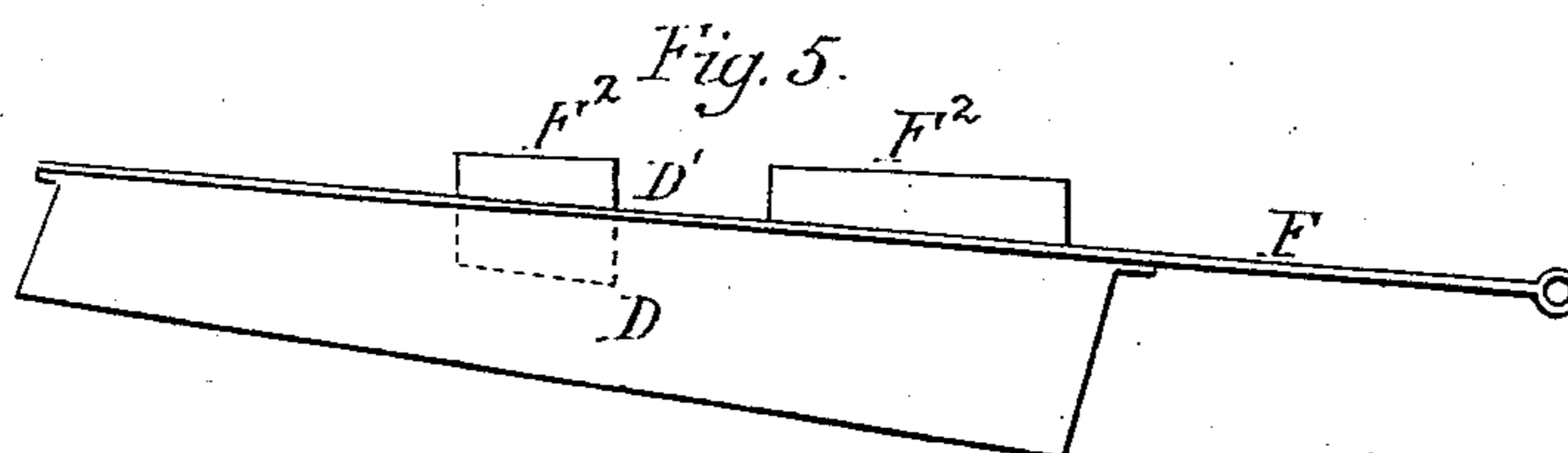
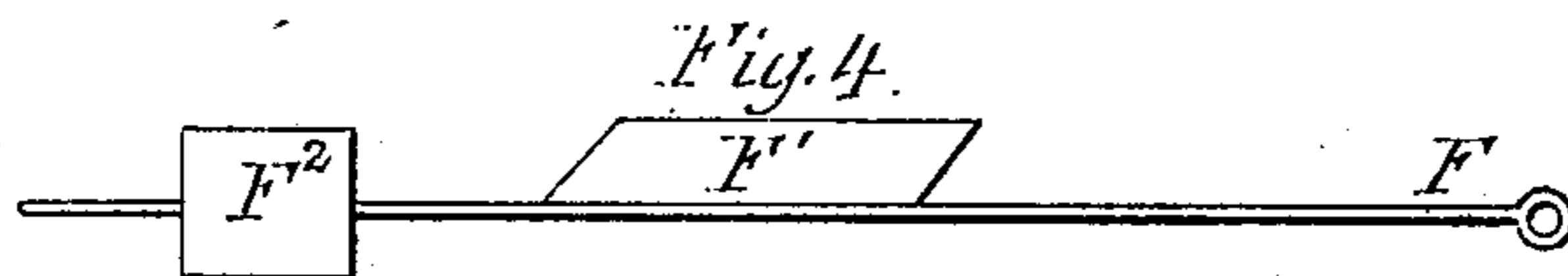
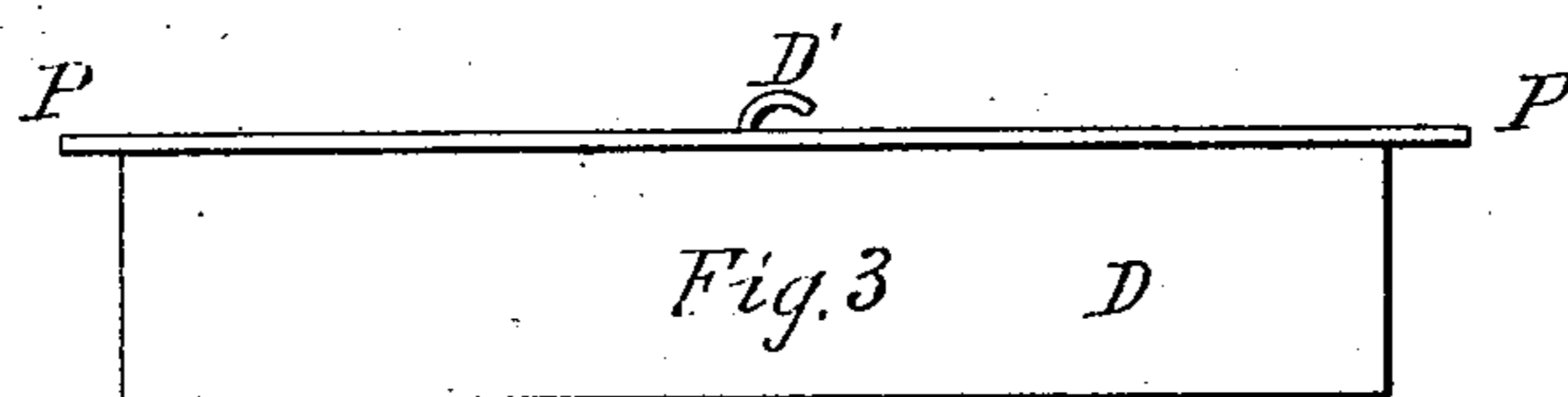
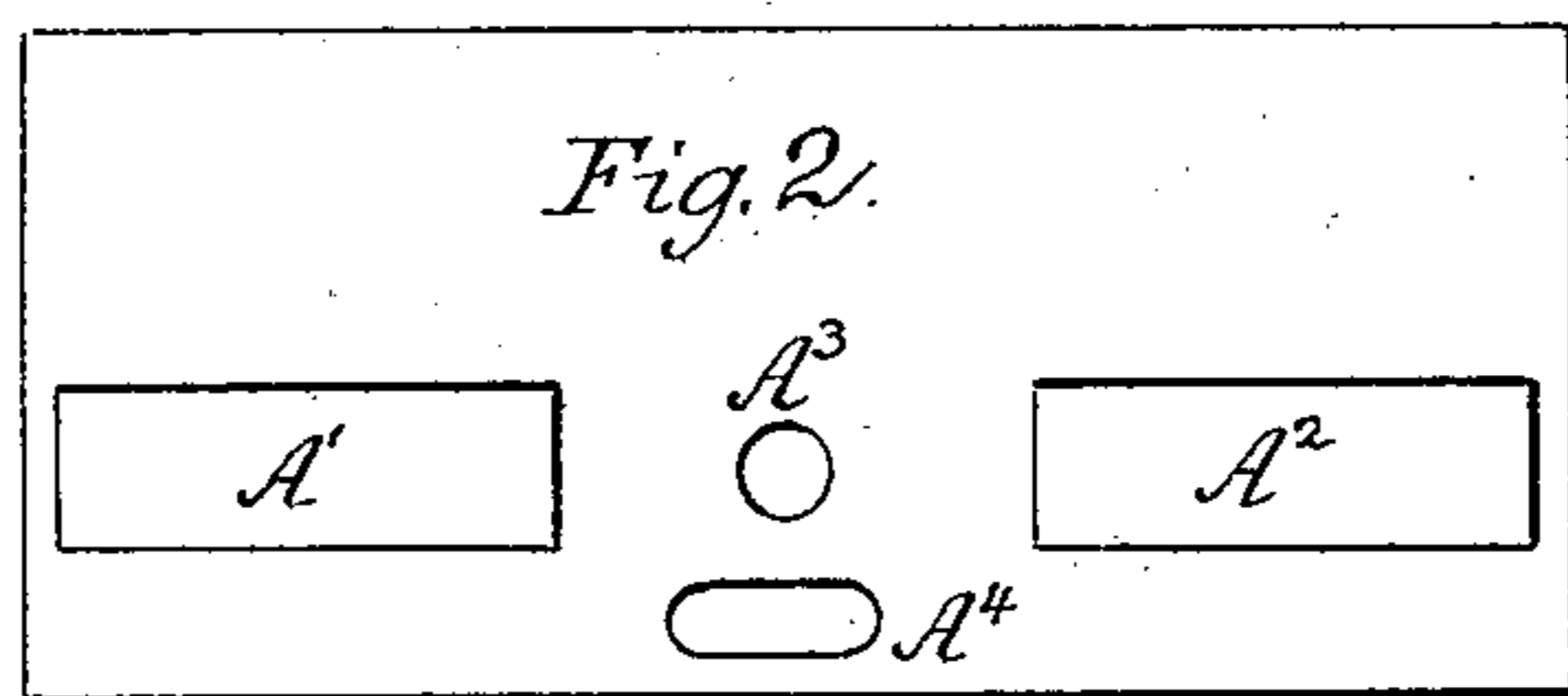
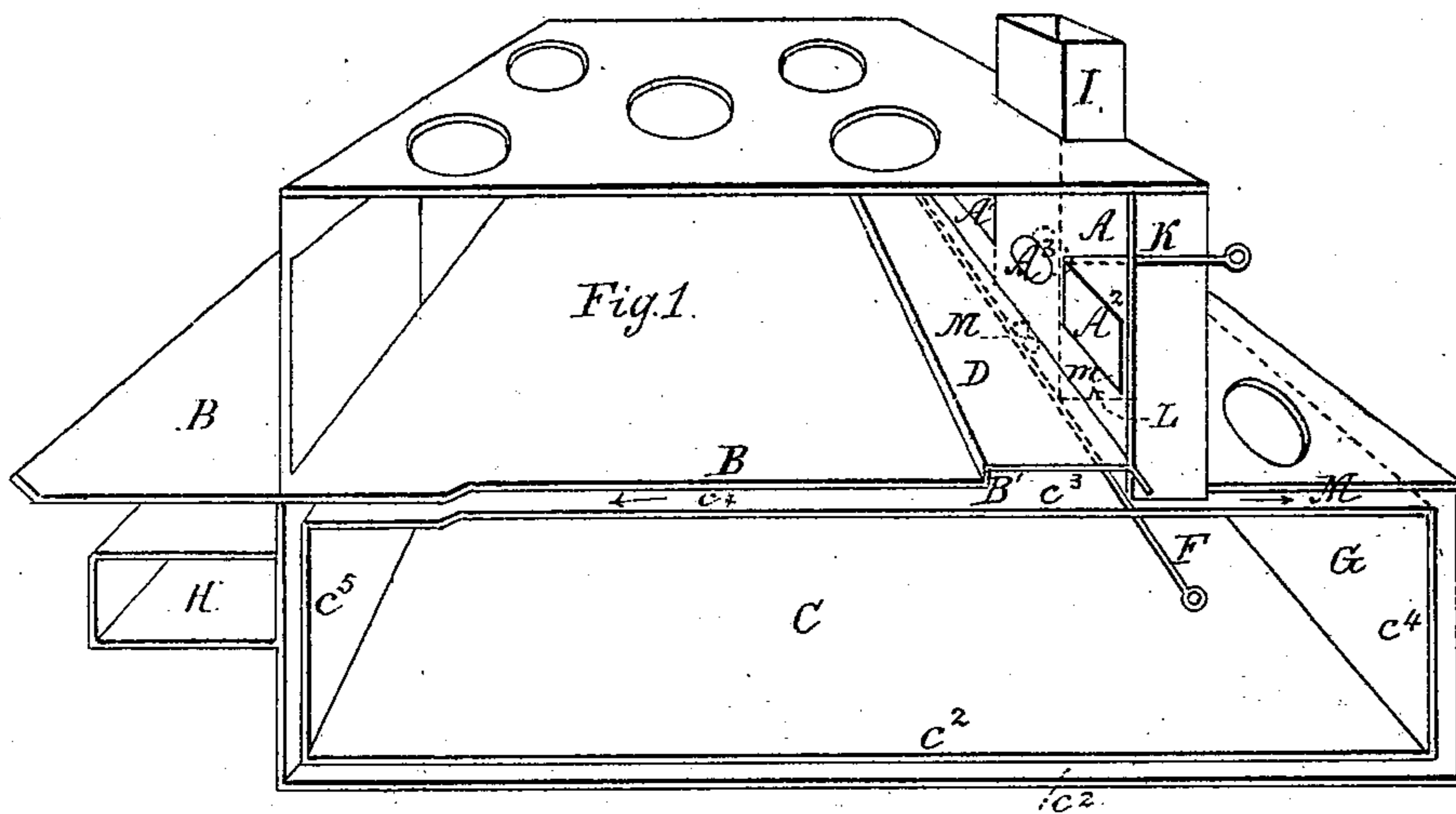


C. H. ROBINSON.

Cooking Stove.

No. 1,978.

Patented Feb. 13, 1841.



UNITED STATES PATENT OFFICE.

CLARK H. ROBINSON, OF UNIONTOWN, PENNSYLVANIA.

MANNER OF CONSTRUCTING STOVES.

Specification of Letters Patent No. 1,978, dated February 13, 1841.

To all whom it may concern:

Be it known that I, CLARK H. ROBINSON, of Uniontown, county of Fayette, and State of Pennsylvania, have invented a new and useful Improvement in Cooking-Stoves, a description of which I have made in the following specification, reference being had to the annexed drawings, making a part of the same.

Figure 1 represents a perspective view of the interior of the stove with a side removed. Fig. 2 a plan of the vertical plate behind the fire chamber. Fig. 3 a plan of the swinging damper with the cam D' exposed to view. Fig. 4 a perspective view of the horizontal rod F with its dampers F' F^2 attached. Fig. 5 a perspective view of the rod F in act of raising the swinging damper D . Fig. 6 plan of the damper K .

Similar figures in the specification refer to similar figures in the drawings.

This stove has in its external appearance nothing of novelty with the exception of the two upright sides being prolonged on the back end of the stove and an end and top plate fitting thereto. This prolongation enables me to make the oven larger, and to add two additional boilers resting in the apertures made in the top plate aforesaid. It also enables me to concentrate the heat more equally to the oven and give the fire any direction as required by means of dampers and flues hereafter to be described.

To enable others to make my improvement I shall describe the parts connected therewith in detail it being composed of viz. 1st, the vertical plate A back of the stove and front of the chimney; 2d, the hearth B ; 3d, the oven C composed of horizontal and end plates; 4th, the swinging damper D ; 5th, the horizontal rod F with its dampers affixed thereto; 6th, the additional length G of the stove; 7th, the apparatus H for roasting coffee and for other purposes.

The vertical plate A is placed back of the fire chamber in front of the chimney and reaches from the top plate, down to the top of the oven C where it is closely fitted, is made of cast iron, or other material and pierced with two rectangular orifices (Fig. 2, $A^1 A^2$) one on each side of the chimney I , and two other orifices (Fig. 2, $A^3 A^4$) opening into the chimney aforesaid, one circular A^3 in a line and between the two rectangular orifices before mentioned and the other A^4 elliptical, below the circular one just men-

tioned and below the swinging damper D to be hereafter described.

2d, the hearth (B Fig. 1) is made in the usual manner extending in front of the doors of the stove as usual; and reaching back in the interior with this exception that I stop the hearth short of the vertical plate A before mentioned a sufficient distance therefrom to make room for the entrance to the flue over the oven to be described. At this end of the hearth, I have cast on it a vertical (see Fig. 1, B^2) flange say from two to three inches in height running the entire width serving as a rest or support to the damper D to be described.

3d, the oven C is below the hearth B and is formed of two horizontal plates (C' , C^2 , Fig. 1) one over and the other under the oven, and ends which join them. The other sides are the two sides of the stove each of the above mentioned plates are made of cast iron or other material as the rest of the stove. The upper horizontal plate (C' , Fig. 1) is placed a sufficient distance below the hearth to allow a sufficient room for a convenient floor (C^3 , Fig. 1) and the lower horizontal plate (C^2 , Fig. 1) a similar distance from the bottom of the stove for the same purpose as aforesaid. The horizontal plate extends the whole length of the stove including the additional length (G , Fig. 1) and are connected by end plates ($C^4 C^5$, Fig. 1) placed in the same condition of the horizontal ones to give room for the flues between them and the end of the stove.

4th, the swinging damper D is made of cast iron or other suitable material, its length being of the full length of the interior of the fire chamber, its width a little wider than the apertures to the flue (C^3 , Fig. 1) so as to give the distance sufficient to rest on the flange B' of the hearth before described, the back end of the swinging damper is supported in the sides of the stove by small exits ($P P$, Fig. 3) and between them a cam (D' , Fig. 3) is made which comes in contact with the horizontal rod (F , Fig. 4) hereafter to be mentioned, and by its outward or contrary motion lifts or lets fall the swinging damper.

5th, the horizontal rod (F , Fig. 4) with its damper affixed thereto is made of iron or suitable materials, round or square as may be desired. It passes through the chamber, and through the side plates of the stove just behind the swinging damper. On this

rod at suitable distances are affixed permanently two dampers, of plate metal or other material, one horizontal (F' , Fig. 4) the length and width of the mouth of the chimney I (Fig. 1) the other vertical F^2 sufficiently high to cover the lower opening A^4 before described in the vertical plate A.

6th, the additional length (G , Fig. 1) to the stove. The sides of this length are made with the sides of the stove; an end is fitted thereto, a stop plate pierced with holes, (one of which is represented in Fig. 1 the other is not seen) all of which must surround the oven before mentioned.

7th, the apparatus H (Fig. 1) is an improvement and is made of the sides a bottom and end of cast iron or other suitable materials and is attached to the stove and placed at convenient distances below the hearth so as to insert a spit. It is used also for roasting coffee. The fire, flame or gas as it moves around the oven effecting the proper heat necessary for cooking—and the ashes or coals being placed on the hearth above serve the same purpose.

8th, the chimney I is made like other chimneys to other stoves, it extends upward from the flue C^3 , Fig. 1; and is closed by damper (F' , Fig. 4) as before described. The circular opening (A , Fig. 3) in the vertical is closed by a damper and rod K Fig. 1.

Operation: To facilitate the description I will now explain the manner the flame, gas, &c., effects the object to be desired by my improvement. In the first place in order to give the flame or gas, &c., a direction to the front of the stove I open the swing damper D by moving the rod F out (the vertical damper) (F^2 , Fig. 4) comes in contact with the cam (D' , Fig. 3) bracing

it up, this same motion of the rod also leaves the mouth of the chimney I open by means of the horizontal damper F' being changed in position. Now the entrance to the flue (C^3 , Fig. 1) being clear the flame or gas, &c., rushes in and passes in the direction of the arrow marked (L , Fig. 1) around the oven till it reaches the mouth m of the chimney I it then goes off into the atmosphere. In the present position of the swing damper it closes the orifices A' A^2 and A^3 and prevents the flame or gas from returning into the fire chamber. In the second place to give the flame or gas a contrary direction to that before mentioned, the position of the rod F being as in the last instance I push in the rod F which causes the damper D to fall on the flange B' of the hearth and remain there. This motion of the rod F opens the orifice (A^4 , Fig. 2) and closes the mouth of the chimney. By the damper D changing its position the orifices (A' A^2 , Fig. 1) are also open. Things being in this condition the flame or gas now follows the direction shown by the arrow M around the oven and into the chimney I at A^4 , Figs. 1 and 2 and then into the atmosphere.

What I claim as my invention and improvement is—

The before mentioned arrangement to give the flame, &c., any direction, forward or backward around the oven by means of flues C and dampers D and F' F^2 connected therewith, and the additional apparatus H which is heated by the oven and hearth for roasting coffee and for using as a spit as described.

CLARK H. ROBINSON.

Witnesses:

W. D. BARCLAY,
WILLIAM BUNTON.