

W. H. BEACH & G. MARSHALL.

Apparatus for Walling Wells.

No. 168,707.

Patented Oct. 11, 1875.

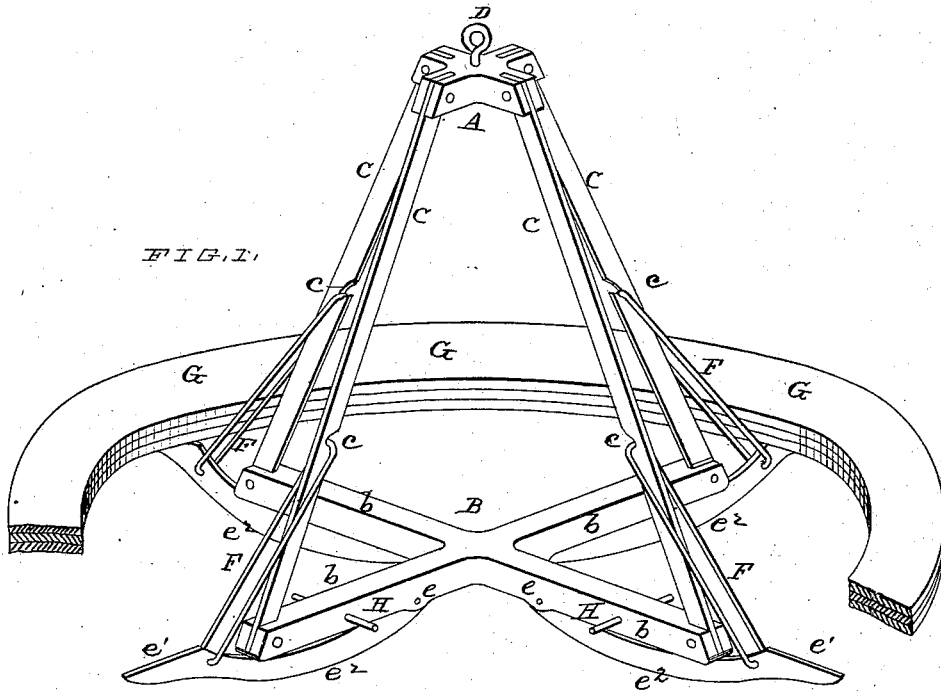
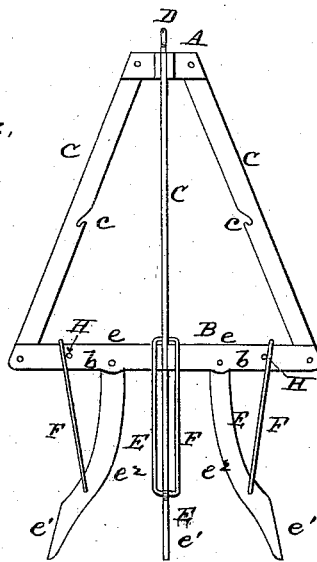


FIG. 1.

FIG. 2.



ATTEST.

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UNITED STATES PATENT OFFICE.

WILLIAM H. BEACH AND GEORGE MARSHALL, OF BELLEVILLE, ILLINOIS.

IMPROVEMENT IN APPARATUS FOR WALLING WELLS.

Specification forming part of Letters Patent No. 168,707, dated October 11, 1875; application filed July 27, 1875.

To all whom it may concern:

Be it known that we, WILLIAM H. BEACH and GEORGE MARSHALL, of Belleville, St. Clair county, State of Illinois, have invented a certain Improved Apparatus for Walling Wells, of which the following is a specification:

Our improvement consists in a hanging frame, which supports a base-ring, upon which the wall of the well is built, and which is lowered down into the well during the erection of the well-walling thereon. The second part of our improvement consists in a number of trip arms sustained by links, which are tripped by contact with the bottom of the well, so as to relieve the frame from the wall, and allow it to be drawn out of the well.

Figure 1 is a perspective view of our apparatus, showing trip-arms in horizontal position. Fig. 2 is a side elevation, showing the trip-arms in vertical position.

The frame consists of a head-cross, A, and a base-cross, B, connected by inclined bars C. In the head A is secured the suspension-link D, which may be swiveled in the head, or otherwise firmly attached thereto. This link is so connected to a derrick as to allow the frame to be raised or lowered, as required. E are the trip-arms. The inner ends of these arms are hinged to the arms *b* of the cross B, at *e*. Near the outer ends of the arms E are links F, passing through said arms, and their upper ends engaging on catches *c* of the bars C, so as to support the arms E in a horizontal position.

When the arms E are in a horizontal position their ends *e*¹ may support a ring, G, of wood or other substance, upon whose top the well-wall is built.

This apparatus is suitable for general use, as the wall can be built up as the apparatus is lowered, so as to keep the stone lying at

about the surface of the ground; but the apparatus is more especially intended for use in the walling of wells which contain so much water as to interfere with the operation of walling in the usual way.

The operation is as follows: The arms E and link F are placed in the position shown in Fig. 1, and the supporting-ring G placed on the ends *e*¹ of the drop or trip arms E. The apparatus may then be lowered down into the well a greater or less distance, and the wall is built on the ring G.

The apparatus, with the wall thereon, may be lowered down as desired, and when the lower part *e*² of the arms reach the well-bottom the further descent of the frame releases the links F from the notches *c*, and the apparatus may be drawn out from the well, the ends *e*¹ being drawn out from under the ring G and wall. As the links fall they come in contact with cross-pins H, which prevent them from catching upon the inner parts of the arms *b*, and thus interfering with the downward movement of the arm E in relation to the frame.

We claim as our invention—

1. The frame A B C E, constructed for support of the well-wall, and for connection to a derrick or equivalent device, so as to operate substantially as and for the purpose set forth.

2. The combination of the frame A B C and drop or trip arms E, substantially as set forth.

3. The combination, with the frame A B C and arms E, of the links D and catch *c*, substantially as set forth.

WILLIAM H. BEACH.
GEORGE MARSHALL.

Witnesses:

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THOS. IBBOTSON.