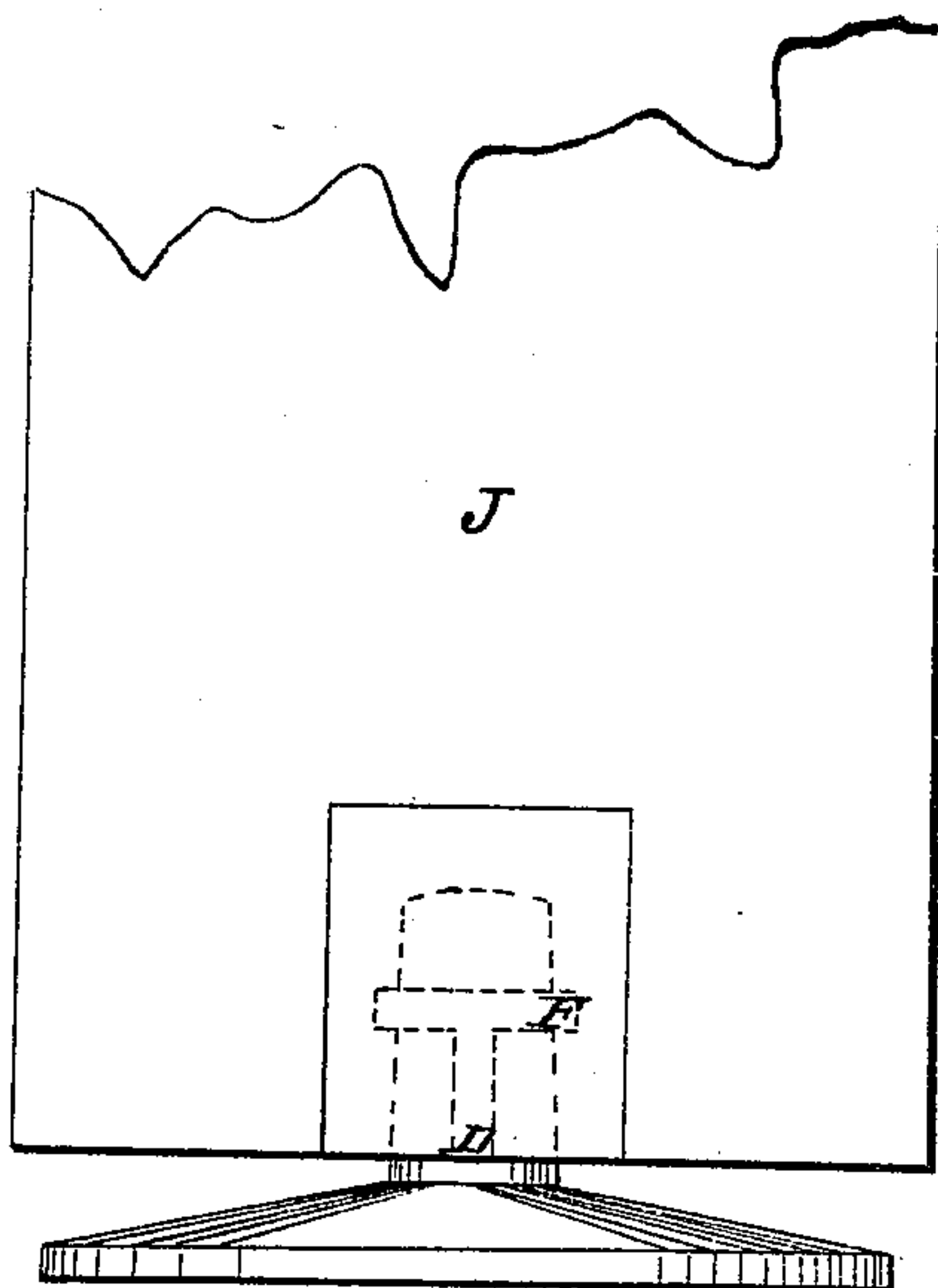
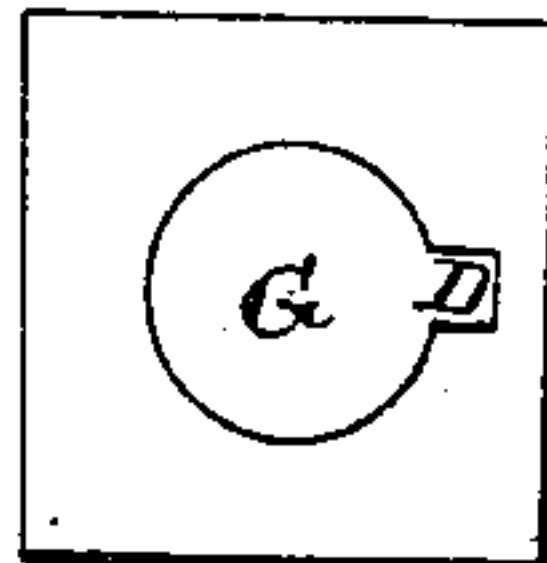
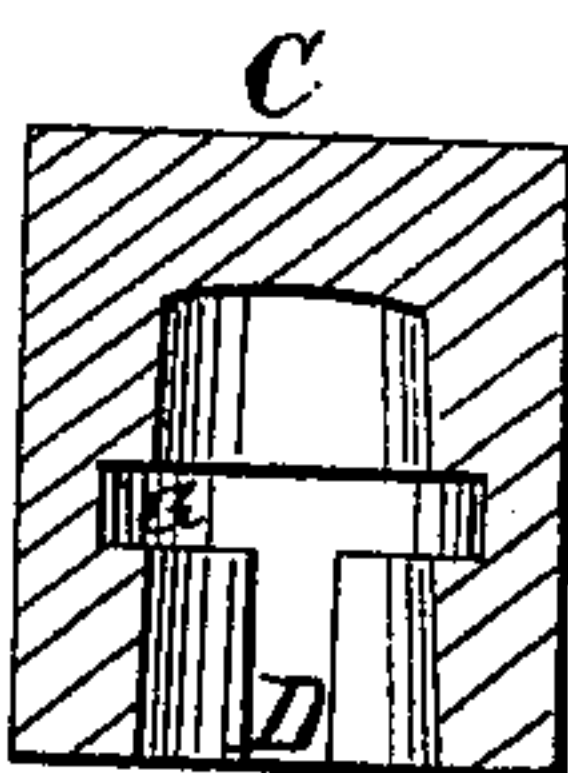
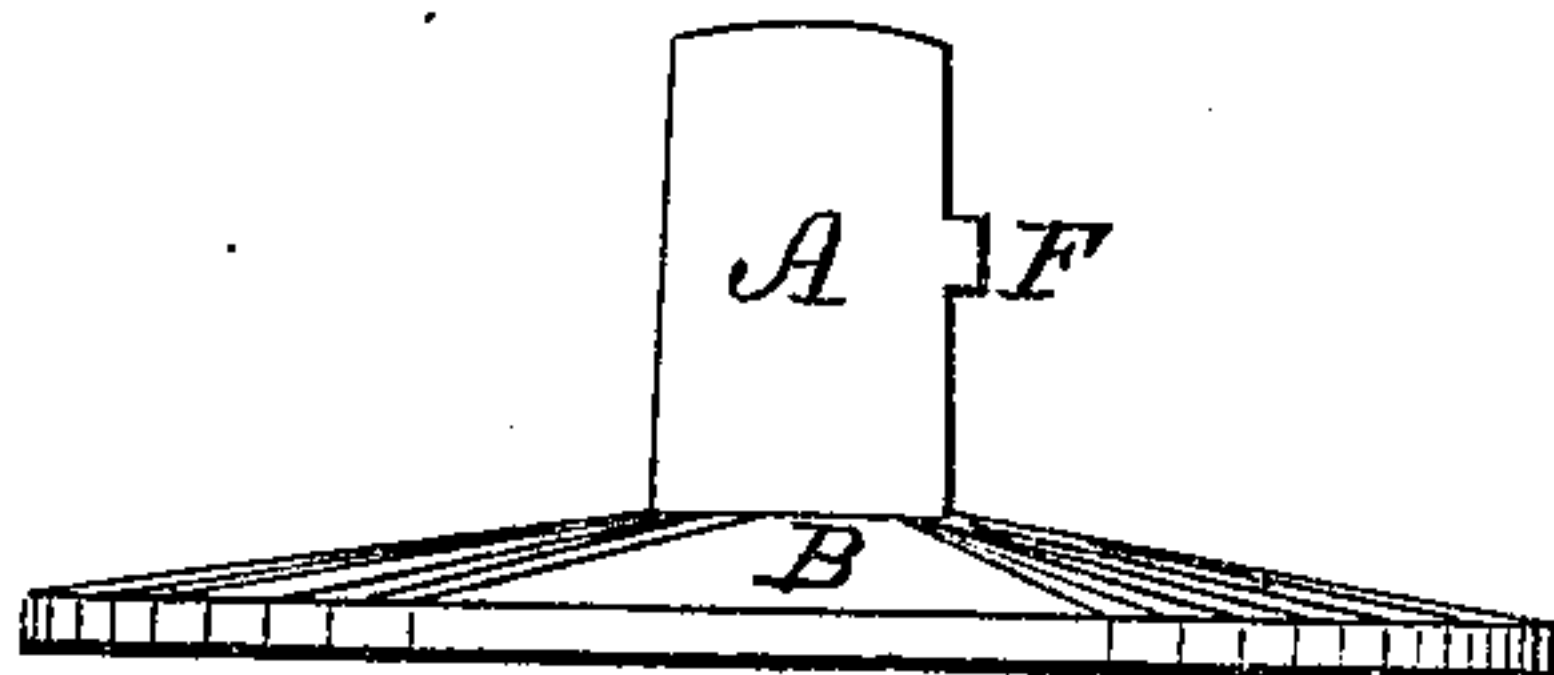


H. Rexford.

Canal Lock Gate Step.

N^o 77,405.

Patented Apr. 28, 1868.



Witnesses:

Martin Burton
William S. Safford

Inventor

Homer Rexford

United States Patent Office.

HOMER REXFORD, OF SANDY HILL, NEW YORK.

Letters Patent No. 77,405, dated April 28, 1868.

IMPROVED CANAL-LOCK-GATE STEP.

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, HOMER REXFORD, of Sandy Hill, Washington county, and State of New York, have invented a new and improved "Canal-Lock-Gate Step;" and I do hereby declare the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in connecting the step on which the gate rests and swings with the metallic box fitted in the heel-post of the gate, to rest upon the pivot of the step, which enters the socket of the box, in such a manner that the step will remain attached to said box when the gate is being put in its proper position, and when removed from its place by accident or design.

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

I make in the socket of the box, heretofore inserted in the lower end of the heel-post of the gate, an annular slot, at about one-third of the height of said socket, and of sufficient size for the "feather," herein described, to move in freely at all times; and from the lower end of said socket I make a vertical slot up into said annular slot, of sufficient size to receive said "feather," and allow it to pass into said annular slot.

Upon the side of the common pivot of the ordinary step, I make a "feather," of sufficient size to fit said vertical slot, and pass into said annular ring or slot, and there be made to revolve so freely that said box cannot, at any time, rest upon said "feather;" and, at the same time, the "feather" will be of sufficient strength to sustain the weight of the "step," in its connection with the "box," at all times.

In the accompanying drawings—

B represents the "pivot," "feather," and "base" combined, forming the "step."

A represents the "step"-pivot.

F represents the "feather."

C represents the vertical of the metallic "box."

E represents the annular slot in the socket of the box.

D represents the vertical slot.

G represents the socket of the "box."

J represents the heel-post of the gate, with the "box" and "step" connected, and when in position.

Having thus made E and D in the socket of G, I fix the metallic box in the lower end of the heel-post of the gate, with D in the direction of the front of the heel-post of the gate, and then connect B with said box by passing F, on the pivot of the said step, through D, into E, and, by a partial revolution of said step, sufficient to bring said "feather" opposite to D in said annular slot, the connection is completed, and said gate can be placed in position, or removed therefrom, without said "step" and "box" being disconnected, whereby much time, labor, and expense are saved in shipping the lock-gate, and in replacing it when it is removed from its proper position by accident or from other causes.

I do not claim the box and step now in use in connection with the support of canal-lock-gates; but

I claim the construction and arrangement of the step B, with its pivot A and feather F, when combined with the metallic box C, constructed with its annular slot D, in the manner and for the purposes herein described.

HOMER REXFORD,

Witnesses:

MARTIN BURTON,

WILLIAM S. SAFFORD.