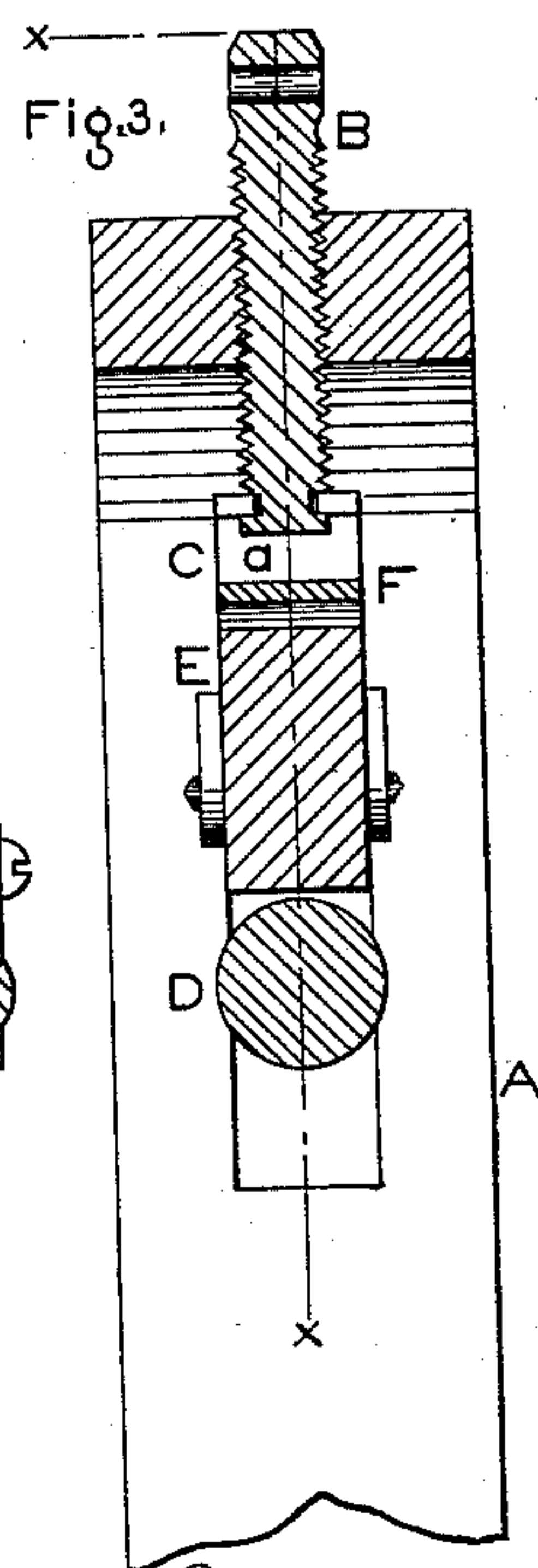
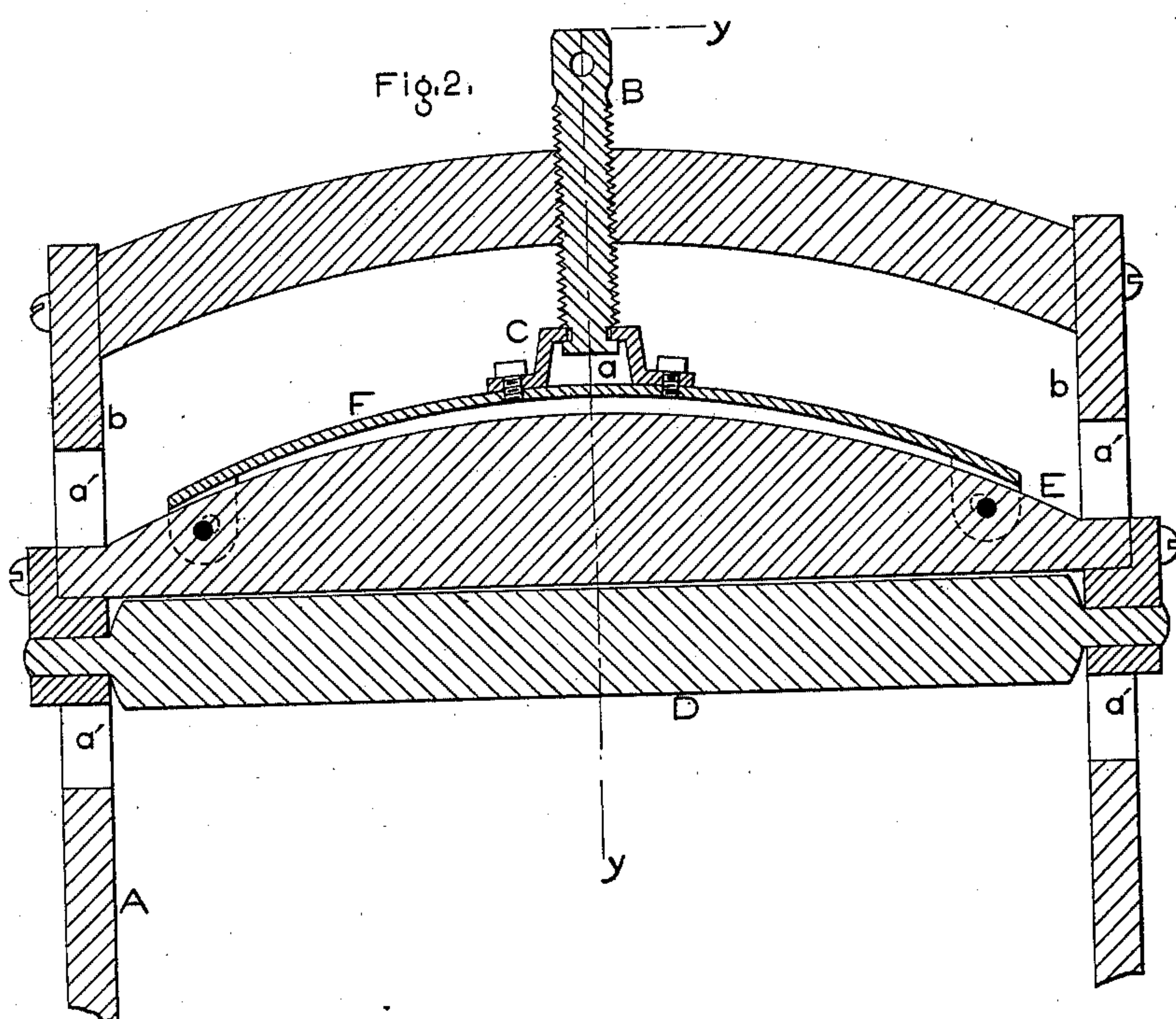
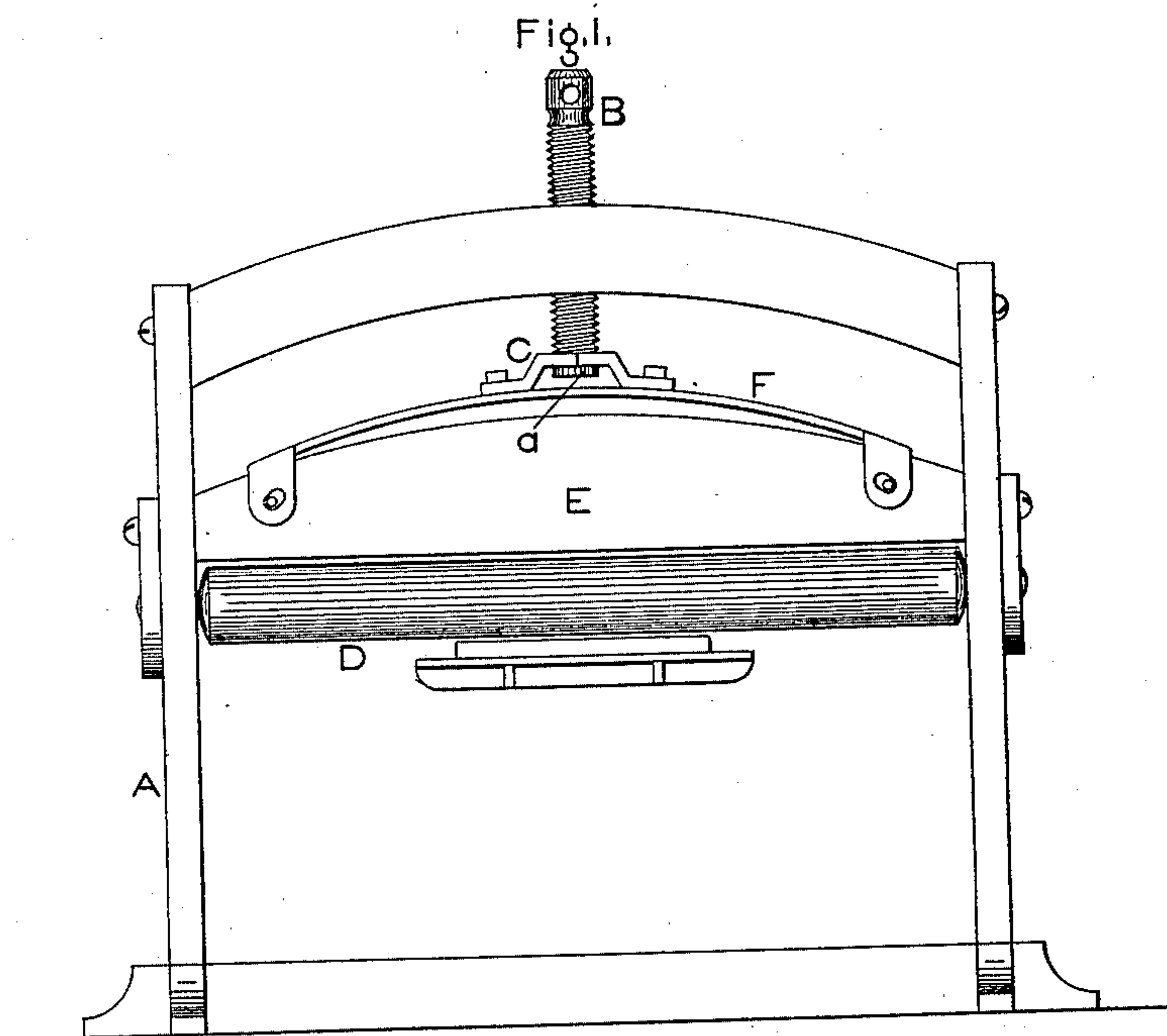


H. C. PFEIL.
Lithographic-Printing Machine.

No. 223,243.

Patented Jan. 6, 1880.



Witnesses:

A. P. Grant,
W. D. Kircher

Inventor:

H. C. Pfeil,
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ATTORNEY.

UNITED STATES PATENT OFFICE.

HERRMAN C. PFEIL, OF CAMDEN, NEW JERSEY.

LITHOGRAPHIC-PRINTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 223,243, dated January 6, 1880.

Application filed September 18, 1879.

To all whom it may concern :

Be it known that I, HERRMAN C. PFEIL, of the city and county of Camden, and State of New Jersey, have invented a new and useful
5 Improvement in Lithographic Presses, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is an end view of a portion of a
10 lithographic press embodying my invention. Fig. 2 is a transverse section thereof on line x x , Fig. 3. Fig. 3 is a longitudinal section on line y y , Fig. 2.

Similar letters of reference indicate corre-
15 sponding parts in the several figures.

My invention relates to improvements in lithographic presses more especially designed for printing on glass; and it consists in sus-
20 pending the pressure-roller in such manner that it yields or conforms to the irregularity of surface of the sheet to be printed, whereby there is a uniformity of pressure in printing, and less liability of breaking of the glass and stone, and superior work is produced, the con-
25 struction and operation of the parts being hereinafter fully set forth.

Referring to the drawings, A represents the frame of a lithographic press, to the top bar of which is fitted a screw, B, extending vertically
30 and having swiveled to its lower end a bisected or split cap, C, which is prevented from displacement from the screw by means of the confining-button a at the bottom thereof.

D represents the roller of the press, whose
35 bearings are on the head E, which is loosely suspended from a spring, F, consisting of a curved flat plate whose ends are pivoted to the beam, and its middle portion is connected to the cap C, the ends of the beam and roller
40 projecting freely into vertical slots a' of the side pieces, b , of the frame A.

It will be seen that, owing to the swiveled connection of the screw B and beam E, and the interposed spring F, the roller D is per-
mitted great freedom of motion, and swings 45 in many directions, whereby, when the press is operated, the roller conforms to irregularities of the sheet to be printed, and there is a uniformity of pressure thereon, the work being regular and superior, and the stone and sheet 50 of glass prevented, in a great measure, from breakage.

The spring F and screw B are readily con-
nected and disconnected by means of the bi-
sected cap C, the parts of which are easily ap- 55 plied to the neck at the bottom of the screw, and then bolted to the spring, or unbolted and displaced, as is evident.

Having thus described my invention, what I claim as new, and desire to secure by Let- 60 ters Patent, is—

1. The bisected cap C, swiveled to the screw B, in combination with the flat spring F, piv-
oted to the bearings of the roller D, and con-
nected centrally to said cap C, substantially 65 as and for the purpose set forth.

2. The suspended roller D and suspended head E, in combination with the spring F and the screw B, substantially as and for the pur-
pose set forth. 70

3. The lithographic press having screw B, bisected cap C, suspended spring F, suspended head E, and suspended roller D, combined and operating substantially as and for the pur-
pose set forth.

H. C. PFEIL.

Witnesses:

W. F. KARCHER,

JOHN A. WIEDERSHEIM.