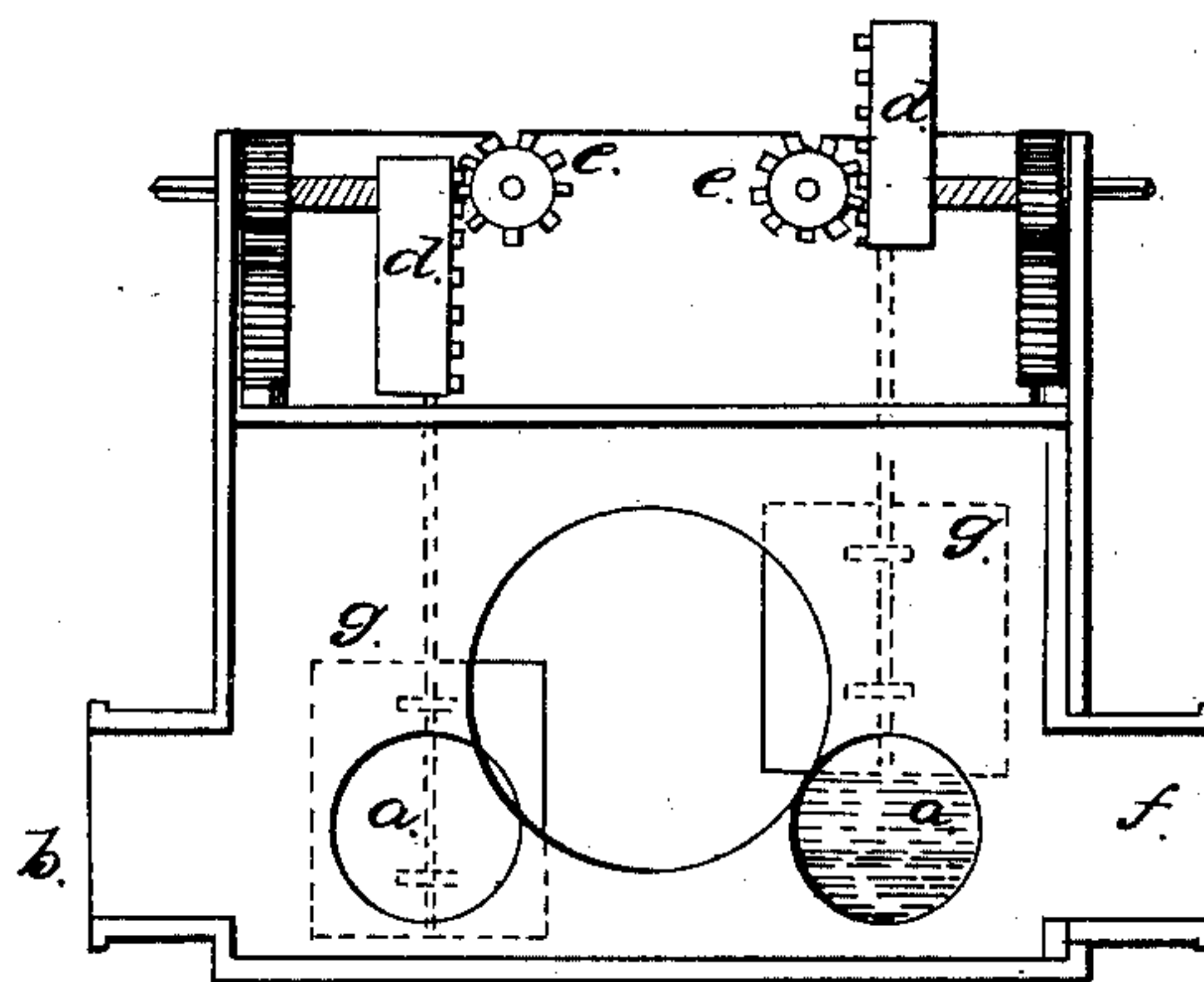
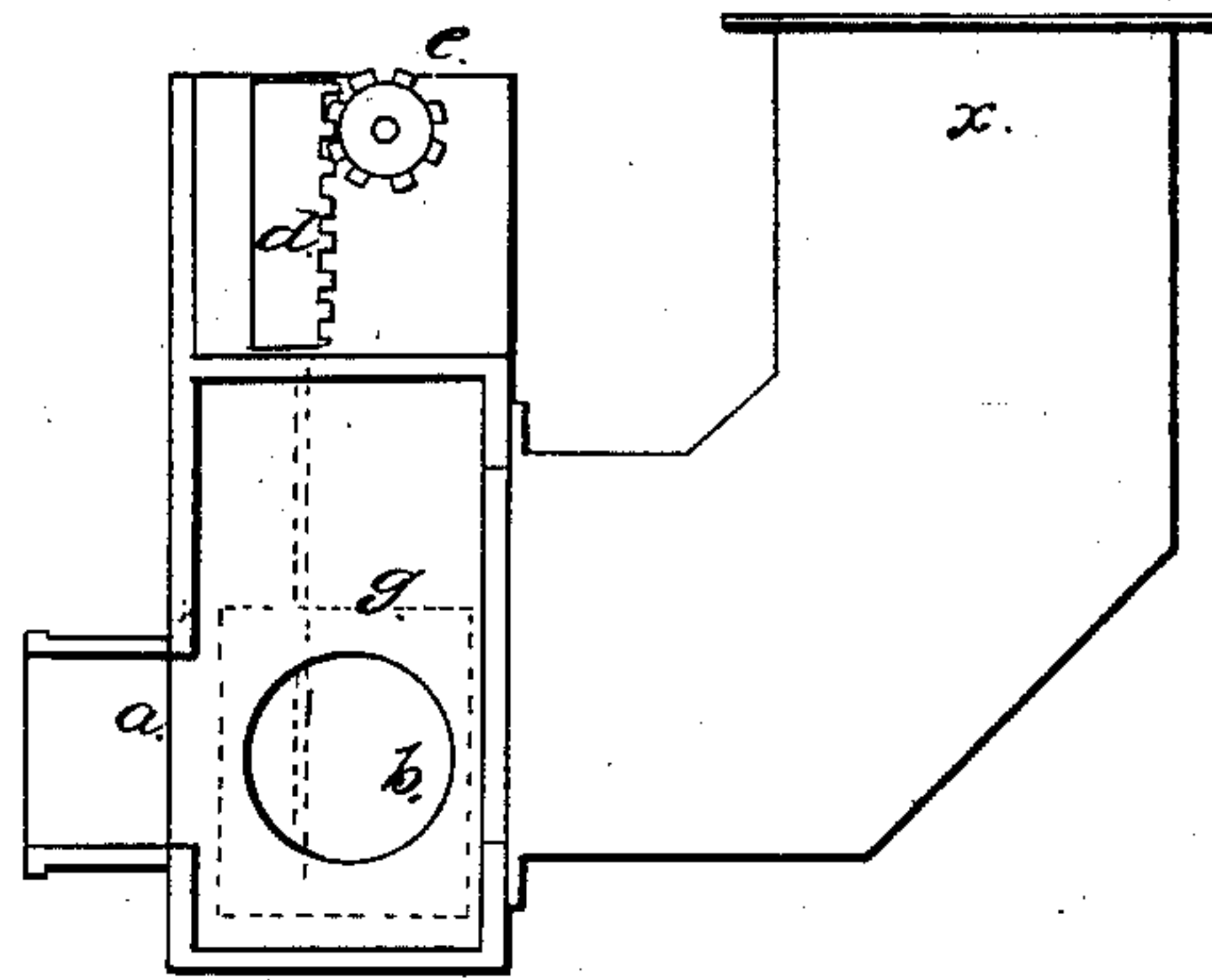
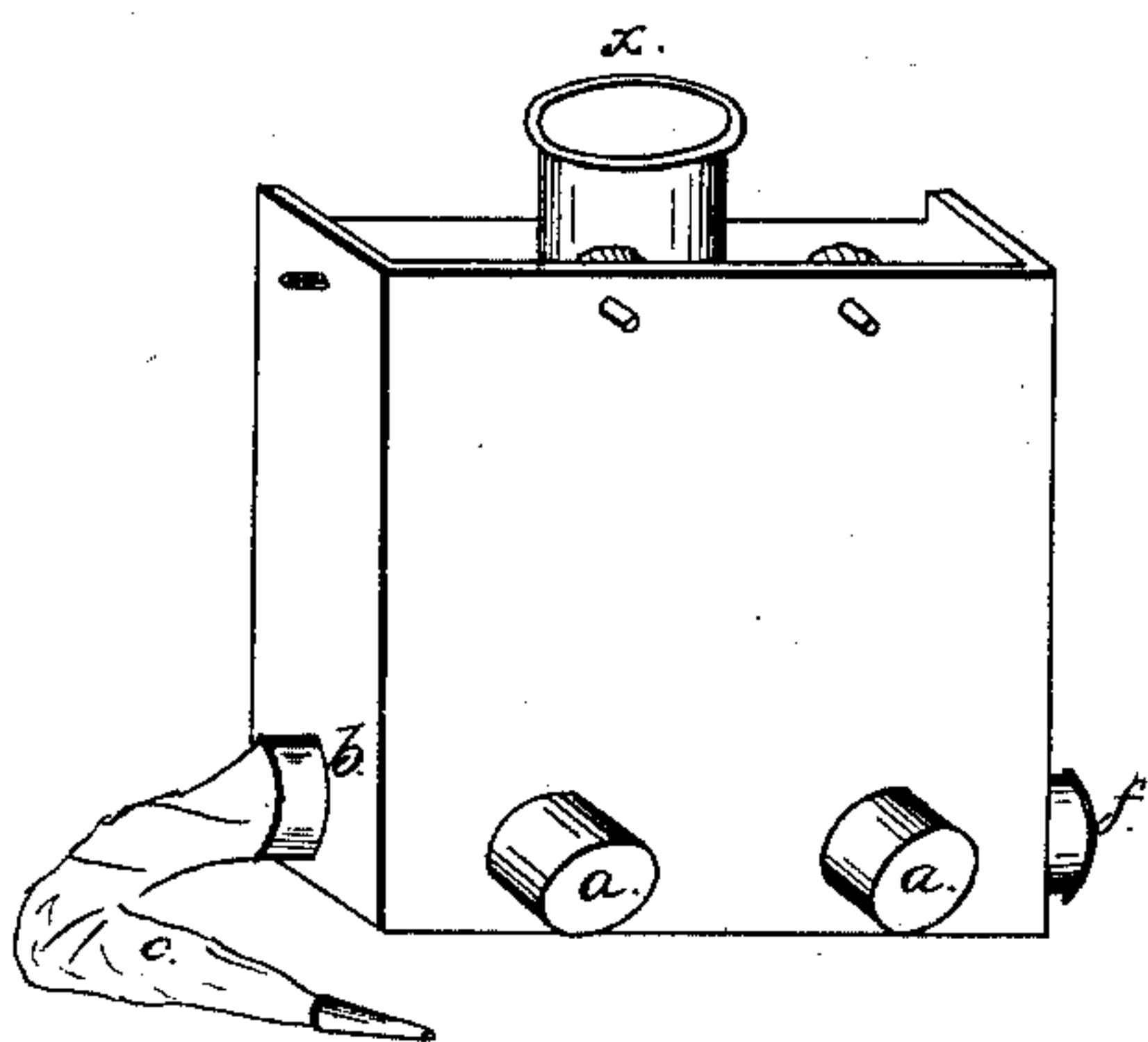


No. 26,740.

PATENTED JAN. 3. 1860.

M. A. WINHAM.  
VALVE CHEST FOR HYDRAULIC MINING.



Witnesses:  
Joseph Hutz  
Edward M. Rajan

Inventor:  
Marcus A. Winham

# UNITED STATES PATENT OFFICE.

MARCUS A. WINHAM, OF SAN JUAN, CALIFORNIA, ASSIGNOR TO I. B. LOW AND F. SMITH,  
OF SAME PLACE.

## VALVE-CHEST FOR HYDRAULIC MINING.

Specification of Letters Patent No. 26,740, dated January 3, 1860.

*To all whom it may concern:*

Be it known that I, MARCUS A. WINHAM, of North San Juan, in the county of Nevada and State of California, have invented certain new and useful Improvements in Controlling the Distribution of Water in Hydraulic Mining; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification.

The machine I have invented I denominate a hydraulic distributor, and to explain its use and benefits it may be requisite to set forth the manner of working the deep diggings or hydraulic mining. After the tunnel or cut is made into the gravel-hill and the sluices arranged to carry off the gravel &c water is introduced into the diggings through an iron pipe of suitable size (*a*). The terminus of this pipe is at a safe distance from the face of the bank to be excavated, and attached to its lower end by bolts or otherwise is the hydraulic distributor. This consists of a box constructed of wrought or cast iron, as is most economical. The front is pierced with two holes *a a*, say of six inches diameter, provided with projecting nozzles to which flexible hose of canvas or india rubber are to be attached. At the sides of the chest are similar holes, to one of which (*b*) a flexible hose *c*, is shown attached. The opposite hole (*f*) is for the discharge of waste or superfluous water, which may be led off in a suitable drain. All the holes are provided with gates or slides (*g*), by which the water can be prevented from entering the canvas hose, or the quantity regulated by raising or lowering the gate by a rack (*d*) and pinion (*e*) or other mechanical equivalent.

In order to facilitate the work and guard against danger, I have constructed my flexible hose in sections, so that when a cave or fall of gravel takes place and the hose is covered up at the discharge pipes, the water

can be shut off by lowering the slide (*g*) supplying that particular hose, and another gate with its hose opened through which the water may be applied to washing away the fallen mass of gravel sand &c.

In many of the deep bank claims where sluicing is employed the miner in his heavy india rubber suit of clothes has frequently to climb 100 feet to shut off or control the water flowing through the hose as heretofore employed, and it frequently occurs that by the unexpected fall of the bank of gravel lives have been lost through the want of some instant means of stopping the current of water and prevention of the further moving of the gravel.

By means of this apparatus several lengths of flexible hose with force pipes attached can be supplied with water from one main pipe instead of that subtle element being trailed from the head through great lengths of hose with its great weight suspended over cuts and chasms.

It cannot but be apparent, that in addition to the comfort of the miner and saving of his time by this facility in controlling the water, there is a great economy in its use, no more being allowed to flow through the hose than is necessary to advantageously separate the gold from the gravel earth &c.

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

The arrangement for controlling by means of a chest or distributor provided with suitable gates, valves or stop cocks for the purpose of cutting off the water employed in hydraulic mining, substantially in the manner as described and set forth in the foregoing specification.

In testimony whereof I have signed my name before two subscribing witnesses.

MARCUS A. WINHAM.

Witnesses:

EDWARD M. RAGAN,  
O. P. STIDGER.