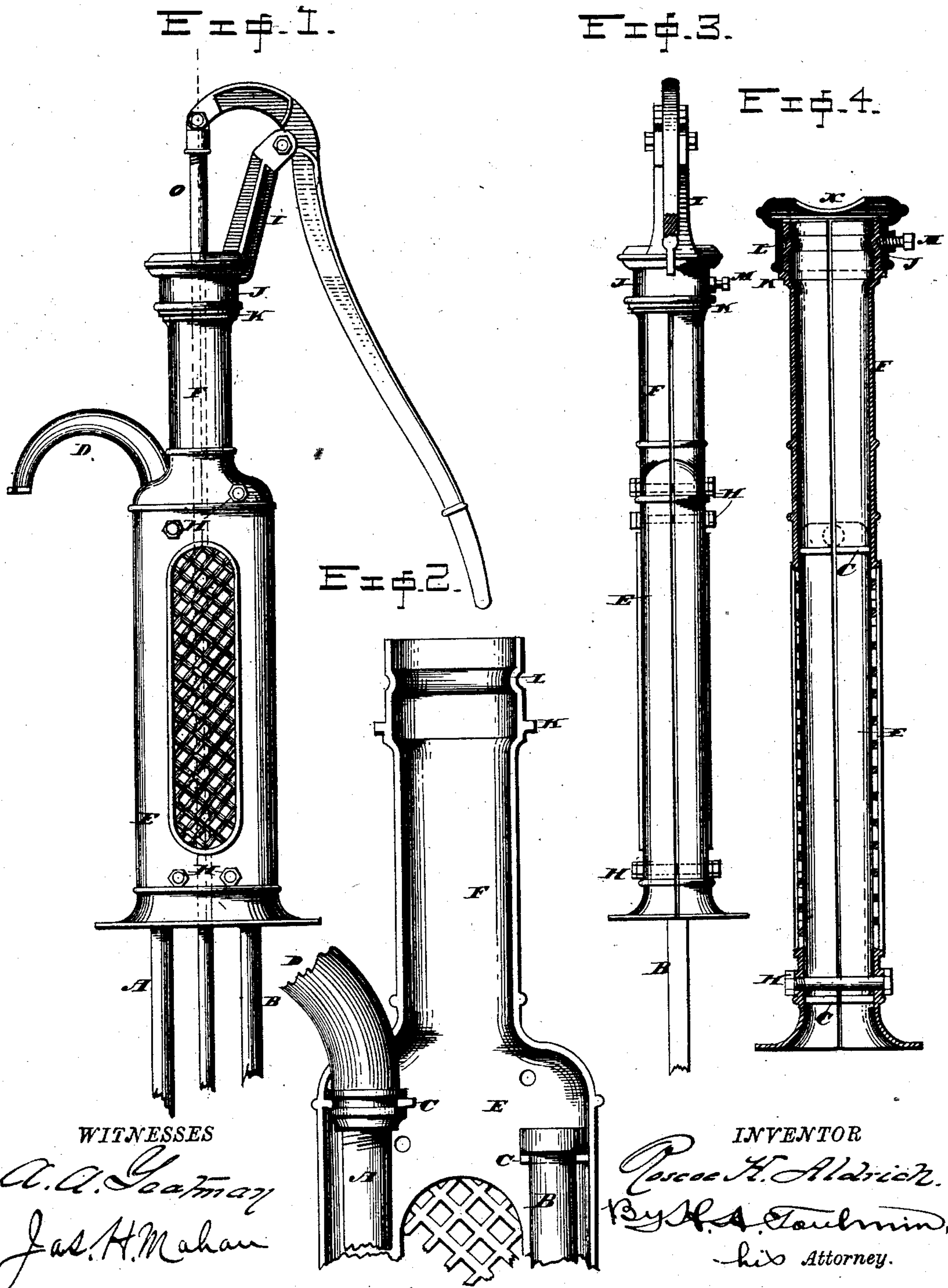


(No Model.)

R. H. ALDRICH.
PUMP.

No. 374,332.

Patented Dec. 6, 1887.



UNITED STATES PATENT OFFICE.

ROSCOE H. ALDRICH, OF SENECA FALLS, NEW YORK, ASSIGNOR TO THE
GOULDS MANUFACTURING COMPANY, OF SAME PLACE.

PUMP.

SPECIFICATION forming part of Letters Patent No. 374,332, dated December 6, 1887.

Application filed July 25, 1887. Serial No. 245,163. (No model.)

To all whom it may concern:

Be it known that I, ROSCOE H. ALDRICH, a citizen of the United States, residing at Seneca Falls, in the county of Seneca and State of New York, have invented certain new and useful Improvements in Pumps, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in pumps, and particularly in a two-part or vertically-divided head having two semi-cylindrical extensions projecting upwardly from the upper end of the body proper of the head, and in a handle-support and a sleeve connected thereto and constructed to fit over and embrace both of the said divided cylindrical extensions, whereby, first, the strains incident to operating the handle and the mechanism connected thereto are sustained by both halves of the divided head in such manner as to tend to hold them together, and not by either of the halves separately, and not in a manner to tend to divide said halves, and whereby, secondly, the handle may be turned to different positions around the head, still bringing the strains of operation upon both halves of the head.

I desire to observe that I am fully aware of the existence of two-part or vertically-divided pump-heads *per se*; but in such instance the head is not provided with two semi-cylindrical upwardly-projecting extensions, as before set forth. In the second place, I desire to observe that I know pump-caps with fulcrum-points for pump-handles are not in themselves new. The improvements presented in the above statement of the invention, however, differ from the old devices, as will hereinafter fully appear.

In the accompanying drawings, forming a part of this specification, and on which like reference-letters indicate corresponding features, Figure 1 represents a side elevation of my improved pump-head, confining-sleeve, and handle-support; Fig. 2, a side elevation of the interior of the upper portion of the one-half of the head, showing portions of several pipes therein; Fig. 3, an elevation of the divided head, &c., looking toward the handle side; and Fig. 4, a vertical sectional view

through the head and confining-cap, showing the division between the halves of the head.

The letter A designates the discharge-pipe, and the letter B the air-chamber of a pump, these pipes forming also the supports of the lower mechanism, which is not shown, as it forms no part of the present invention. These pipes are clamped and held between the flanges C, formed on the interior of the head and fashioned to receive the pipes. The pipe A is provided with a spout, D.

The letter E refers to the respective halves or vertical sections of the head, each half being constructed in shell-like form, so as to constitute an interior chamber, in which the upper ends of the supporting-pipes are contained, and of course clamped and held, as already suggested. The halves are also preferably constructed with an open-work portion for ornamentation and lightness; and they are further provided with lower flaring ends, so as to constitute a proper platform-flange for the supporting of the head upon the usual platform or well-curb.

So far there is nothing distinctively new in this device. I now, however, approach the features of my invention.

The letter F designates the two upwardly-projecting semi-cylindrical extensions, one projecting from each half of the head. These extensions stand close together, as seen in Fig. 3, when the halves of the head are brought together and secured by bolts and nuts H, and extend a sufficient distance above the body of the head to secure the proper altitude for the handle. These extensions form the support for the handle-standard I; and that the strains incident to operating a handle and the weight of the handle and its connections may be borne by both of the extensions without a tendency to strain them apart, the standard is provided with a sleeve, J, which fits over both of the extensions snugly and smoothly, and by preference rests at its lower end upon two semi-angular beads, K, which, when the extensions are brought together, form an annular shoulder for the said sleeve. The extensions may each also be provided with a semi-angular groove, L, the two grooves forming an annular seat for a set-screw, M, carried by the sleeve and

acting as a means of securing the sleeve, as also of clamping the extensions toward each other when in the position shown in Fig. 4. In this figure I have omitted the upper bolts, H, as I
5 may do in practice, if I desire, because of the action of the sleeve J and its set-screw in holding and drawing the halves together and toward each other, this being perfectly practicable, unless, indeed, the set-screw happens to
10 be placed immediately over the joint between the two extensions. This would not necessarily occur. Thus it will be observed that I have a two-part pump-head with all the advantages incident to that class of head—the
15 clamping of supporting-pipes, the effective sustaining of the lower mechanism, &c., combined with a handle-support, which throws all the strain received by it jointly and equally upon the two halves of the head, completely
20 avoids all tendency to separate the halves and gradually work loose the nuts on the clamping-bolts, and consequently loosen the grip of the halves upon the supporting-pipes and allow the suspended pump-cylinder and the mechanism therein to sag and sway from side to
25 side, and, besides this, the position of the handle around the head may be changed, if desired; and, again, as already suggested, the

upper clamping-bolts may be omitted, if desired. The cap, it will be observed, has an
30 elongated opening, N, therein for the passage of the plunger-rod O, which oscillates back and forth on account of the arc described by means of the short end of the handle.

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

In a pump, the combination, with a two-part vertically-divided head secured together in the body thereof by clamping-bolts, and a semi-
40 cylindrical extension projecting upwardly from each half of the head and standing proximately against each other, and having an outer groove therein, of a handle-standard and a sleeve secured thereto and fitted over the extensions
45 and acting to prevent them and the halves of the head from spreading under the strain of operating the handle, and a set-screw carried by the cap and entering the groove.

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

ROSCOE H. ALDRICH.

Witnesses:

H. P. USHER,

C. A. BLODGETT.