

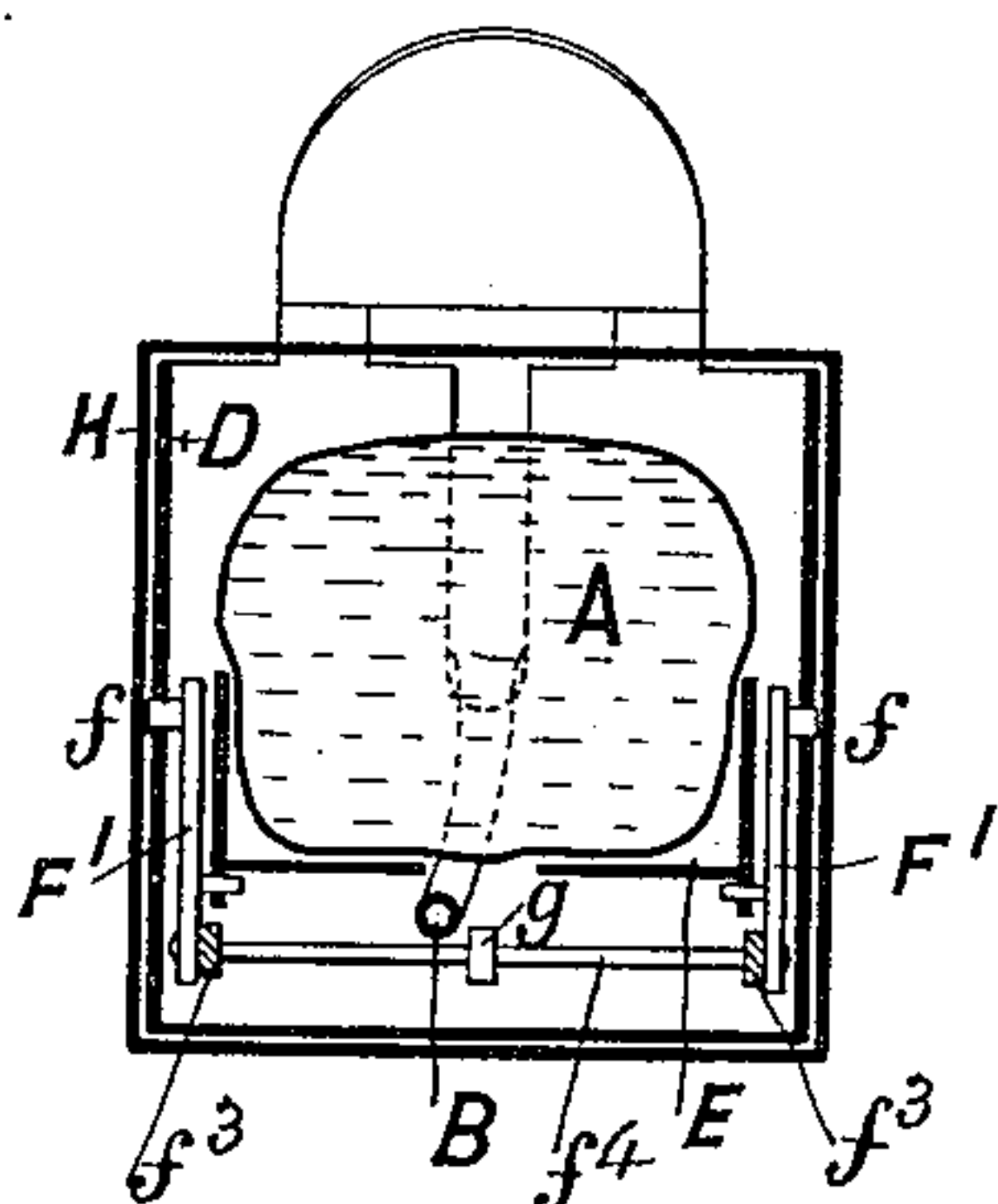
(No Model.)

W. J. SAWYER.
INKSTAND.

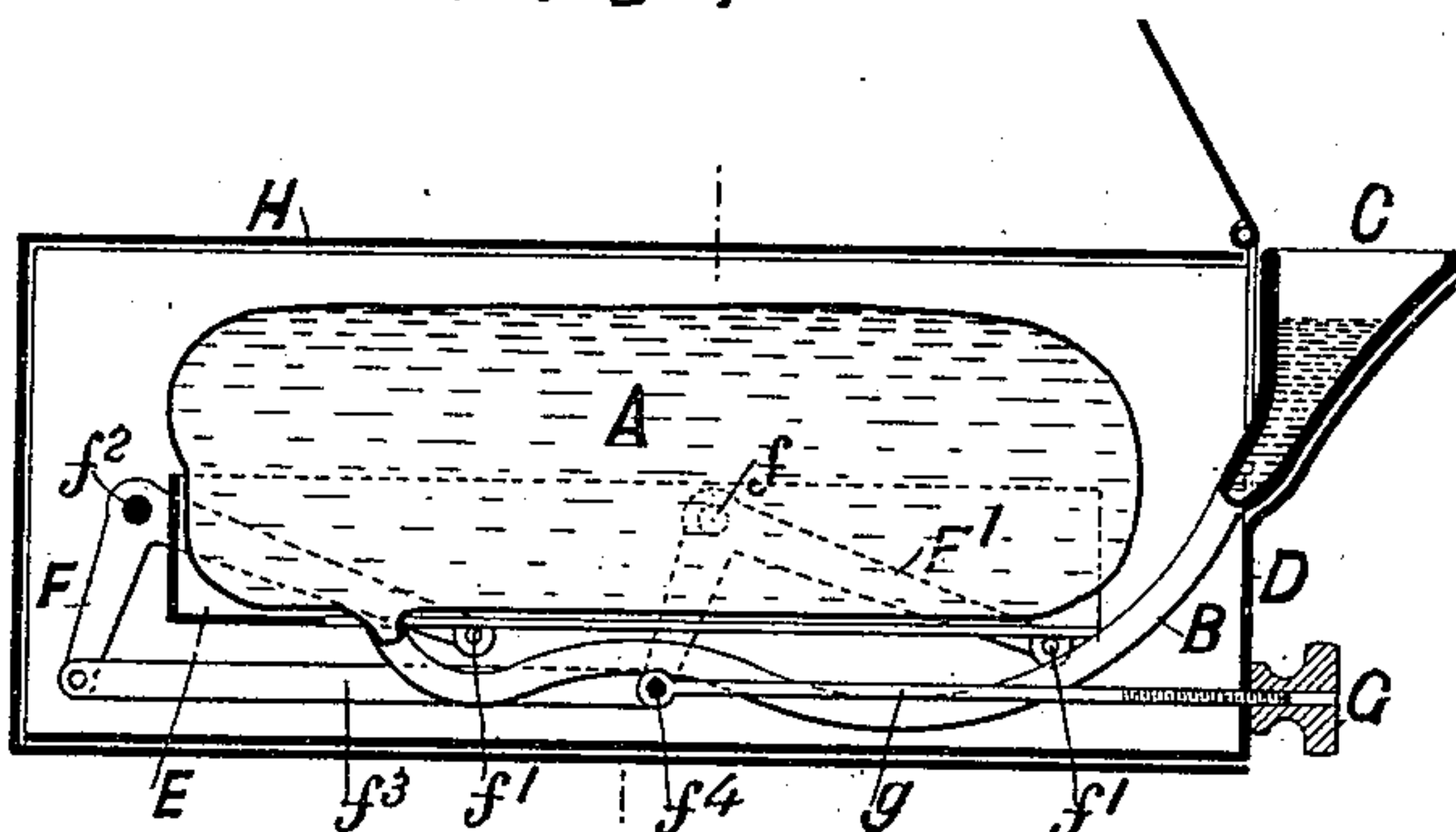
No. 467,053.

Patented Jan. 12, 1892.

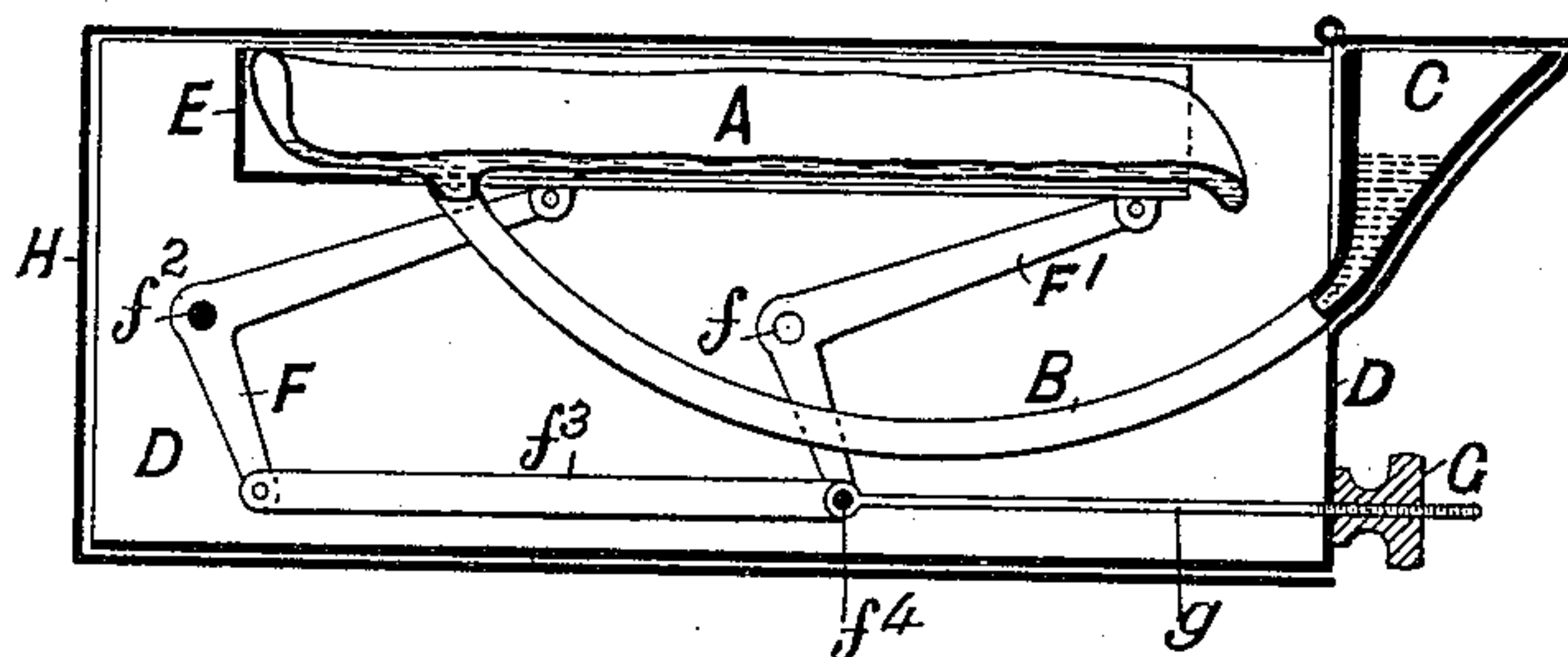
F I C . / a



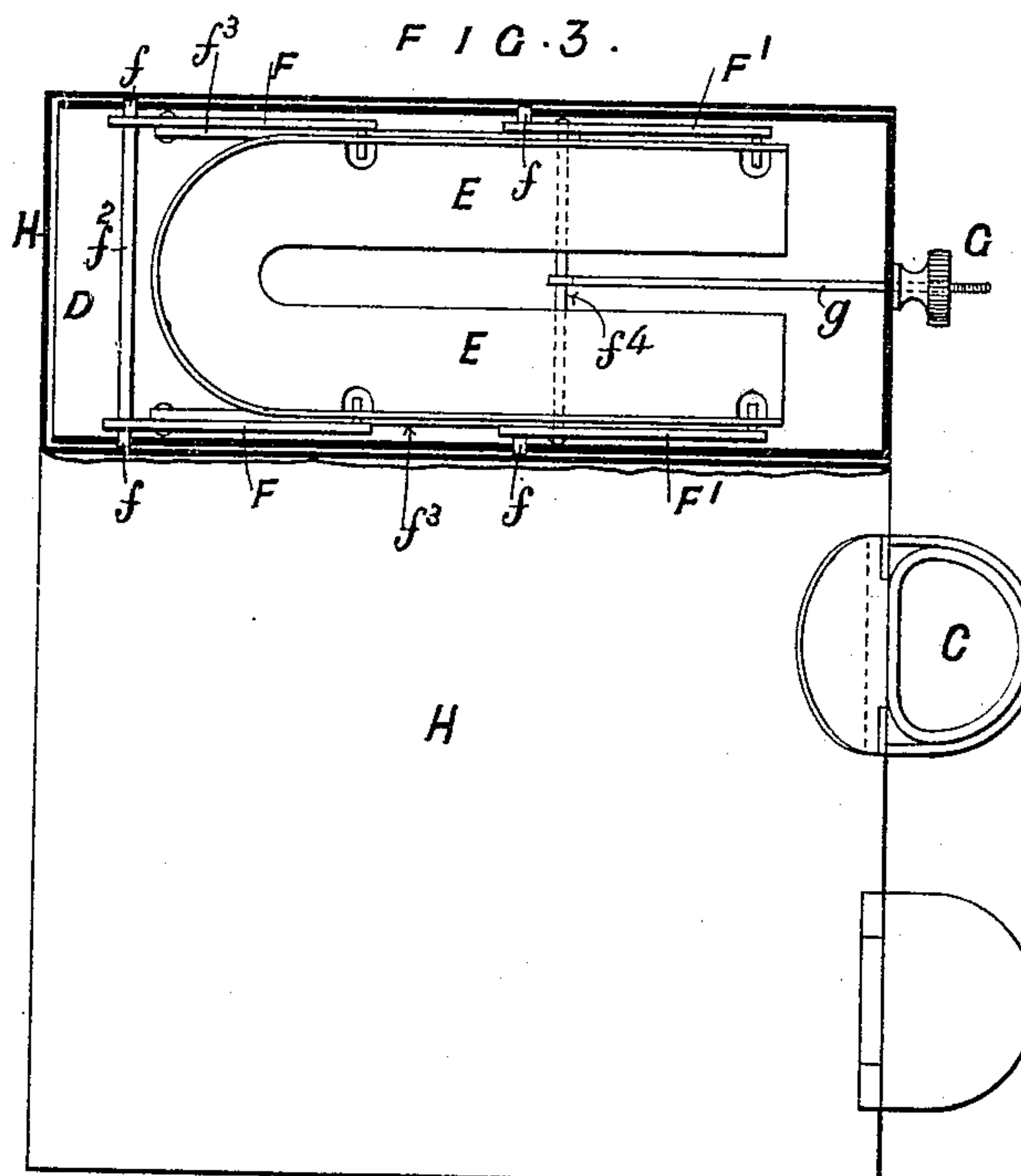
F I G . 1 .



F / G . 2 .



F 1 G.3.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM JAMES SAWYER, OF LONDON, ENGLAND.

INKSTAND.

SPECIFICATION forming part of Letters Patent No. 467,053, dated January 12, 1892.

Application filed August 27, 1891. Serial No. 403,890. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JAMES SAWYER, gas engineer, of Elmfield, Selhurst Road, South Norwood, London, in the county of Surrey, England, have invented a new and useful Improved Inkstand, of which the following is a full, clear, and exact description.

My invention relates to an improved inkstand, and has for its object to prevent contact of the air with the bulk of the ink (in order to prevent the ink undergoing the chemical and physical changes which cause it to thicken) and at the same time maintain a practically constant quantity of ink in a small well in which the pen is dipped.

My invention consists, essentially, in the employment for containing the ink of a vessel which is entirely closed, except in respect of its connection with the dipping-well, but which is collapsible under the external atmospheric pressure, and so permits the ink to flow spontaneously into the dipping-well without the admission of any air to take the place of the outflowing ink, so that all contact of the air with the contents of the vessel is prevented, the small quantity of ink contained in the dipping-well only being exposed. The dipping-well is connected with the collapsible reservoir by a tube, and the invention also comprises means whereby the relative positions of the reservoir and dipping-well may be adjusted from time to time, as required, to maintain the ink in the well at a constant level as the contents of the reservoir become diminished in quantity. For this purpose the dipping-well may either be lowered or the reservoir may be raised by a suitable means of adjustment, and to render this adjustment as infrequent as possible the reservoir is of such form as to contain a considerable quantity with a very low head or column, so that whether the reservoir be full or nearly empty the level of the ink in the dipping-well will not be appreciably affected. The reservoir is made of flexible and impervious material, preferably india-rubber, and a suitable form for the purpose is a flattened or cylindrical bulb laid horizontally and supported in a cradle adjustable in the vertical direction for the purpose of varying the height of the reservoir with regard to the dipping-well. This adjust-

ment may be effected by various means, one being a system of levers hereinafter described with reference to the accompanying drawings, forming part of this specification, wherein I have illustrated one example of my invention. I would, however, have it understood that I do not limit myself to this particular means of adjustment, as various other mechanical contrivances may be adopted to attain the same end.

Figure 1 is a longitudinal sectional elevation, and Fig. 1^a a cross-section, of the inkstand, the ink-reservoir being full and in its lowermost position. Fig. 2 is a similar view, the reservoir being nearly empty and in its highest position. Fig. 3 is a plan showing three such inkstands side by side in one casing, one of them being in section to show the reservoir-elevating mechanism.

The same letters of reference indicate the same parts in all the figures.

A is the collapsible oblong ink-reservoir, preferably made of india-rubber, provided with an outflow-tube B, of the same material, leading from the under side of the vessel A and enlarged at its outer end to form the dipping-well C, which is supported in a cup formed on the front of the inner casing D, in which the elevating mechanism is mounted. The reservoir A lies in a cradle E, having a longitudinal slot to give passage to the tube B when placing the reservoir in the cradle. This cradle is in this example supported on two pairs of bell-crank levers F F' F', working on centers at f , their long arms being pivoted to the cradle at f' and the back pair being fast on the same axis f^2 and their short arms connected to the short arms of the other pair by links f^3 , so that both pairs work together with a parallel motion in order to maintain a horizontal position of the cradle. To a yoke f^4 , attached to the front pair of levers, is connected an adjusting-rod g , which may be a rack-rod or may be conveniently operated by a milled nut G, screwing on the threaded part of the rod g and abutting against the front end of the casing D, so as by its revolution to move the rod g and oscillate the levers F F' to raise the cradle. In the example shown the casing D fits in an outer casing H, from which it may be with-

drawn to facilitate refilling the reservoir. Instead of this elevating motion of the reservoir the dipping-well C might be carried by a vertically-sliding support fitted to work in guides on the casing and operated by an adjusting-screw, or other means may be adopted for raising and lowering it with regard to the reservoir.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim, is—

1. An inkstand consisting of a closed collapsible containing-vessel connected by a tube with an open dipping-well at about the same level as the reservoir; substantially as specified, the vessel and dipping-well being adjustable as to height relatively to one another by any suitable means.

2. The herein-described inkstand, consisting of a horizontal closed collapsible containing-vessel connected by a flexible tube with

an open dipping-well at about the same level as the reservoir, in combination with a supporting-cradle vertically adjustable with regard to the dipping-well.

3. The herein-described inkstand, consisting of a horizontal closed collapsible containing-vessel connected by a flexible tube with an open dipping-well, in combination with a supporting-cradle carried and rendered vertically adjustable by pairs of levers operated substantially as and for the purpose specified.

The foregoing specification of my improved inkstand signed by me this 13th day of August, 1891.

WILLIAM JAMES SAWYER.

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