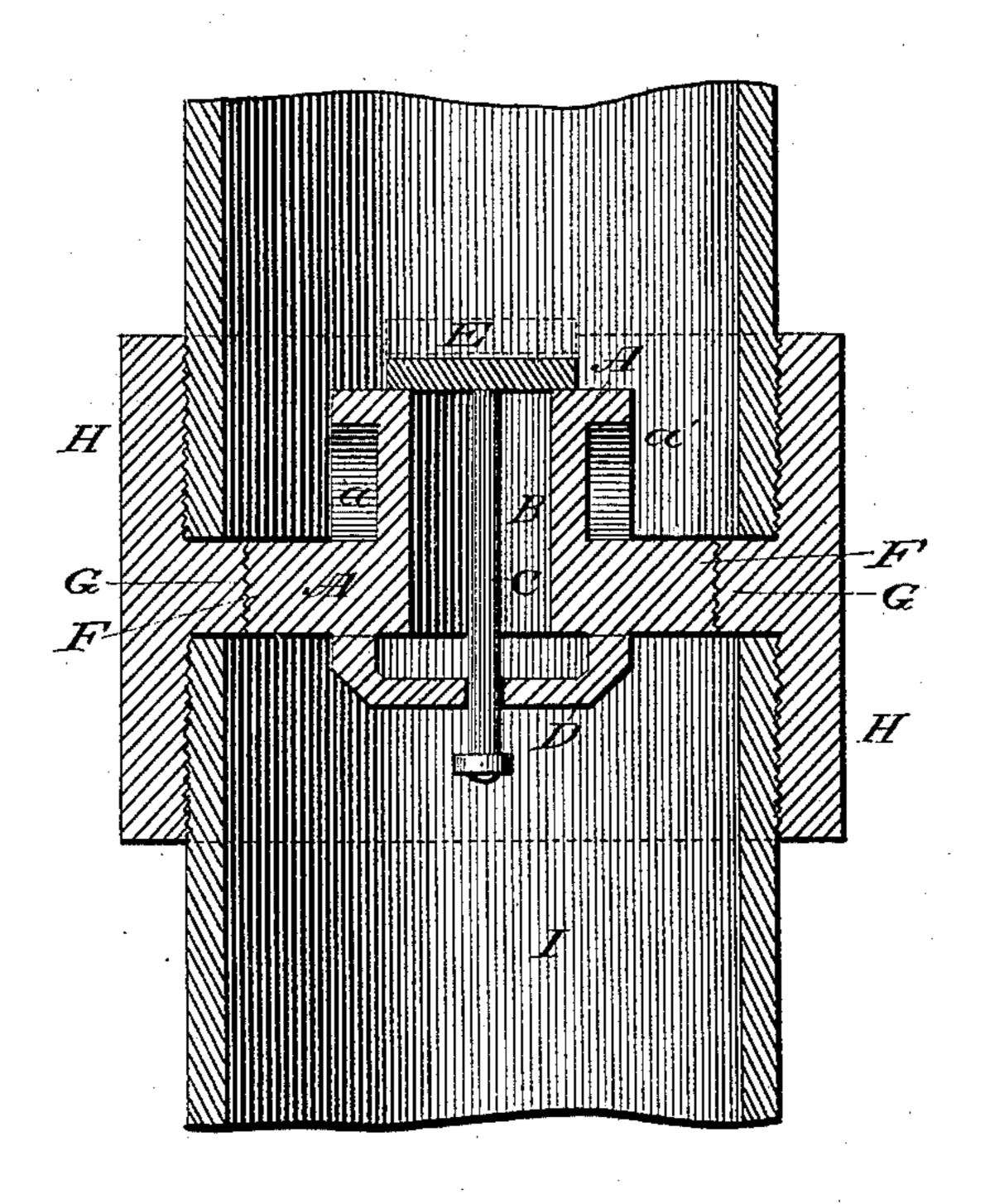
(No Model.)

H. A. HALL.

CHECK VALVE.

No. 283,777.

Patented Aug. 28, 1883.



Witnesses: William Ill Toughtur Heury & Duthouy Trevertor. Howard J. Hall

## United States Patent Office.

HOWARD A. HALL, OF STURGIS, MICHIGAN.

## CHECK-VALVE.

SPECIFICATION forming part of Letters Patent No. 283,777, dated August 28, 1883.

Application filed February 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, Howard A. Hall, a citizen of the United States, residing at Sturgis, county of St. Joseph, and State of Michigan, have invented a new and useful Check-Valve, of which the accompanying is a specification.

My invention relates to check-valves which are used in drive-wells; and the object of my invention is to furnish for drive-wells a check-valve without packing. I attain this object by the mechanism illustrated in the following drawing, in which the figure is a vertical section of the entire check-valve in position in the well screwed to the pipe-coupler.

E is the check-valve, which is seated on the circular metallic block A, having through the center channel B. The valve-rod C is guided by the grate D. The flange F of the block A is furnished with a screw-thread fitting into a

corresponding screw-thread cut into the internal annular flange of the pipe-coupler H, which projects slightly into the bore of the pipe. The upper part of the block A is reduced in diameter, and is provided with notches  $a\ a'$  to 25 receive a wrench. I I are the well-pipes, joined by the coupler H.

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

The combination, with the check-valve and the block A, having the notches a a', and the lower threaded flange, F, of the coupler H, having the internal annular threaded flange, G, substantially as described.

HOWARD A. HALL.

Witnesses:

WM. M. LOUGHLIN, CHARLES B. GURNEY.