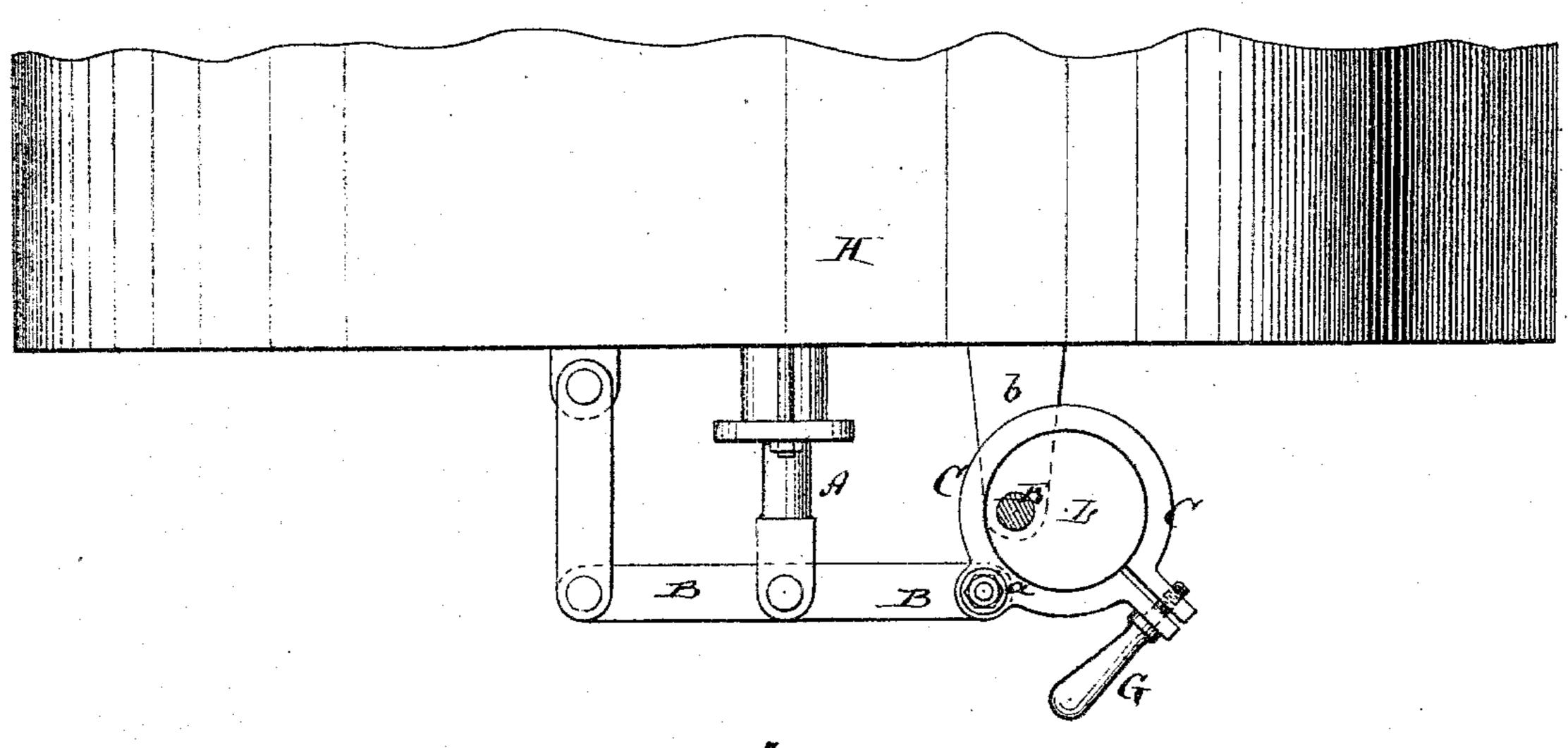
CHARLES E. STEWART.

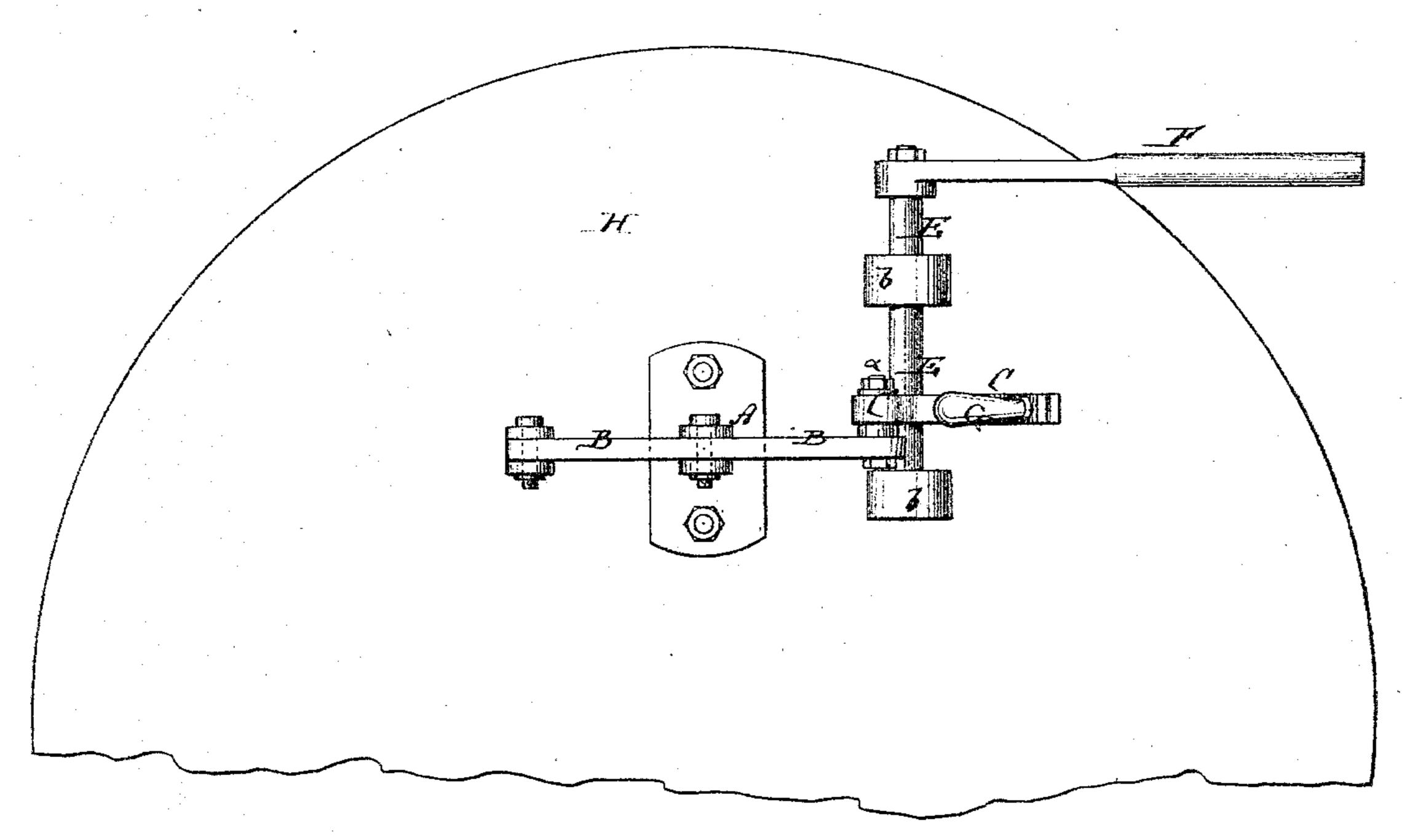
Improvement in Throttle-Valve Gears.

No. 115,904.

Fig.1.

Patented June 13, 1871.





Witnesses: A Bennementorf. 4m 86.6. Smith.

Inventor:

C. E. Stewart.

UNITED STATES PATENT OFFICE.

CHARLES E. STEWART, OF ASPINWALL, UNITED STATES OF COLOMBIA.

IMPROVEMENT IN THROTTLE-VALVE GEARS.

Specification forming part of Letters Patent No. 115,904, dated June 13, 1871.

To all whom it may concern:

Be it known that I, CHARLES E. STEWART, of Aspinwall, in the State of Panama and United States of Colombia, have invented a new and Improved Throttle-Valve Lever; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a plan or top view, partly in section, of my improved throttle-valve lever. Fig. 2 is a front view of the same.

Similar letters of reference indicate corre-

sponding parts.

This invention has for its object to provide a simple and powerful mechanism whereby the throttle-valves of steam-boilers can be operated without any danger of successful counteraction by the force of the steam. The invention consists in a new combination of parts, whereby the desired degree of power is obtained.

A in the drawing represents the valve-stem, connected with a lever, B, whose free end is, by a bolt, a, pivoted to an annular but split strap or band, C. This band embraces an eccentric, D, which is mounted upon an upright shaft, E, that hangs in ears b b. F is the valve-lever projecting from the shaft E. By turning the lever F the eccentric will move the band

C and shift the position of the same in such manner as to swing the lever B and move the valve. The strap or band C is open or split, as stated, and its ends are held together by a screw, G. This screw, when applied so as to firmly bind the band to the eccentric, will lock the lever and valve in any desired position. This form of lever can be readily attached with but little alteration of those now in use, all that is required being to cut the lever B of a suitable length to receive the bolt a, which connects it with the eccentric, and attach it to the boiler, as indicated in Fig. 2.

The special advantages of this arrangement consist, chiefly, in the perfect ease and steadiness of operation, the result of the powerful compound leverage; also, in the effective and rapid way of securing the valve-lever in any

desired position by the screw G.

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

The combination of the throttle-valve with the levers B, strap C, eccentric D, shaft E, and lever F, all arranged substantially as herein shown and described.

CHARLES E. STEWART. [L. S.]

Witnesses:

WM. DILL,

Special Inspector Customs.

CHAS. ERASMUS PERRY,

U. S. Consul.