

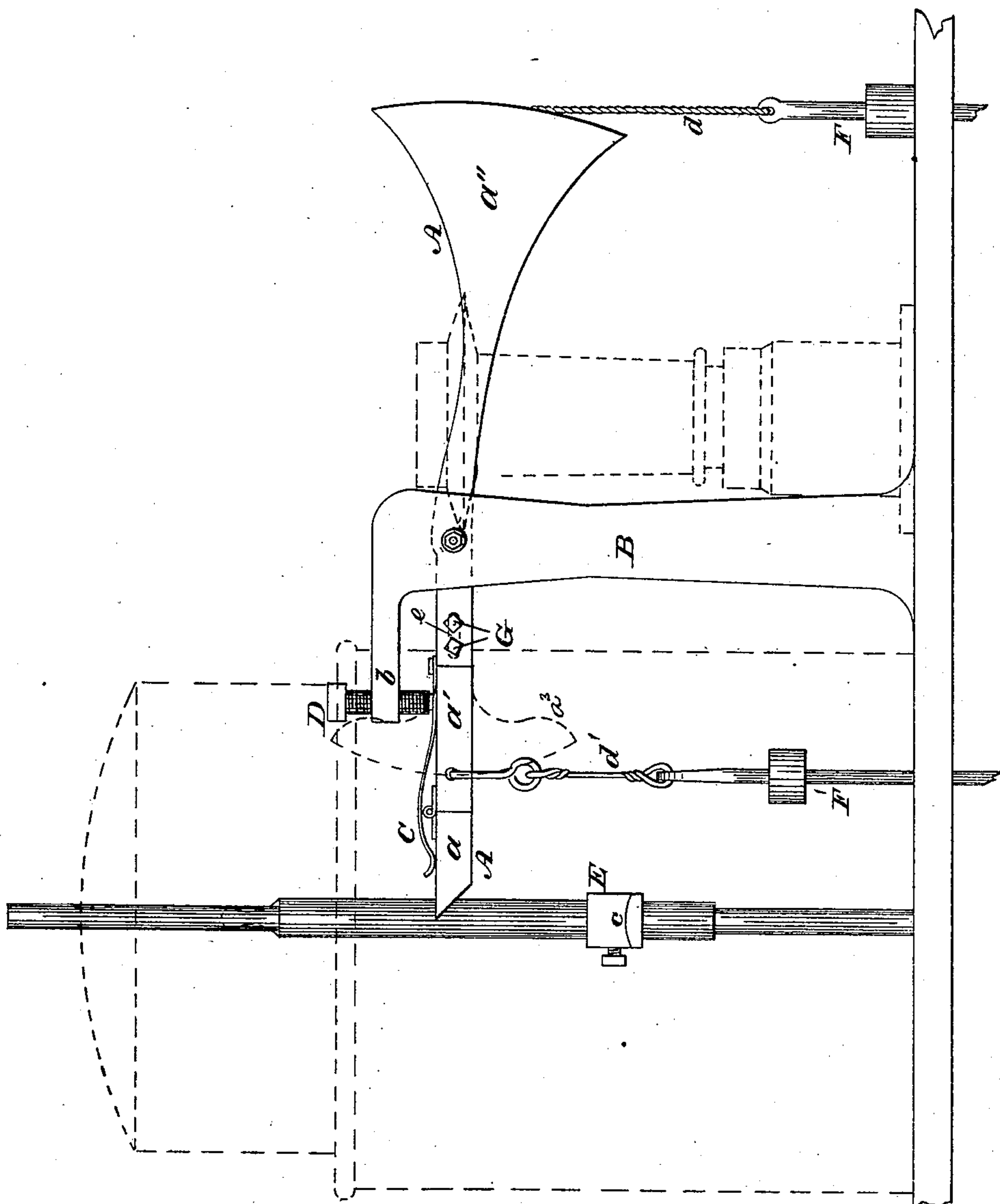
(No Model.)

S. H. PINCUS.

Pumping Mechanism for Gas Apparatus.

No. 236,622.

Patented Jan. 11, 1881.



Witnesses:

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PUMPING MECHANISM FOR GAS APPARATUS.

SPECIFICATION forming part of Letters Patent No. 236,622, dated January 11, 1881.

Application filed March 23, 1880. (No model.)

To all whom it may concern:

Be it known that I, S. HENRY PINCUS, a citizen of the United States, residing in the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Pumping Mechanism for Gas Apparatus, which improvement is fully set forth in the following specification and accompanying drawing, in which the figure is a front view of the pumping mechanism embodying my invention.

This invention relates to apparatus in which the rising and falling of an air-holder operates a lever, and through it a pump which supplies hydrocarbon fluid to the apparatus.

The said invention consists of the peculiar construction and combination of devices hereinafter set forth and claimed.

Referring to the drawing, A represents a weighted beam, which is hinged to or mounted on a standard or upright, B, properly supported and located adjacent to one of the rising and falling air-holders of a gas apparatus. The beam is formed of sections a a' , hinged together, the hinge being so disposed that the end section, a , may be raised, and against it presses a spring, C, which is secured to the section a' .

D represents a screw or pin which is secured to a horizontal limb, b , at the top of the standard or upright B, and arranged vertically, so as to be struck by the beam A.

Attached to the air-holder of the gas apparatus (shown by dotted lines) is a guided block, E, having an inclined or curved face, c , so disposed that it extends beneath the section a of the beam.

Depending from the beam is a pump-rod, F, which is properly weighted, and its connection d passes over a segment, a^2 , secured to the beam. Rods for two or more pumps may be connected to the beam, although in some cases but a single pump may be required.

The operation is as follows: As air or gas is forced into the holder it rises, as is well known, and carries with it the block E, which reaches the section a of the beam A, and elevates the same, thus tripping the beam. When the holder has completed its ascent it returns, and, pressing against the upper face

of the section a , now rigid, it lowers the beam, when the weighted pump-rod descends and the pump is accordingly operated. When the block E, continuing its return motion, clears the end of the section a , the beam rises to its normal position, and thus lifts the pump-rod. The block E is again ready to rise and reach the section a , and when the air-holder ascends the other operations are repeated, and thus the pump is worked, the oil or fluid being thereby forced from a place of supply into the vaporizer or receiver.

It will thus be seen that the upward motion of the beam is short or limited, and its general operation prompt and uniform with the motions of the air-holder, and harmonious with the requirements of the vaporizer or receiver.

The screw or pin D serves not only as a stop for the beam, but as means for adjusting the extent of elevation of said beam. The section a' is separable from the remaining portion a'' of the beam, and connected thereto by a screw, G, which passes through said portion and a longitudinal slot, e , in the end of said section a' , whereby the beam may be lengthened and shortened, and thus adjusted relatively to the block E, the air-holder, and other parts.

An additional pump may be operated by beam A by means of a piston-rod, F', hung by connection d' from the end of said beam opposite to segment a'' . This connection d' may be hung from a hook on said beam, or it may be passed over segment a^3 , (indicated by dotted lines.)

I am aware that it is not broadly new to employ a pump-operating lever in combination with a rising and falling or expanding and contracting air-holder, whereby the movement of said holder operates the pump which supplies the hydrocarbon fluid.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the gas-holder and the block E carried thereby, the beam A, having the section a , which yields in one direction only, the spring C, which operates to

hold said section in its normal position, and a pump-rod hung directly from said beam, substantially as set forth.

2. A tripping-beam, A, having a segment,
5 *a''*, in combination with pump-rod F, hung by connection *d* from said segment, adjusting-screw D, which regulates the movement of said tripping-beam, and a gas-holder which

carries block E, having a curved shoulder, *c*, which trips the hinged spring-pressed arm of 10 said lever.

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