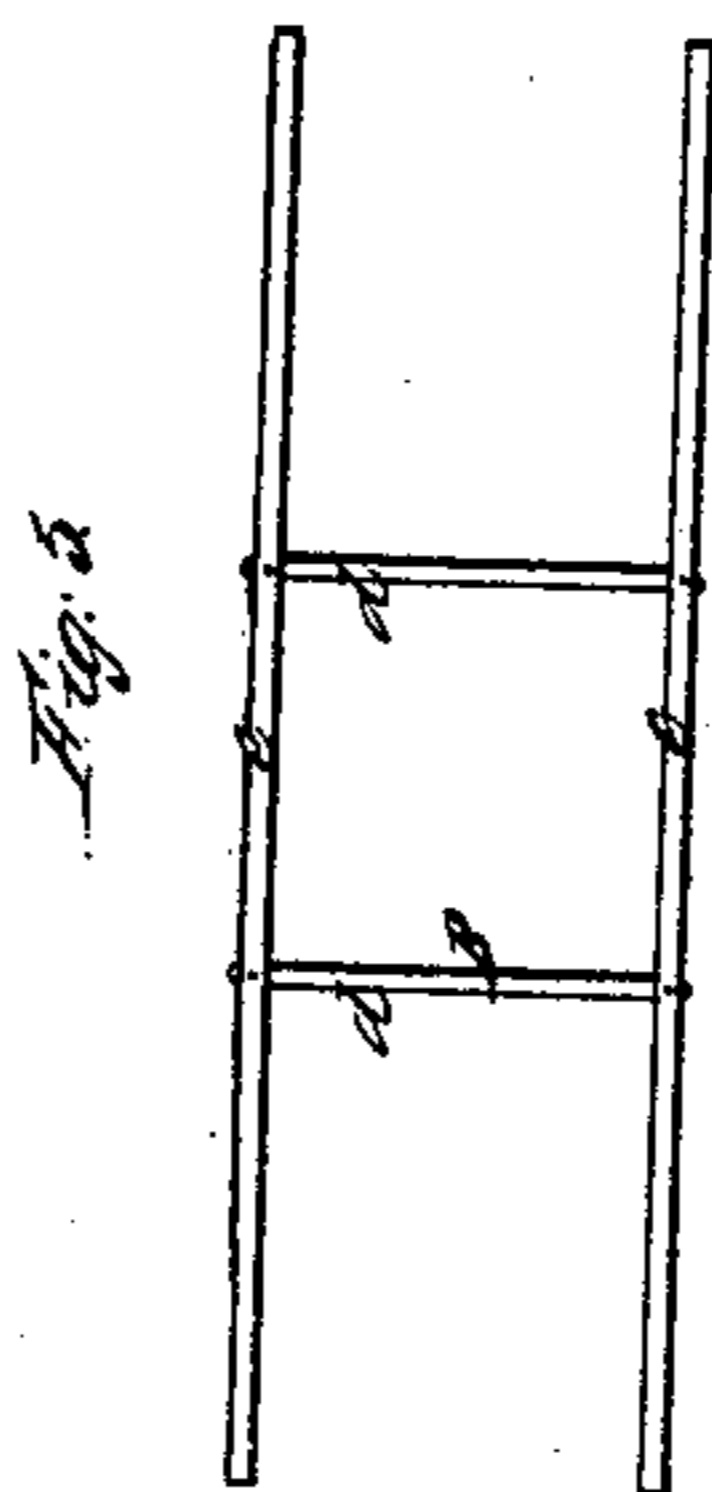
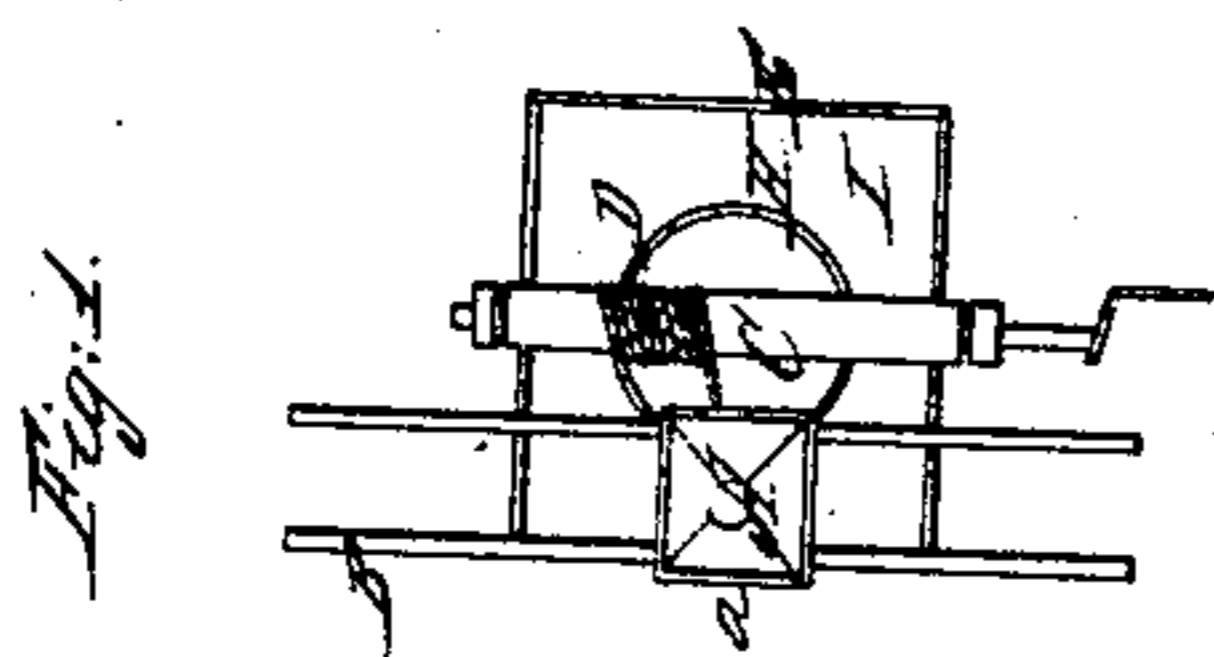
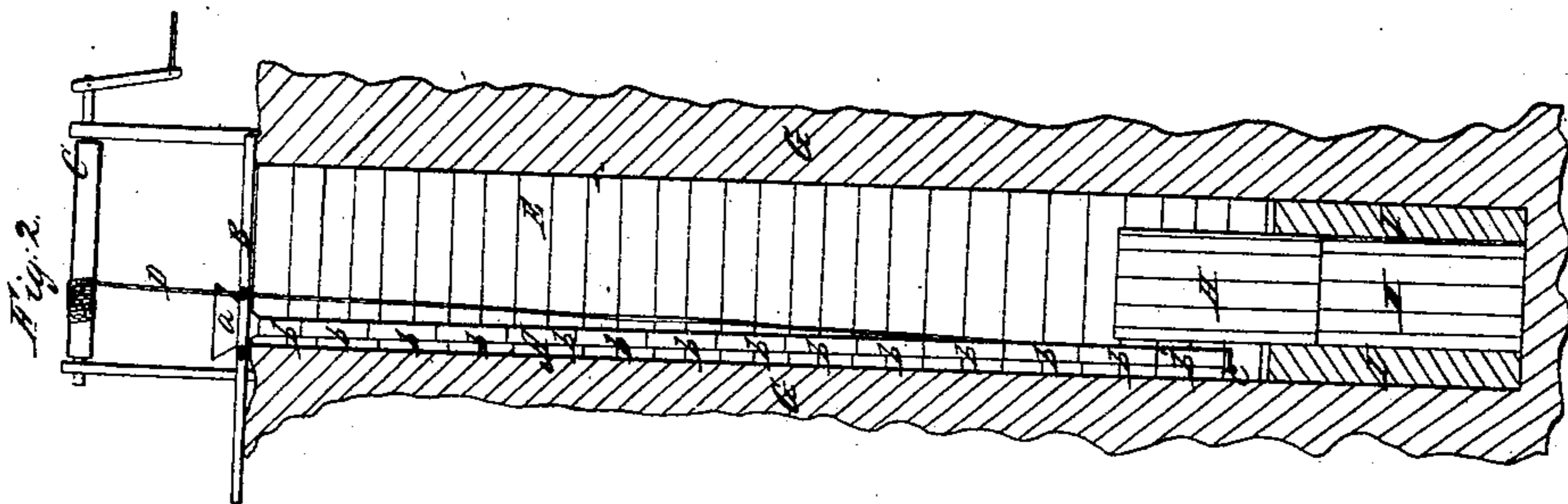
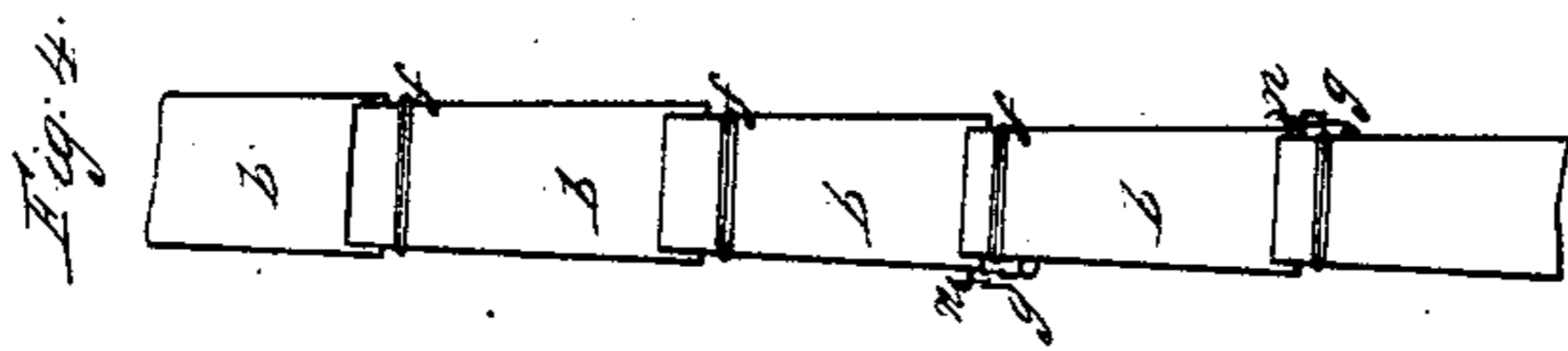
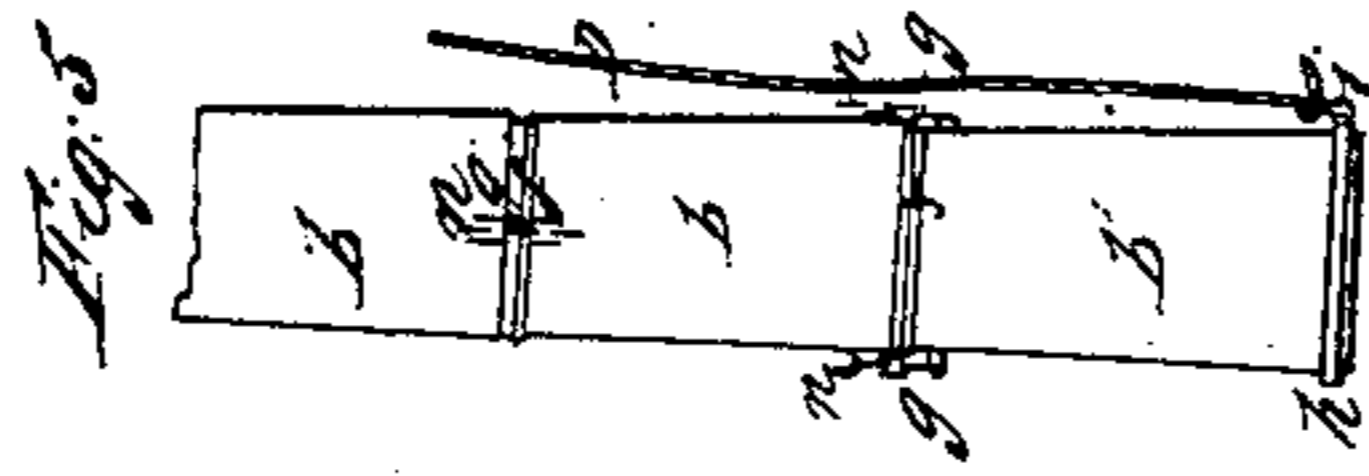


W. S. Follensbee.

Cistern.

N^o 71,155.

Patented Nov. 19, 1867.



Witnesses:
Gyloanus D. Locke
G. H. Milliston

Inventor:
W. S. Follensbee

United States Patent Office.

WILLARD S. FOLLENSBEE, OF JANESVILLE, WISCONSIN.

Letters Patent No. 71,155, dated November 19, 1867.

IMPROVED GROUT-CONDUCTOR.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLARD S. FOLLENSBEE, of the city of Janesville, in the county of Rock, and State of Wisconsin, have invented a Grout-Conductor for grouting wells; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a plan or top view of a well with my conductor in position for use.

Figure 2 is a vertical section of well with the conductor the same as in fig. 1.

Figure 3 is a view of the supporting-frame or rack.

Figure 4 is a longitudinal section of the conductor.

Figure 5 is an enlarged view of a portion of the lower sections of the conductor.

The nature of my invention relates to grouting wells, and consists, first, in the employment of a metallic tube having a funnel or hopper-shaped mouth to conduct the grout from the top of the well to its desired position in the same by simply shovelling or pouring it into the open mouth of the tube at the top of the well, thereby avoiding the necessity of keeping a man in the well while the same is being grouted, and consequently the danger arising from the frequent caving in of old wells with wooden curbing, and the falling of stones and other bodies upon the head of the operator below, as well as the labor incident to lowering the grout in buckets, as in the ordinary manner; second, in supporting a grout-conductor in its proper position in a well by means of a movable frame or rack, of the form of the ordinary cheese-rack, surrounding or clasping the neck of the conductor below its mouth, and having its ends resting on the ground at opposite sides of the well; third, in constructing a grout-conductor in sections, joined as hereinafter described, so that thereby it can be more easily carried and placed in position; that it can be more easily cleaned and more readily adjusted to the depth of the well or the distance the grout is to be lowered.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the drawings, G represents the ground or earth walls back of the curbing E of the well, which is here represented as the ordinary plank curbing; H H', the grouting-tubs or forms; I, the grout in position between the forms and curbing; and A the grout-conductor, reaching to the top of the well. I prefer to construct this conductor in short sections, *b* and *b'*, of heavy sheet metal, with their ends passing into each other after the manner of the sections of an ordinary stove pipe, and having, like the latter, a shoulder or rib, *f*, to prevent their pressing too far together. To keep them together, I employ generally a short chain, *g*, with the lower link secured in a staple in the lower section, and the upper link passing over a hook, *n*, in the upper section. I prefer a chain with three links, operating as shown, as thereby the sections are prevented from becoming disunited by the accidental slipping off of the chain from the hook, while at the same time they can be readily disjoined, when desired. The upper section terminates in a funnel or hopper-shaped mouth, *a*, for the more ready admission of the grout, and is supported on a movable rack, B, that rests across the top of the well. The construction of the rack can be readily seen from the drawings. The lower section *b'* of the conductor may have a strengthening-band, *h*, through which passes a staple or ring, *i*, to which is secured the lower end of the rope D, that reaches to the top of the well, and passes around the windlass C. The object of this rope and windlass is to support and lower the lower sections of the conductor into the well as fast as other sections are added at the top, and also to similarly aid in the withdrawal of the conductor from the well. It will be seen that the grout can be discharged in any portion of the well desired by simply moving the upper end over the point desired by means of the rack.

What I claim as new, and for which I desire Letters Patent of the United States, is—

A grout-conductor, composed of sections, connected as described, and arranged to operate substantially as set forth.

Witnesses:

S. D. LOCKE,

G. H. WILLISTON.

WILLARD S. FOLLENSBEE.