

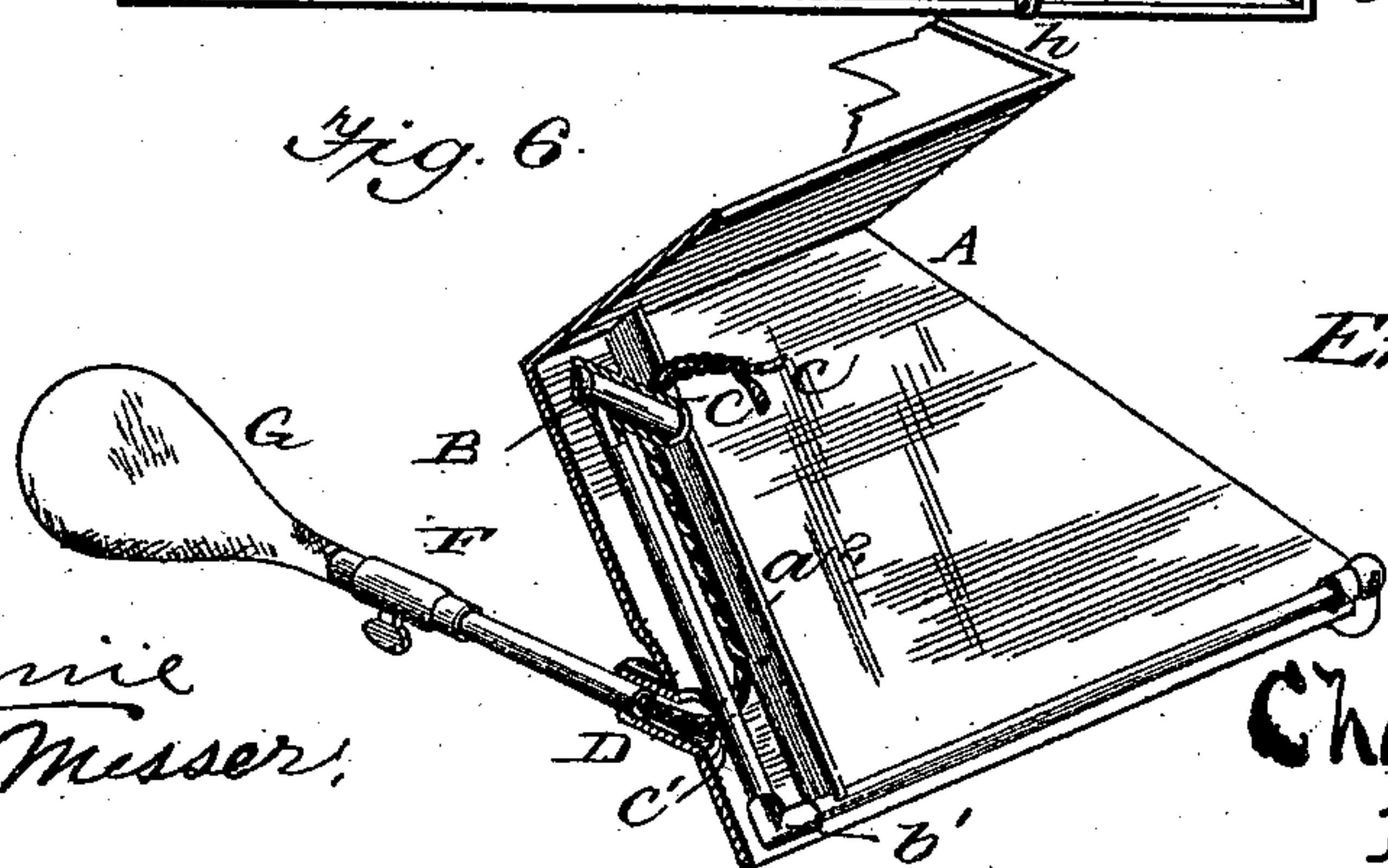
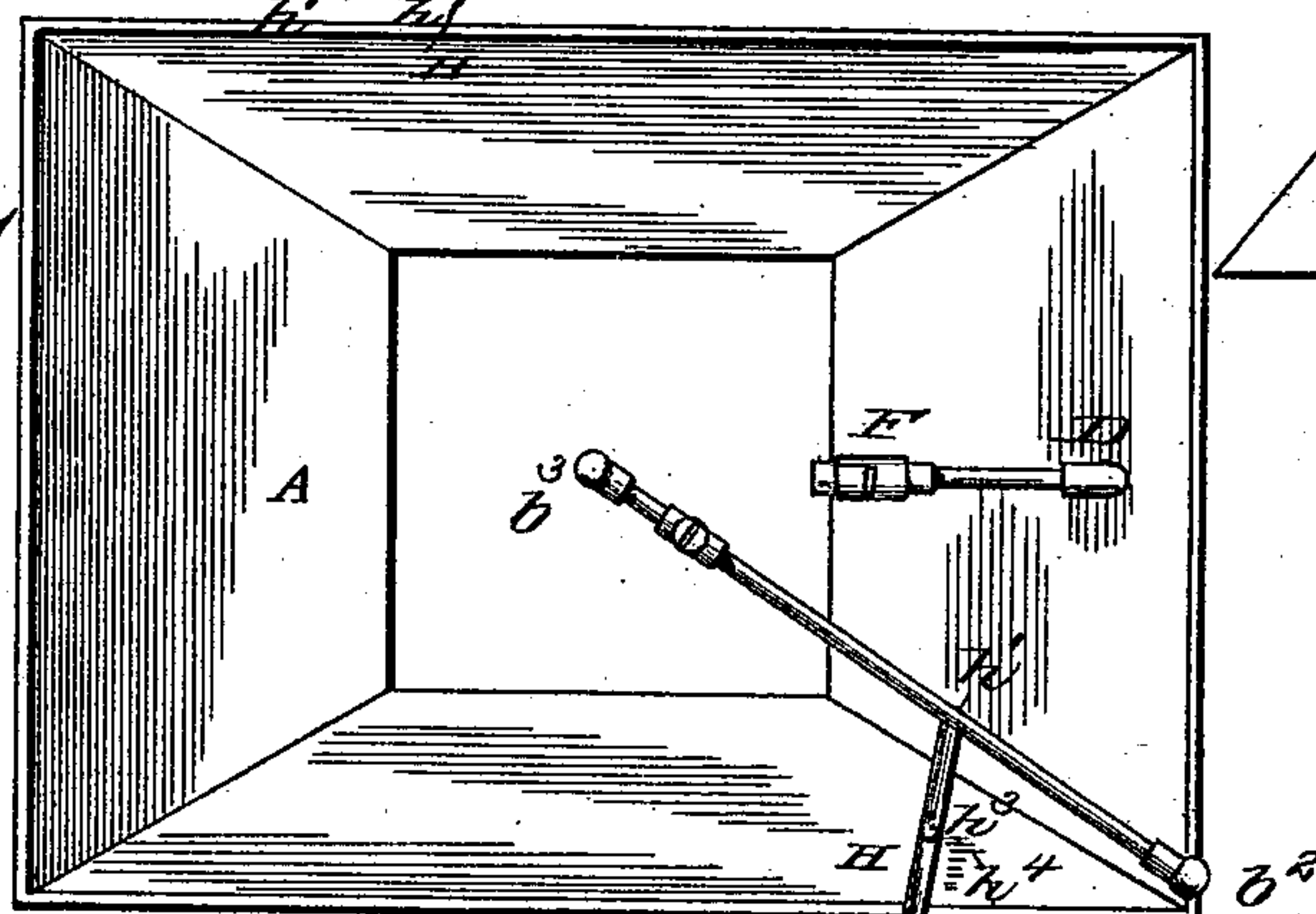
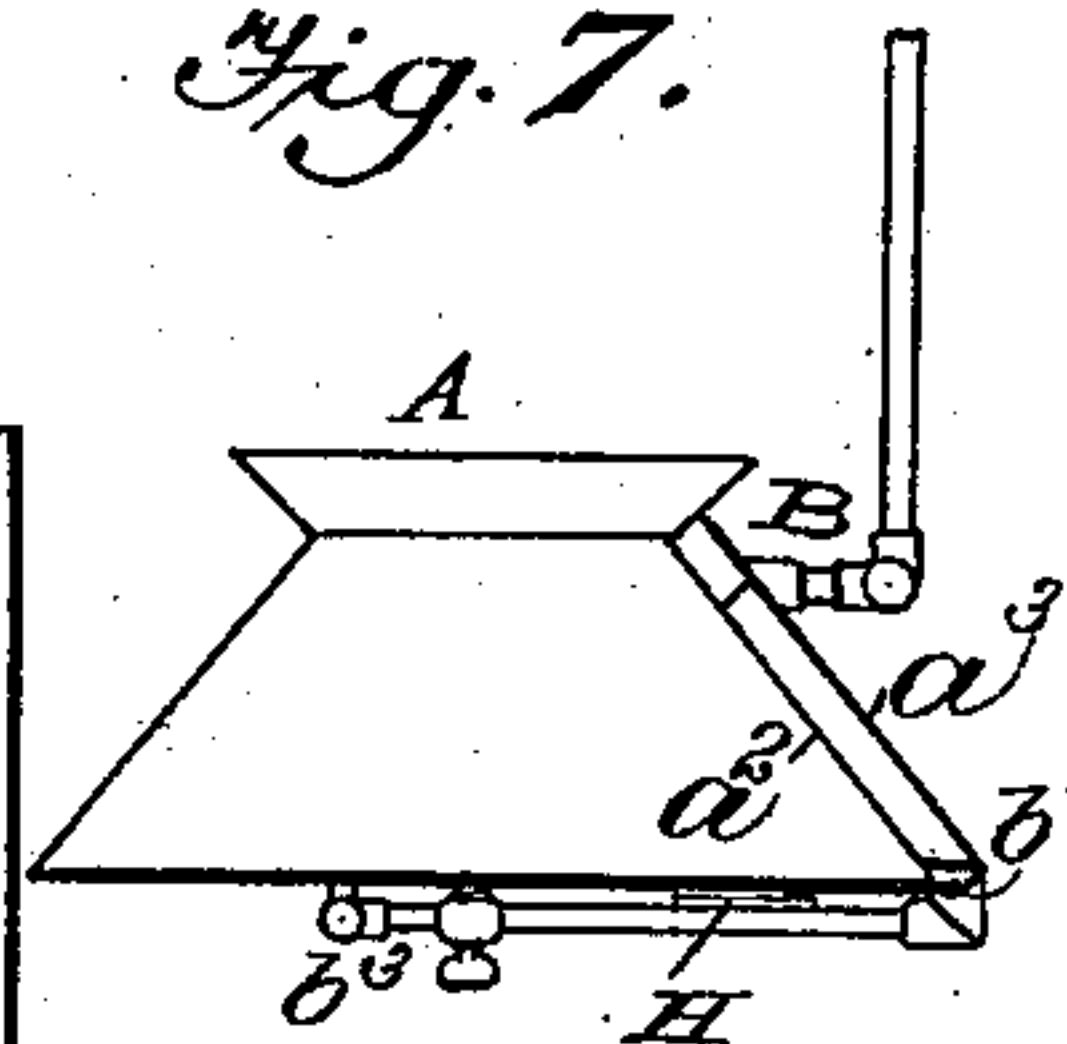
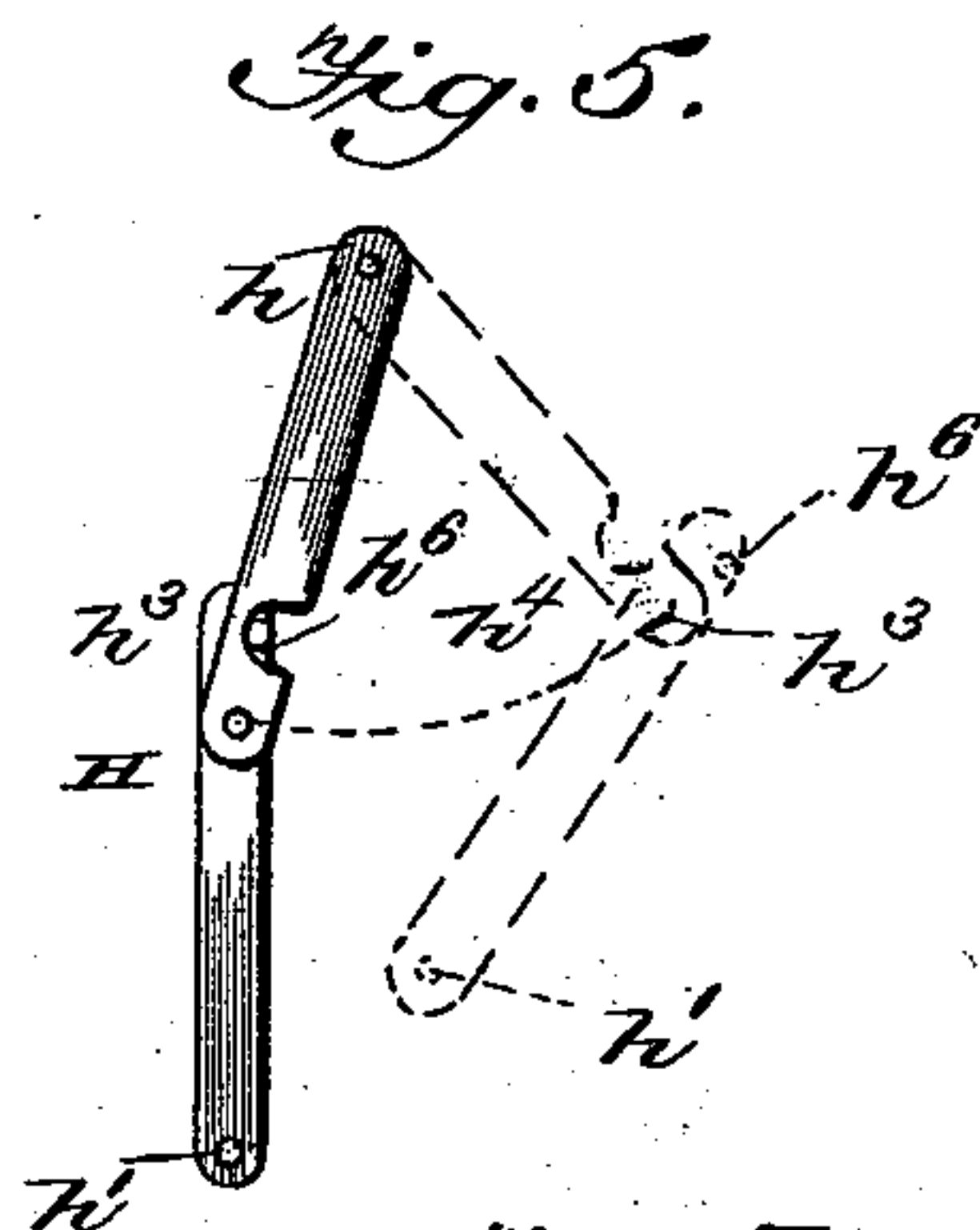
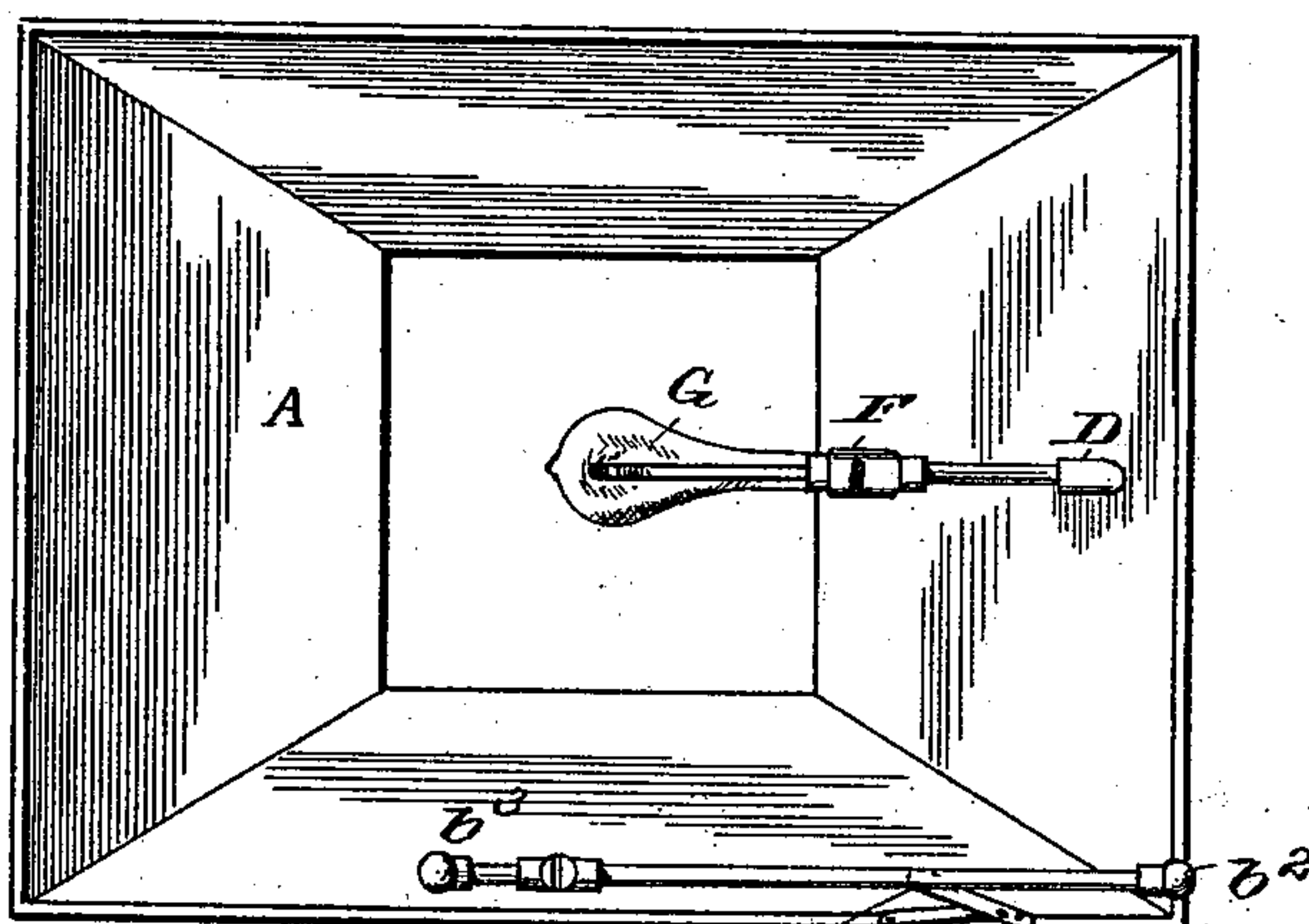
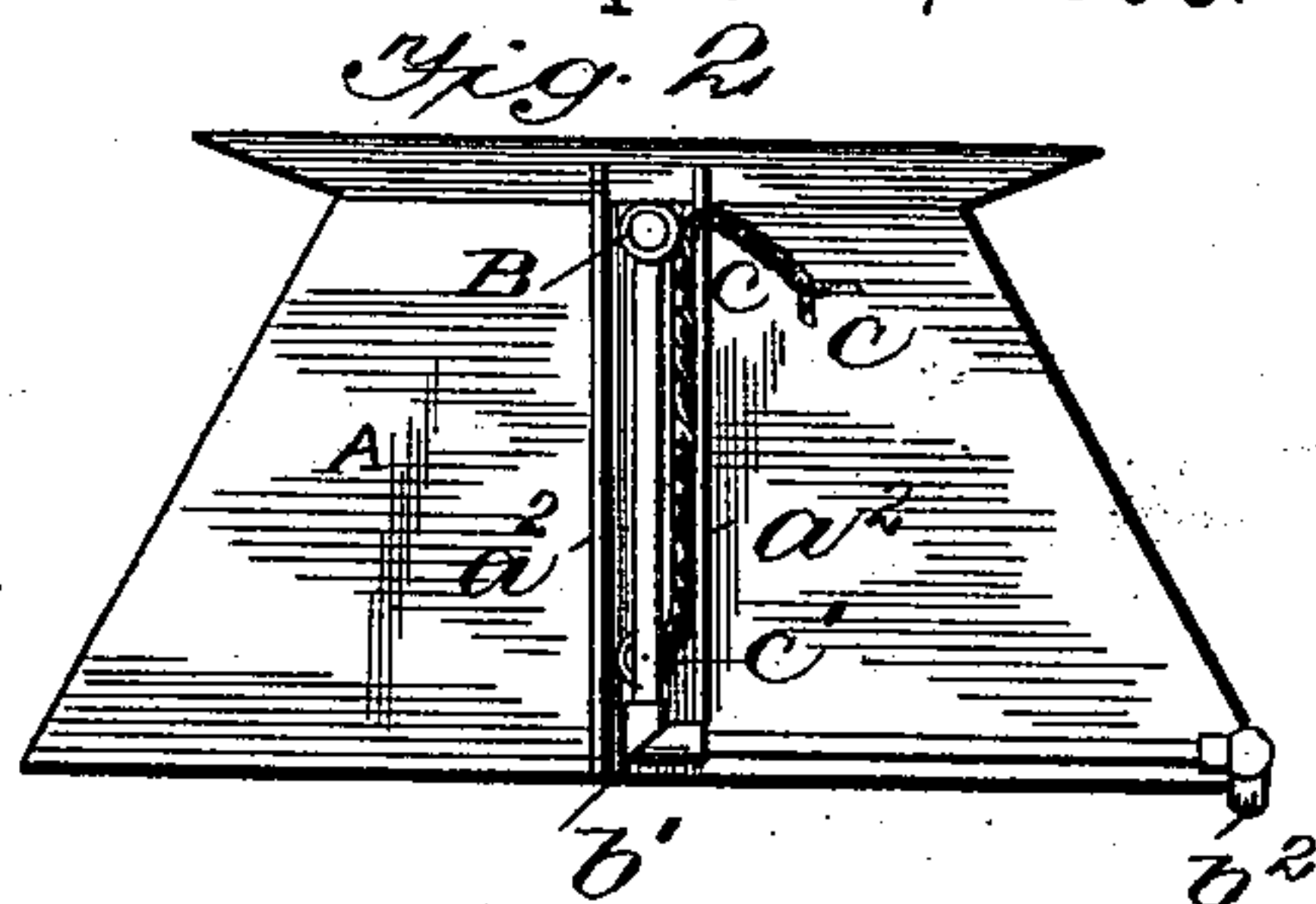
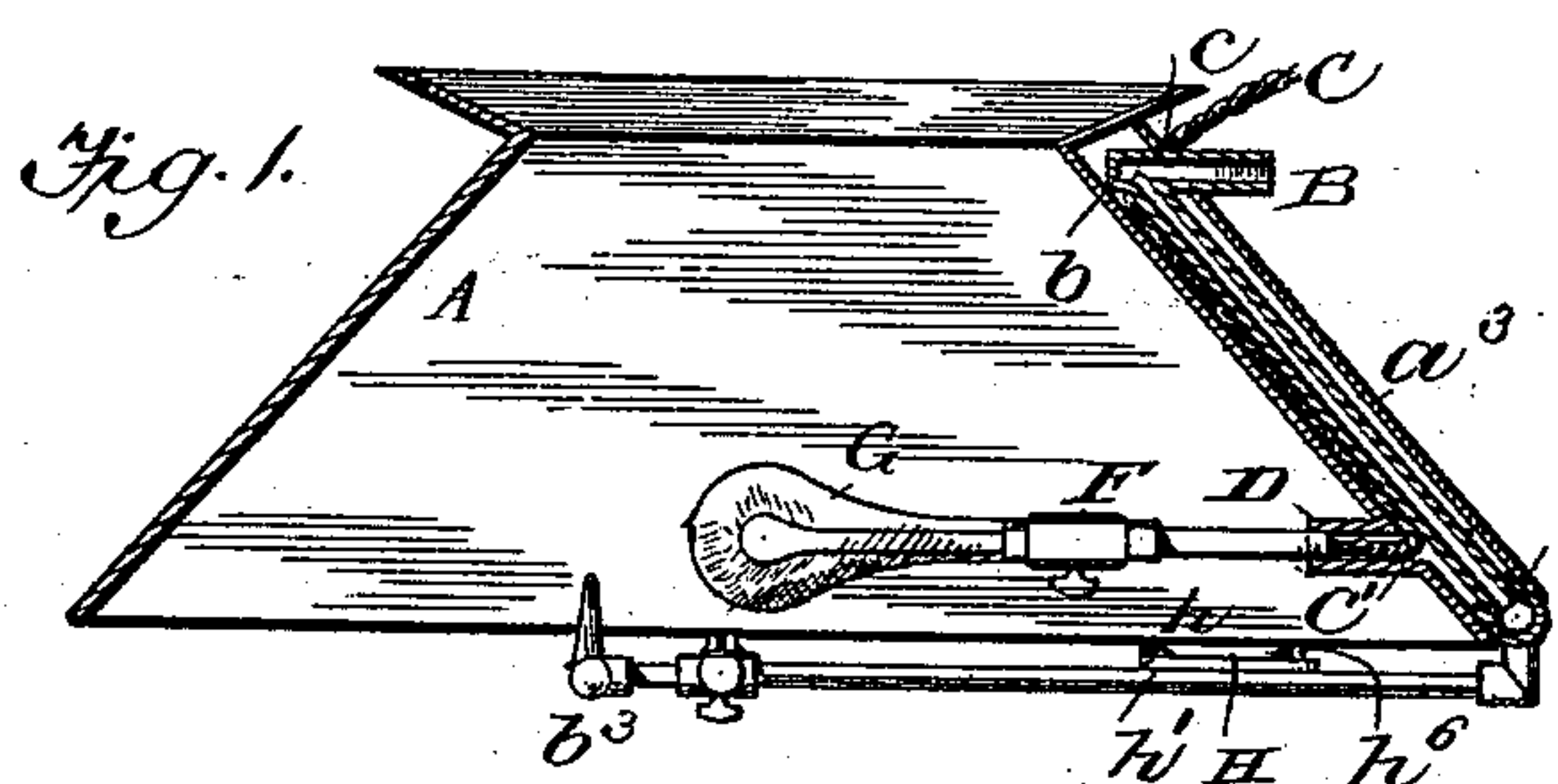
(No Model.)

E. F. GENNERT.

BILLIARD OR POOL TABLE SHADE AND REFLECTOR.

No. 546,611.

Patented Sept. 17, 1895.



*Emil F. Gennert*  
Inventor

Witnesses

Therese  
Simon Messer.

B4 ✓

Chas. E. Barber  
His Attorney



# UNITED STATES PATENT OFFICE.

EMIL F. GENNERT, OF BROOKLYN, ASSIGNOR TO THE E. P. GLEASON MANUFACTURING COMPANY, OF NEW YORK, N. Y.

## BILLIARD OR POOL TABLE SHADE AND REFLECTOR.

SPECIFICATION forming part of Letters Patent No. 546,611, dated September 17, 1895.

Application filed March 16, 1893. Serial No. 466,227. (No model.)

*To all whom it may concern:*

Be it known that I, EMIL F. GENNERT, a citizen of the United States of America, and a resident of Brooklyn, Kings county, State of New York, have invented a new and useful Improvement in Billiard or Pool Table Shades and Reflectors, of which the following is a specification.

My invention relates to improvements in billiard and pool table shades and reflectors, particularly those used over billiard or pool tables; and it consists of the combination of gas-light fixtures and electric-light fixtures, whereby either may occupy the center or focus of the shade or reflector.

Figure 1 is a side view, partly in section; Fig. 2, an end view; Fig. 3, a view from below with an electric burner in position for use; Fig. 4, a similar view with a gas-burner in position for use; Fig. 5, a top view of a stop-hinge in two positions. Fig. 6 is a perspective with parts broken away to show the tube or casing for pipe and wires. Fig. 7 is an elevation in outline, showing pipe extending above the pipe B to show the manner of supporting the shade or reflector.

The shade or reflector A is supported in position over any object it is desired to illuminate by the gas-pipe B. This pipe extends along the outside of the shade or reflector between the two projecting pieces  $a^2 a^2$  and beneath the piece  $a^3$ , the pieces  $a^2 a^2$  and  $a^3$  forming a tube or covering for the pipe and wires, as shown in Figs. 1, 2, and 6, to  $b^1 b^2$  and from  $b^2$  to  $b^3$  beneath the shade or reflector. Electric conductors C extend from  $c$  to  $c'$  adjacent to the gas-pipe. At  $c'$  they pass into a tube D to a socket F. An electric lamp or burner G is attached to F in the usual manner.

When electric light is to be used, a lamp G is attached to the socket F, as shown in Fig. 3. It then occupies the center or focus of the shade or reflector A, the gas-pipe occupying a position along one side of the shade or reflector, as shown in the drawings.

When gas-light is to be used, the gas-pipe from  $b^2$  to  $b^3$  turns upon the joint  $b^2$ , bringing the gas-burner  $b^3$  to the center or focus of the shade or reflector, as shown in Fig. 4. The electric lamp should be removed from the socket when gas is to be used. A stop-hinge

H, extending from one side of the shade or reflector at  $h$  to the gas-pipe at  $h'$ , holds the gas-pipe  $b^2 b^3$  in position while in use. The hinge-joint  $h^3$  passes through the arc  $h^4$ . (Shown in dotted lines.) A stop  $h^6$ , consisting of a pin on one arm, strikes the other arm and determines with certainty the point at which it is desired the burner  $b^3$  should be held. The joint  $h^3$  passes a little beyond a right line between the points  $h h'$ , where it is attached to the shade and gas-pipe, respectively, thus tending to prevent the displacement of the gas-pipe by an accidental touch. The joint  $b^2$  may consist of a gas-cock, which is opened when the burner  $b^3$  occupies the proper position for illumination, but which is closed when occupying any other position.

This device is particularly designed for billiard or pool tables and is secured above the center of the table, as must be done in such cases to secure uniform light all over the table without shadow.

What I claim is—

1. A shade or reflector of the character described in combination with gas pipes and light wires, secured thereto and supported thereby and lights or burners extending into position centrally beneath the shade alternately and interchangeably.

2. In a billiard table shade or reflector, adapted to be secured above the table, the combination of an electric and gas burner secured to one side of the shade, and supported by the shade substantially as described.

3. A shade or reflector of the character described, in combination with gas pipes and light wires secured thereto and supported thereby, and lights or burners extending into position centrally beneath the shade alternately and interchangeably, and means for locking the gas pipe connection and light burner into place centrally, substantially as described.

4. In a billiard table shade or reflector, adapted to be secured above the table, the combination of an electric and gas burner conducted to the shade from above and secured to one side of the shade and leaving the space beneath the reflector, entirely clear, substantially as described.

5. In a billiard table shade or reflector,



adapted to be secured above the table, the combination of an electric and gas burner secured to one side of the shade, and electric and gas burners and conductors brought down  
5 from above the shade and conducted in the same, leaving the space entirely clear below and to the sides all around the shade, substantially as described.

6. In a billiard table shade or reflector,  
10 adapted to be secured above the table, the combination of an electric burner and a gas burner and a locking arm made in sections for the gas burner and adapted to lock it in position for lighting against accidental move-  
15 ment, substantially as described.

7. The combination of a shade or reflector with electric and gas conductors, secured thereto and extending through and under a tube or shield on the reflector and interchangeable gas and electric burners adapted to be  
20 secured within the reflector centrally, leaving the space clear all around the reflector, as described.

8. A polygonal shade or reflector of the character described having inclined sides; in combination with interchangeable electric and gas lights and supports therefor, either of which is adapted to be moved out of the way when the other is in use, substantially as  
25 described, whereby the shadows are avoided from beneath the shade or reflector, substantially as and for the purpose specified.

9. A shade or reflector of the character described, having inclined sides; in combination  
35 with interchangeable electric and gas lights and an independent support for each, either of which is adapted to be moved out of the way when the other is in use, substantially as described, whereby the shadows are avoided  
40 from beneath the shade or reflector, and means for locking the gas burner centrally beneath

the reflector and shade, substantially as and for the purposes specified.

10. The herein described polygonal shade or reflector having inclined reflecting surfaces;  
45 in combination with electric and gas lights adapted to be supported interchangeably and alternately, centrally beneath the reflector, and means for supporting the burners of both electric and gas lights at and by the side of  
50 the shade or reflector, substantially as described, leaving the space below and around the reflector entirely clear and devoid of shadows, substantially as described.

11. A shade or reflector of the character described; in combination with electric and gas conductors secured thereto and projecting therefrom, substantially as described, whereby an electric light or a gas light may be secured centrally within the shade or reflector  
60 and whereby light may be thrown away from the reflector by its reflecting sides, without producing shadows over the area covered by the reflected light, as set forth.

12. A shade or reflector having a vertical  
65 support above it; in combination with a gas burner and an electric light burner secured to and projecting from the shade or reflector, which supports said burners, in front of the reflecting surface or surfaces of the reflector,  
70 substantially as described, whereby all shadows are avoided on the lighted area, as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 20th day of February, 1893.

EMIL F. GENNERT.

Witnesses:

HARRY WELCH,  
CHARLES TERWILLIGER.