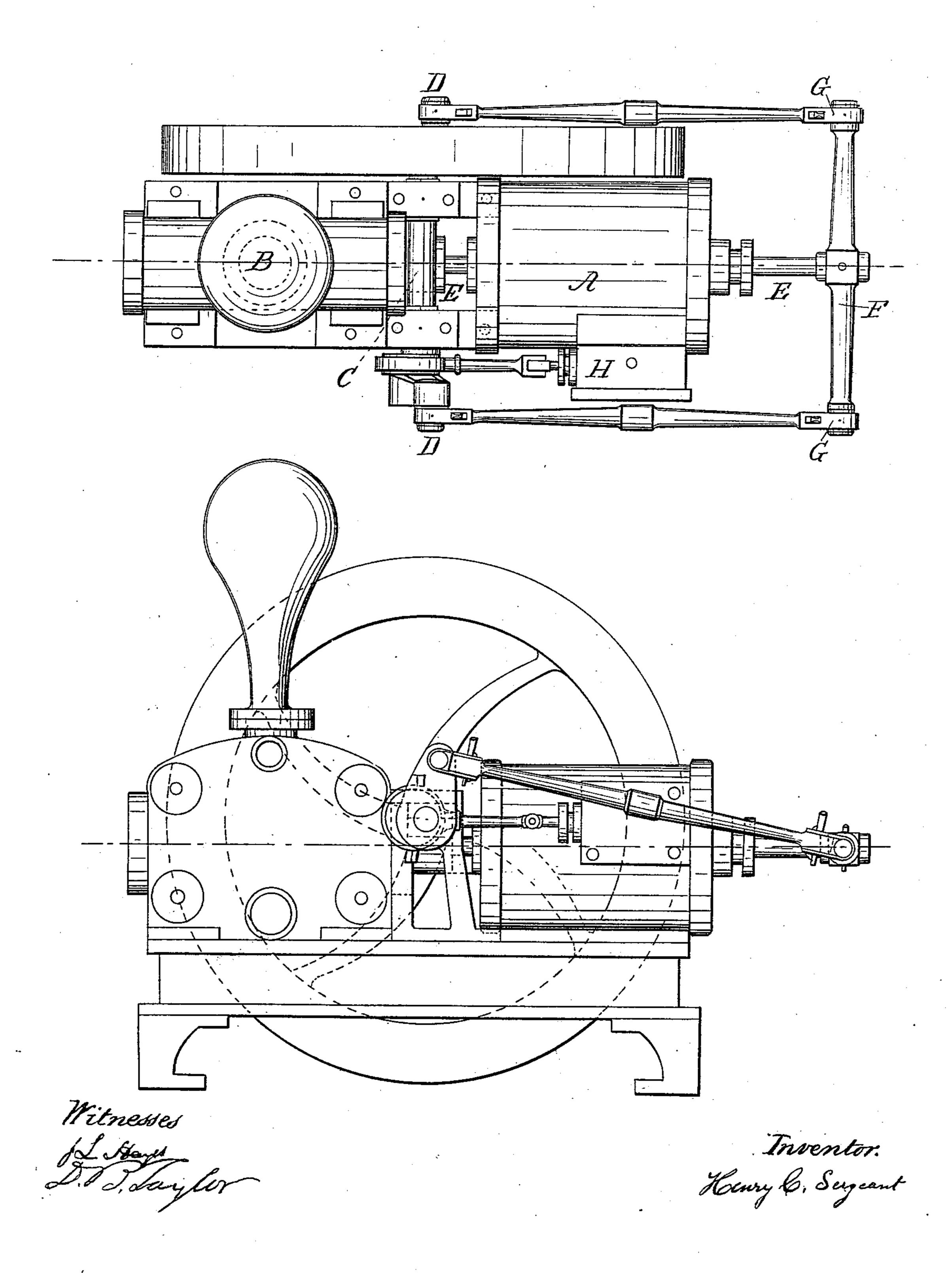
## H.C.Sergeant, Steam Pump. Patented Oct.7,1862.

JT\$ 36,623.



## United States Patent Office.

HENRY C. SERGEANT, OF NEW YORK, N. Y.

## IMPROVEMENT IN STEAM-PUMPS.

Specification forming part of Letters Patent No. 36,623, dated October 7, 1862.

To all whom it may concern:

Be it known that I, Henry C. Sergeant, of the city and State of New York, have invented a new and Improved Mode of Constructing Steam-Pumps; 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.

The rature of my invention consists in placing the crank-shaft between the heads of the steam and pump cylinders, just above or below the piston-rod, and revolving it by means of two cranks and side rods, and taking the power from the back end of either the steam or pump cylinder. By this combination I have a pump with crank, balance-wheel, plain movements, and economy of space, so desirable for ship purposes.

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

A is intended to represent the steam-cylinder; B, the pump-cylinder; C, the crank-shaft; D D, the two cranks, one cast on the arm of the balance-wheel.

E E represents the piston - rod, passing through the steam-cylinder and into the pump-cylinder.

F is the cross-head, attached to the end of piston-rod. This cross-head carries the connecting-rods G G, which are also attached to the crank-pins shown at D D.

The operation is very plain, the piston-rods of the two cylinders being connected as one. When steam is admitted to the engine and put in motion, the pump will also be in motion, having the same stroke.

The pump-cylinder can be constructed in any ordinary way. The cross-head can be used with or without guides.

I do not claim the construction of any one part separately.

I claim—

The arrangement of the steam and pump cylinders, balance wheel, shaft, cranks, and connecting rods, as specified in the foregoing specification.

HENRY C. SERGEANT.

Witnesses:

J. J. BLANNDT, D. B. TAYLOR.