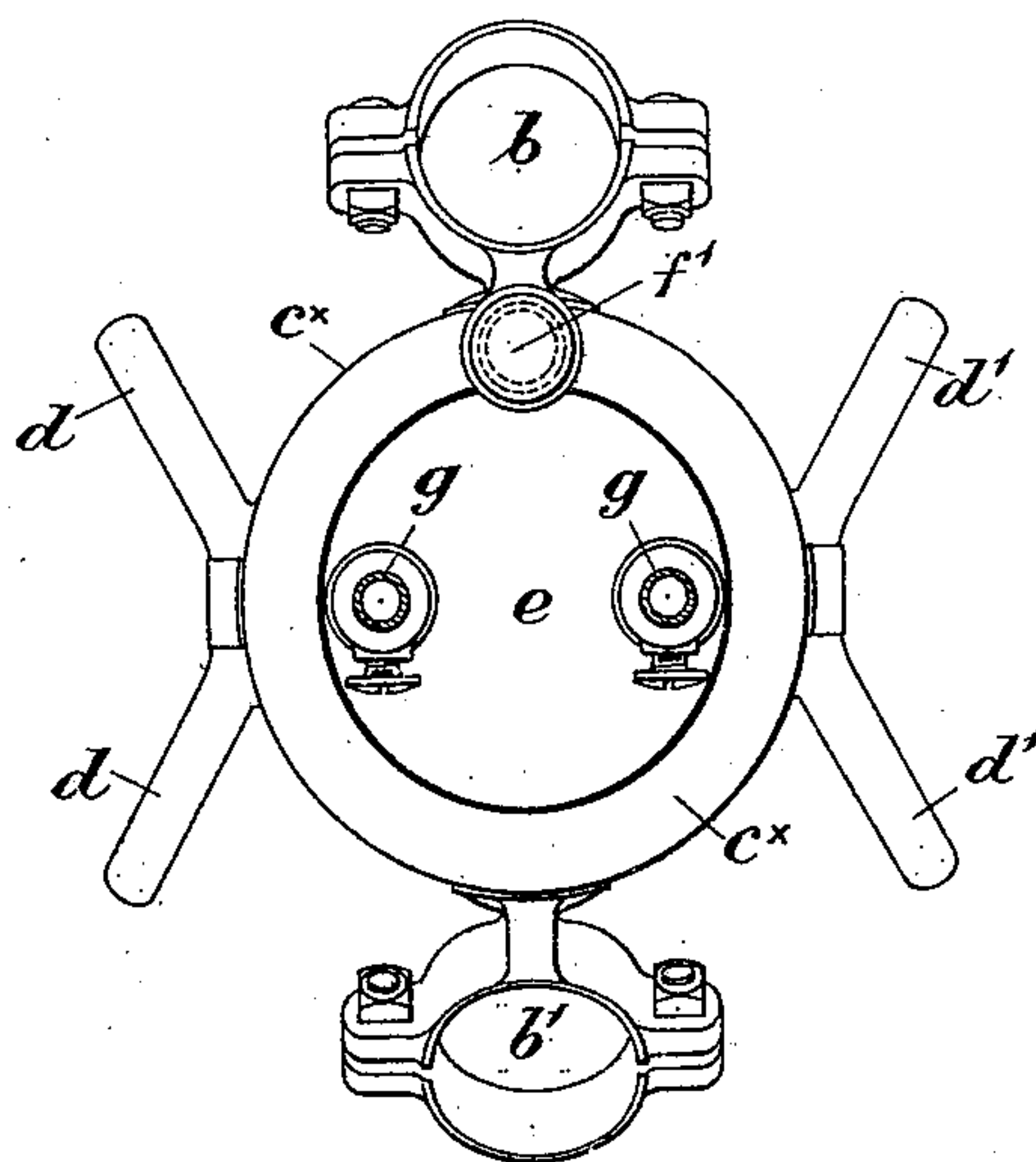


Fig. 5.



Witnesses.
August Stegmaier
Adolf Franken

Inventor.
Adolf Franken

UNITED STATES PATENT OFFICE.

SELIG FRANKEN, JR., OF ARNHEM, NETHERLANDS.

POWDER-DUSTER FOR CYCLES.

SPECIFICATION forming part of Letters Patent No. 545,475, dated September 3, 1895.

Application filed March 4, 1895. Serial No. 540,463. (No model.)

To all whom it may concern:

Be it known that I, SELIG FRANKEN, Jr., a subject of the Queen of the Netherlands, residing at 135^c Weerdjesstraat, Arnhem, in the Netherlands, have invented a certain new and useful device for enabling cyclists while riding their machines to protect themselves from the attacks of dogs, (for which I have applied for, but not yet obtained, Letters Patent in Great Britain, to bear date August 27, 1894, No. 16,313,) of which the following is a specification.

This invention relates to a device for enabling cyclists while riding their machines to protect themselves from the attacks of dogs.

In the accompanying drawings, Figure 1 represents in vertical section one form of apparatus adapted for carrying my invention into effect. Fig. 2 is a corresponding side elevation, and Fig. 3 a plan. Fig. 4 is a vertical section, and Fig. 5 a plan, of a modified construction. Fig. 6 is a side elevation of a safety-bicycle, illustrating, by way of example, the mode of applying my invention.

According to one mode of carrying out my invention the device consists of a small metal cylinder *a*, secured to the frame of the machine by means of brackets or supports *b* *b'*, and provided on each side with a chamber *c* *c'*, from which the distributing-pipes *d* *d'* branch out laterally near the chain-wheel on the pedal-shaft. Within the cylinder there is arranged a spring-controlled rod or plunger *e*, which operates a bellows or collapsible chamber *e'*. Through the plunger is formed a filling-hole *f*, which is closed by a screwed cap or stopper *f'*. On the outer face of the plunger *e* are secured two rods or hollow tubes *g* *g*, both of which pass upward and through a clamp or guide *h*, attached to the frame of the machine near the seat-pillar. The upper extremities of the rods or tubes may be connected by a wooden knob or handle or they may be formed from a single rod or tube and be simply arched, as shown at *i*, in order to afford ready means for operating. Upon depressing the plunger *e* a portion of the pepper contained in the collapsible chamber *e'* will be forced through the passages *e^x* into the chambers *cc'* and thence through the pipes *d* *d'*.

According to the construction illustrated in

Figs. 4 and 5, the cylinder *a* is surrounded by a chamber *c^x*, from which the distributing-pipes *d* *d'* project. In this arrangement the collapsible chamber *e'* is supplied with air through the opening at *k*, a valve *k'* being provided for admitting air during the upward movement of the plunger. *f'* is a cap or stopper for closing the filling-hole in the top or cover of the chamber *c^x*. Upon depressing the plunger *e* air is forced from the collapsible chamber *e'*, by way of the passages *ll*, through the perforations in the bottom of the chamber *c^x*, a small quantity of the pepper or other material in the said chamber *c^x* being blown out through the distributing-pipes *d* *d'*.

In preparing the apparatus the cap *f'* is first unscrewed and some pepper is poured into the chamber *e'* or *c^x*, as the case may be. The cap is then replaced and tightened, whereupon the device is ready for use. For pepper some other pulverulent material, noxious to dogs, but comparatively harmless, may be substituted.

Should a dog come near the machine, it is only necessary for the cyclist to depress the plunger *e* through the medium of the handle *i*, sufficient pepper being thus expelled from the device through the pipes *d* *d'*, near the chain-wheel, to drive the dog away.

The complete device does not add much to the weight of the machine, while, on account of its shape, it offers little resistance to the wind.

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

1. A device for enabling cyclists to protect themselves from the attacks of dogs, secured to the framework of the machine near the pedal-shaft by means of brackets or supports, and comprising a chamber for the reception of pepper or equivalent pulverulent material, a plunger, worked near the seat-pillar by means of rods, for ejecting said material, and pipes for distributing the same on each side of the machine in the immediate vicinity of the pedal-shaft, substantially as herein described.

2. In an apparatus adapted for attachment to cycles for affording cyclists protection from the attacks of dogs, the combination with the collapsible chamber *e'*, disposed within the

cylinder *a*, the latter being furnished with securing brackets *b b'*, of a plunger *e*, connected with said chamber and operated by rods *g*, and pipes *d d'* which serve to diffuse
5 the pepper or other pulverulent material into the atmosphere about the pedal-shaft of the machine, substantially as set forth.

3. In an apparatus adapted for attachment to cycles for affording cyclists protection from
10 the attacks of dogs, the combination with the collapsible pepper chamber *e'*, disposed within the cylinder *a*, of a plunger *e*, connected with said chamber, distributing pipes *d d'* pro-

jecting from each side of the apparatus, upwardly extending rods *g* for operating the
15 plunger, clamp *h* attached to the framework near the seat-pillar for guiding and securing the rods *g* and clamps *b b'* for attaching the metal cylinder *a* to the lower part of the framework near the pedal-shaft, substantially as set
20 forth.

SELIG FRANKEN, JR.

Witnesses:

AUGUST SIEGFRIED DOCH,
ADOLF FRANKEN.