

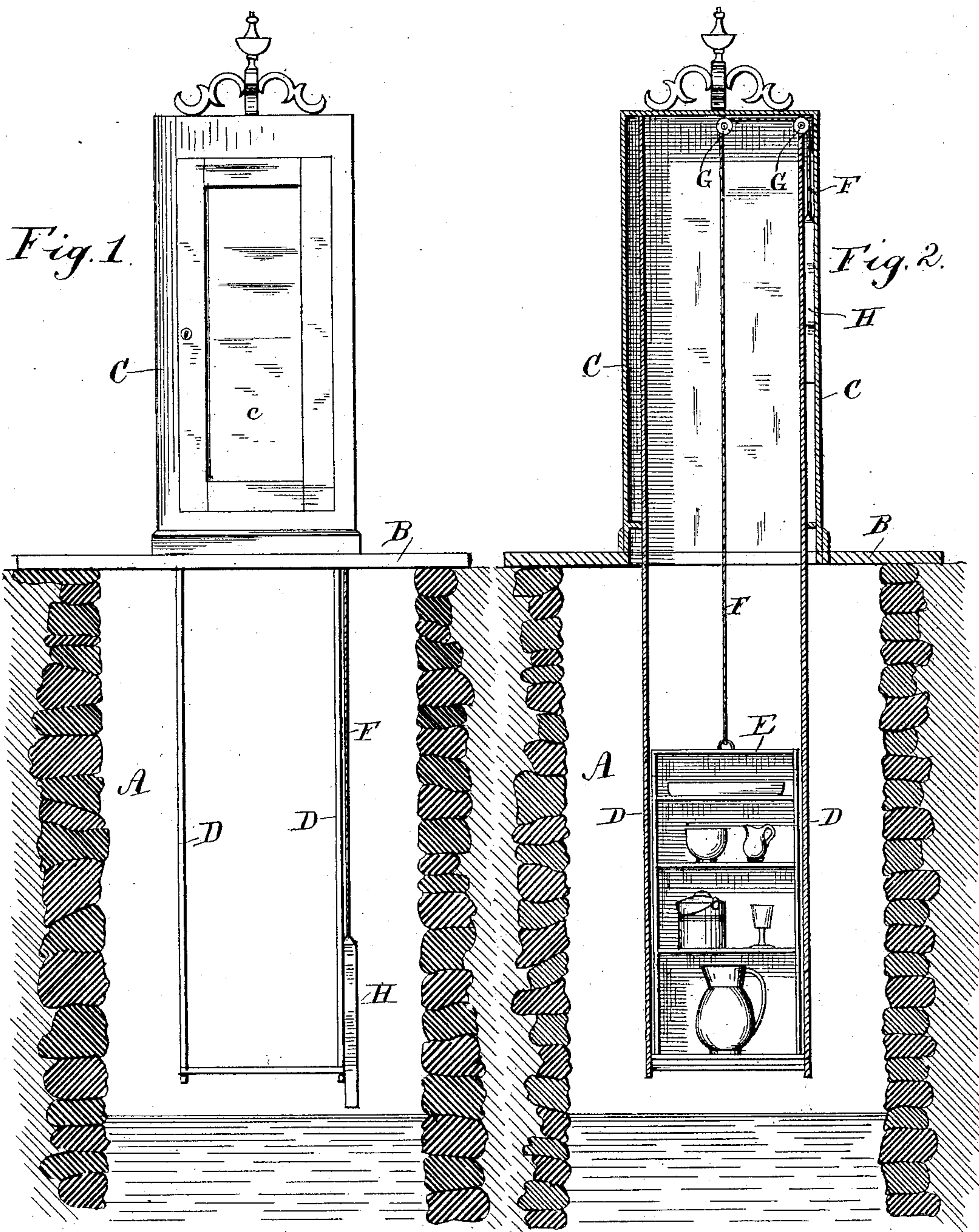
(No Model.)

2 Sheets—Sheet 1.

J. E. GROSJEAN.
WELL REFRIGERATOR.

No. 337,058.

Patented Mar. 2, 1886.



Witnesses

E. S. Smith
C. E. Doyle

Inventor
James E. Grosjean
By his Attorney
Henry C. Carter

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

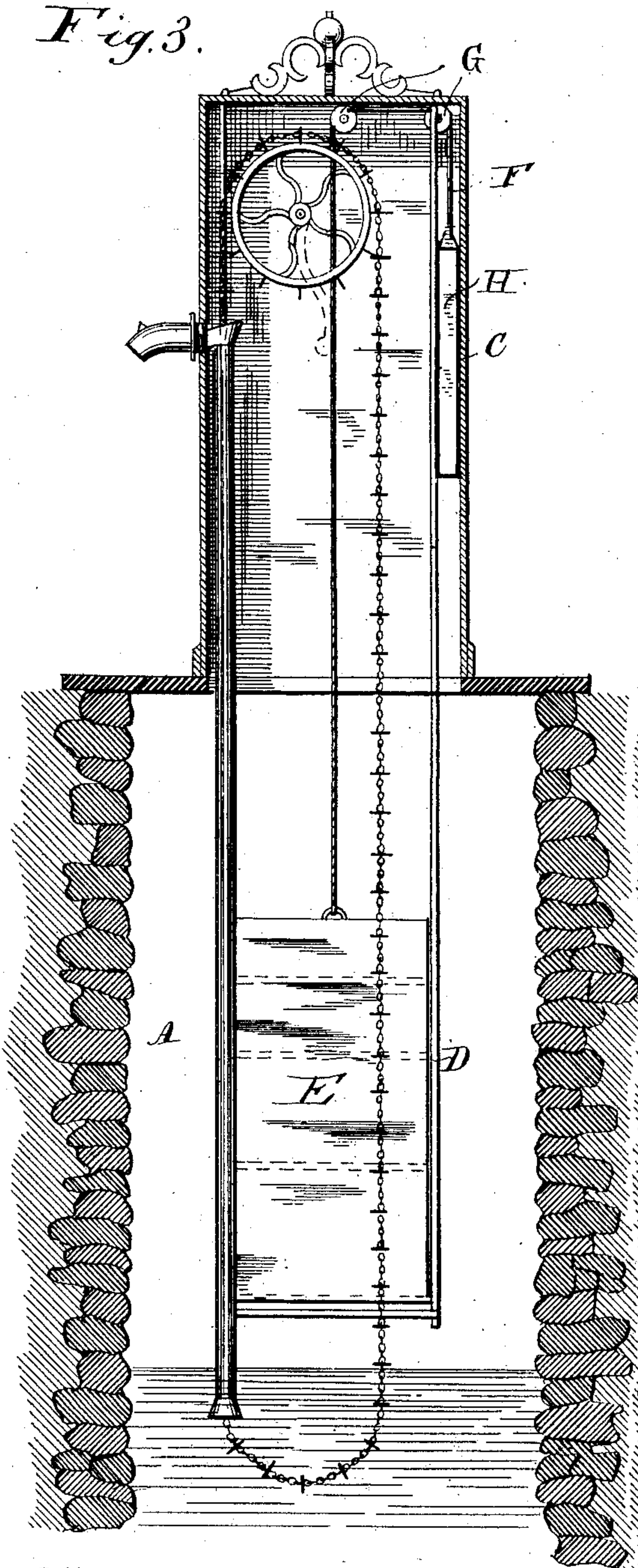
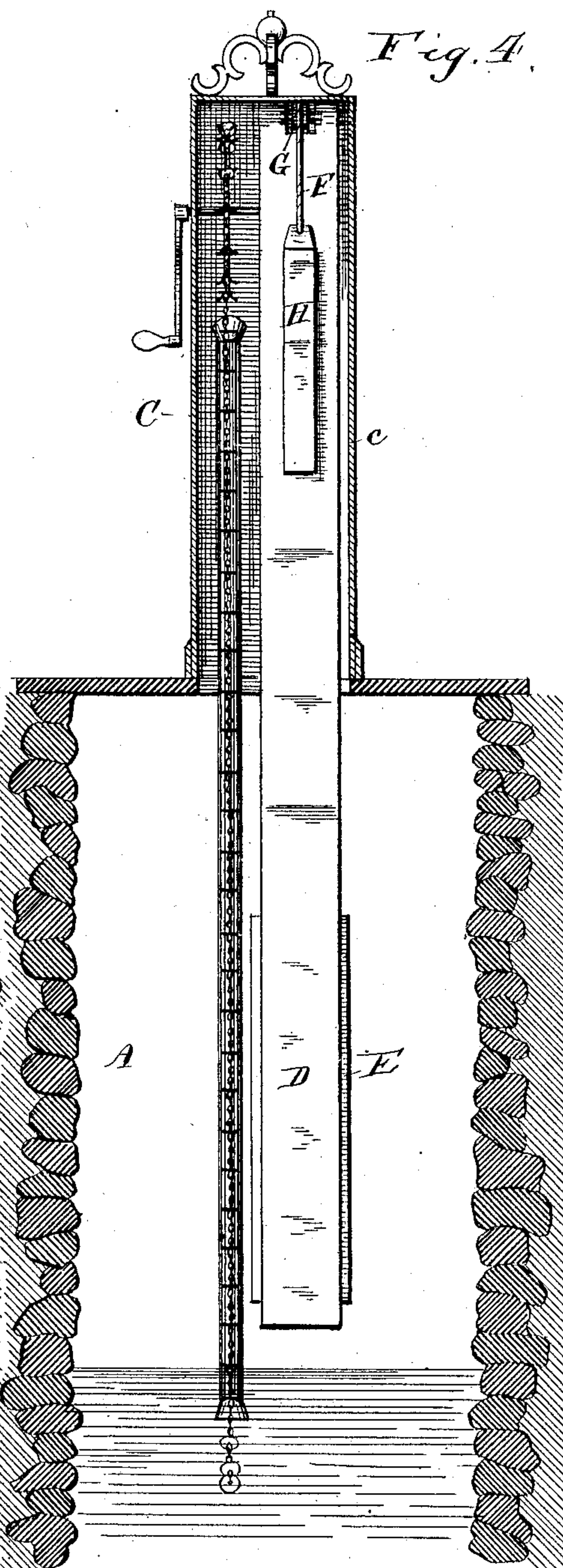


Fig. 4.



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UNITED STATES PATENT OFFICE.

JAMES E. GROSJEAN, OF FREDERICKSBURG, OHIO.

WELL-REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 337,053, dated March 2, 1886.

Application filed September 23, 1885. Serial No. 177,886. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. GROSJEAN, a citizen of the United States, residing at Fredericksburg, in the county of Wayne and State of Ohio, have invented certain new and useful Improvements in Well-Refrigerators, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The object of my invention is to provide a cheap and convenient device by which wells may be utilized as refrigerators for preserving edibles during hot summer weather. To this end I construct an elevator car or case of suitable size to be lowered into the well with which it is to be used, said car or case having preferably a series of shelves. I provide above ground over the well a casing adapted to receive the elevator car or case and to sustain the latter. I prefer to lower and raise the elevator car or case by means of a cord or rope or their equivalents attached at one end to said car or case, and having at its opposite end a counterbalancing-weight somewhat heavier than the said car or case when the latter is empty. The cord or rope runs over one or more pulleys in the casing. Instead, however, of using the counterbalancing-weight, it is obvious that a windlass may be employed, or a sprocket-wheel operating in connection with a chain attached to the car or case may be utilized as a well-known means for raising or lowering the latter. The casing for the elevator car or case has a door, which, when closed, excludes dirt from the car or the well, and the said casing may also serve as a support for a chain-pump or a pump of other form, said casing in such instance being made about six inches wider than when it is used only in connection with the refrigerating elevator-car.

In order that my invention may be fully understood I will now describe it in connection with the accompanying drawings, in which—

45 Figure 1 shows my device in connection with a well, the door of the casing being closed and the car being supposed to be raised. Fig. 2 shows the inside of the casing and the car lowered into the well. Figs. 3 and 4 illustrate my invention in connection with a well having a chain-pump.

50 A denotes the well, and B the covering-

planks for the same, said planks supporting the casing C, which is open at its bottom, as will be understood, said casing having a door, c, to afford ready access to the elevator-car. 55

Between guideways D, attached to the casing C, is placed the elevator car or case E, which is preferably of sheet metal, said car fitting loosely between said guideways, and being preferably provided with a series of 60 shelves, as shown.

F is a cord or rope passing over pulleys G at the top of the casing, said cord or rope being attached at one end to the refrigerator-car, and having at its opposite end a counterbalancing-weight, H, preferably somewhat heavier than the said car when the latter is empty. The weight H is guided in the casing C between one of the guideways D and the outside of said casing. 70

In Figs. 3 and 4 I have shown my invention in connection with a well having an ordinary chain-pump which is operated in the usual manner, the only difference between the construction shown by these figures and that shown by Figs. 1 and 2 being that the casing is made a few inches wider in the former instance to accommodate the pump. 75

To raise and lower the elevator-car the operator takes hold of the cord or rope F and 80 pulls gently up or down, the car E, whether loaded or not, being so nearly counterbalanced by the weight H that it may be easily moved in either direction. Should there be such a difference of weight between the car E and 85 the weight H (owing to heavy loading of the car or other causes) that the said car will not stand steadily in any position, either raised or lowered, to which it may be adjusted, a wedge or key may be inserted between one of the pulleys G or the cord or rope F, and the casing C or some other fastening device for the car may be employed. When the car in its descent reaches the bottoms of the guideways D, the cross-piece d, connecting the lower ends of 95 said guideways, will prevent its further descent.

From the foregoing it will be apparent that by my apparatus the low temperatures of wells, whether dry or containing water, may 100 conveniently be utilized for domestic refrigerating purposes, and that the use of the casing

which supports the elevator-car or the car and pump will prevent dirt from falling into the well or coming in contact with the articles of food contained in said car, while the door of the casing affords ready access to the car when necessary.

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

1. The combination, with a well, of a casing 10 above the same, said casing being provided with a door, guideways attached to said casing and extending down into the well, an elevator-car between said guideways, a counterbalance-weight, a cord or rope attached to 15 said car and weight, and one or more pulleys over which said cord or rope runs, substantially as set forth.

2. The combination, with the casing C,

adapted to be supported over a well, the said casing being provided with a door, c, and with 20 guideways D, extending down into the well and connected at their bottoms by a cross-piece, of an elevator-car, E, adapted to run between said guideways, a counterbalancing-weight, H, connected with said car, pulleys 25 supported by said casing, over which the flexible connector between said weight and car runs, and a chain-pump also supported by and housed within said casing C, substantially as set forth.

In testimony whereof I affix my signature in the presence of two witnesses 30

JAMES E. GROSJEAN.

Witnesses:

W. S. PEPPARD,
E. E. CASPER.