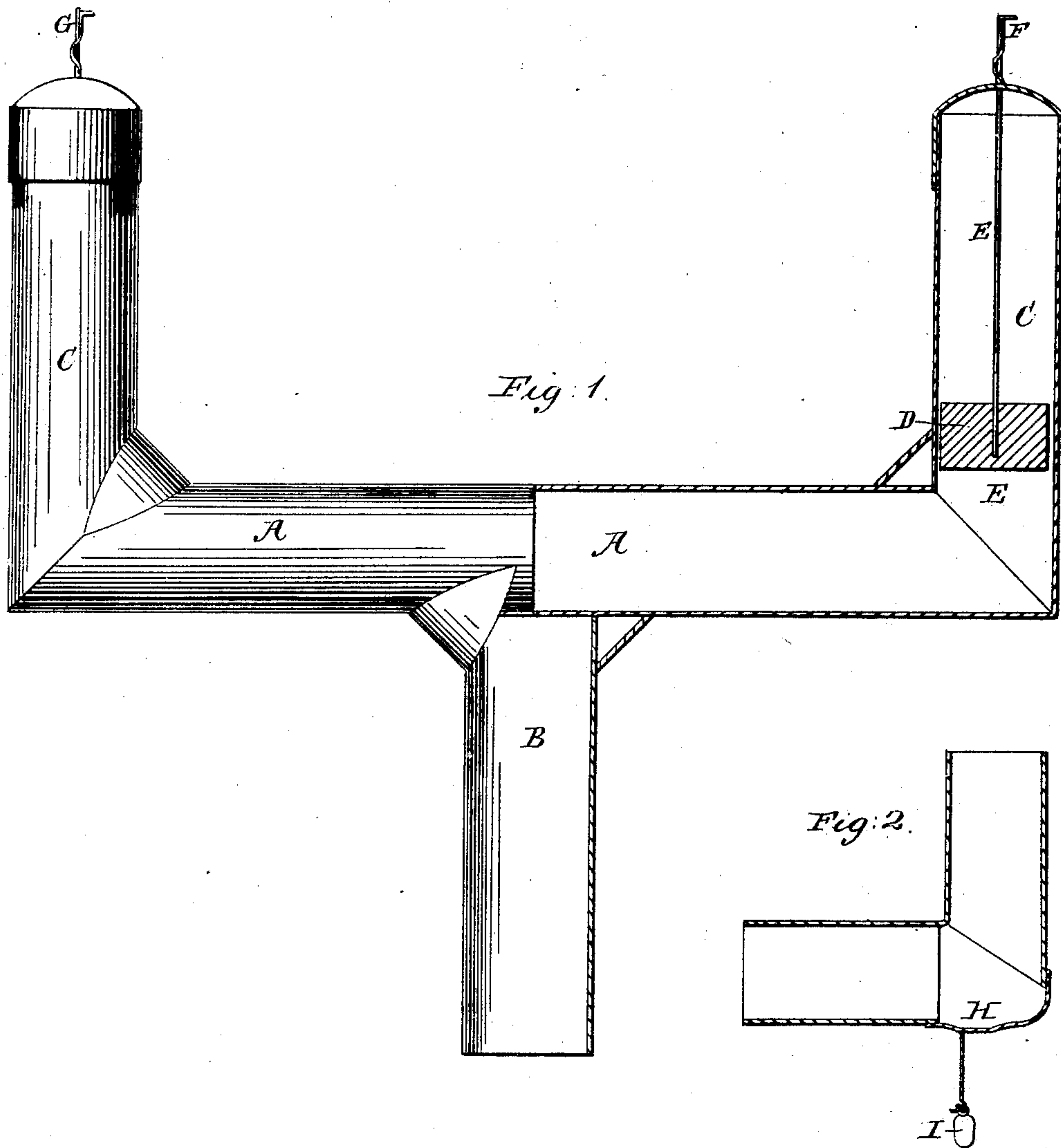


S. D. HAILEY.
Leveling Instrument.

No. 26,762.

Patented Jan'y 10, 1860.



Witnesses.
H. C. Howle
J. R. Gordon Jr.

Inventor.
S. D. Hailey
by his atty.
G. W. Mitchel

UNITED STATES PATENT OFFICE.

SAMUEL D. HAILEY, OF JACKSON, TENNESSEE.

SURVEYOR'S LEVEL.

Specification of Letters Patent No. 26,762, dated January 10, 1860.

To all whom it may concern:

Be it known that I, SAML. D. HAILEY, of Jackson, in the county of Madison and State of Tennessee, have invented a new and Improved Land-Level; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

10 The nature of my invention consists in forming an elastic joint, in combination with a horizontal tube connecting with two perpendicular tubes, with water or any other fluid till it rises in the perpendicular tubes to a proper height; then floats are put in each of the perpendicular tubes; rods project up from the floats with a sight on their upper end; when the rods are of equal lengths they find a perfect level; one of the

20 sights is movable to give any required grade, the perpendicular tubes being kept vertical by the weights.

To enable others to make and use my invention I will proceed to describe its construction and operation.

I construct my level of one horizontal

and two perpendicular tubes connected by an elastic joint as shown in the annexed drawing, which is a side view of my invention. 30

a is a horizontal tube.

b, is the socket that secures the staff that holds the level.

c, c, are the perpendicular tubes.

d d are the floats which move freely in the tubes by the fluid. 35

e, e, are the rods projecting from the floats.

f, f, are the sights; *g* the movable sight to get the required grade. 40

I claim—

1. Connecting the vertical tubes to the horizontal tube, by means of a yielding joint in any manner, substantially as described.

2. I claim combining a plumb and weight with the jointed tubes to keep them vertically, for the purposes set forth. 45

SAMUEL D. HAILEY.

Attest:

ALEX. W. CAMPBELL,
H. M. GIST.