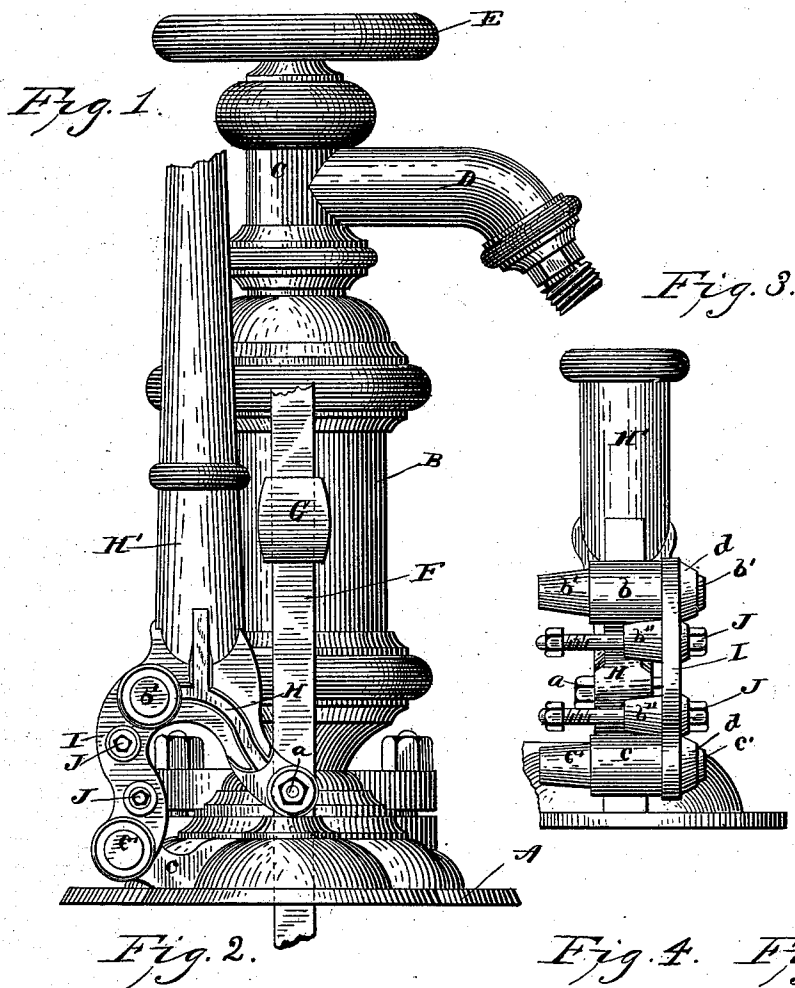


(No Model.)

A. J. TYLER.  
PUMP BRAKE.

No. 402,116.

Patented Apr. 23, 1889.



Witnesses

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# UNITED STATES PATENT OFFICE.

AARON J. TYLER, OF ALBION, NEW YORK.

## PUMP-BRAKE.

SPECIFICATION forming part of Letters Patent No. 402,116, dated April 23, 1889.

Application filed September 4, 1888. Serial No. 284,525. (No model.)

*To all whom it may concern:*

Be it known that I, AARON J. TYLER, a citizen of the United States, residing at Albion, in the State of New York, have invented certain new and useful Improvements in Pump-Brakes, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 represents a side elevation of my improved pump-brake; Fig. 2, a plan view of a portion of the base of the pump; Fig. 3, an end elevation, one of the fulcrum-links being removed; and Figs. 4 and 5, detail views of one of the fulcrum-links.

The invention consists in certain novel features of construction and arrangements of parts, that will be fully hereinafter described, and particularly pointed out in the claims appended.

The essential object of the invention is the provision of simple devices for reciprocating a pump-rod by means of a pivoted vibrating handle, the devices employed being so constructed that they will last for a great length of time and will effectually prevent any lateral vibration of the handle during operation, thereby permitting the pump-rod to move much easier and smoother and more rapidly than with the devices now employed for this purpose, as will more fully hereinafter appear.

Referring to the annexed drawings by letter, A designates a suitable pump-base, having mounted upon and secured to it a vertical air-chamber, B, provided at its upper end with a water-chamber, C, spout D, and hand-wheel E. These parts are not claimed in this application, as they are covered by claims in another application filed by me on the 14th day of May, 1888, and numbered 273,888.

The letter F designates a portion of a wind-mill pump-rod vertically guided by being passed through suitable apertures in the base and in an arm, G, formed on or secured to the casing or air-chamber B. Pivotaly attached to this pump-rod by means of a pivotal bolt, *a*, is the forward end of a curved arm, H, attached to or formed integral with the vibrating lever or handle H'. The rear end of the curved arm H has formed integral with it a transverse cylindrical-shaped boss, *b*, having projecting from its ends the concentric taper-

ing pins *b' b'*. Cast integral with the base is another enlargement, *c*, provided with similarly-shaped pins *c'*. Connecting the rear end of the curved arm H to the enlargement *c* on the base are the pivotal fulcrum-links II, these links being provided at their ends with short outwardly-projecting sleeves *d*, internally tapered to fit snugly on the tapering pins *b' c'*, the adjacent or inner faces of the links abutting against the ends of the enlargements *b* and *c*. These links I are connected together and held on their tapering pins by means of transverse bolts J J, which pass through the links, and tubular extensions *b''*, formed on the adjacent faces of the same. When the links are drawn together by means of the bolts J, the adjacent ends of these sleeves *b''* abut against each other, and thereby prevent the links from binding or clamping too tightly the enlargements *b* and *c* and their tapering pins. When it is desired to bring the links I I closer together to compensate for any wear that may occur to the parts, the ends of the sleeves *b''* are filed or ground off a little, and the bolts may then be tightened to the extent desired. It will be thus observed that by this arrangement the operating devices will be very durable and will preserve their efficiency as long as they last. By pivoting the operating-handle in this manner a broad and substantial fulcrum is obtained that will prevent any undue lateral vibration of the handle, insuring a smooth and easy vertical movement of the pump-rod.

It is evident that this pump-brake may be applied or attached to any style of pump employing a reciprocating pump-rod, irrespective of formation or style of base or support.

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

1. The combination of a pump-rod, a vibrating lever provided with an arm, this arm being pivotaly connected to the pump-rod at its forward end and provided at its rear end with an integral enlargement having oppositely-projecting reduced pins, a support or base provided with an integral enlargement having oppositely-projecting reduced pins, the fulcrum-links connecting the pins on these enlargements, and connecting-bolts for hold-

ing these links upon the pins, substantially as set forth.

2. The combination of a pump-rod, a vibrating lever provided with an arm at its lower end, this arm being pivotally connected at its forward end to the pump-rod and having formed on its rear end an enlargement provided with oppositely-projecting pins, a support or base provided with an enlargement having oppositely-projecting pins, the fulcrum-links pivotally connecting the pins on the enlargements, these links being provided on their adjacent faces with abutting sleeves, and the connecting-bolts, substantially as described.

3. The combination, with a support or base provided with an enlargement having tapering pins projecting in opposite directions, of a pump-rod, an operating-lever provided with an arm pivotally connected to the pump-rod, an enlargement provided with oppositely-projecting tapering pins being carried by this arm, the fulcrum-links connecting these tapering pins, these links being provided with

internally-tapered sleeves adapted to fit the said tapering pins, and the connecting-bolts, substantially as described.

4. The combination of a base provided with an enlargement, this enlargement being provided with oppositely-projecting tapering pins, a pump-rod, an operating-lever provided with an arm on its lower end, the forward end of this arm being pivoted to the pump-rod and its rear end being provided with oppositely-projecting tapering pins, fulcrum-links connecting the tapering pins on the handle with those on the base, these links being provided with internally-tapered sleeves *d d*, adapted to fit over the said tapering pins, and the connecting-bolts passing through the fulcrum-links, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

AARON J. TYLER.

Witnesses:

EDWIN W. BRONSON,  
WALTER H. OLDS.