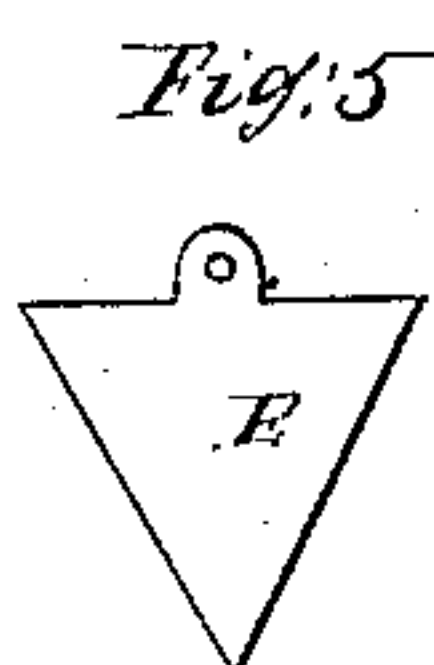
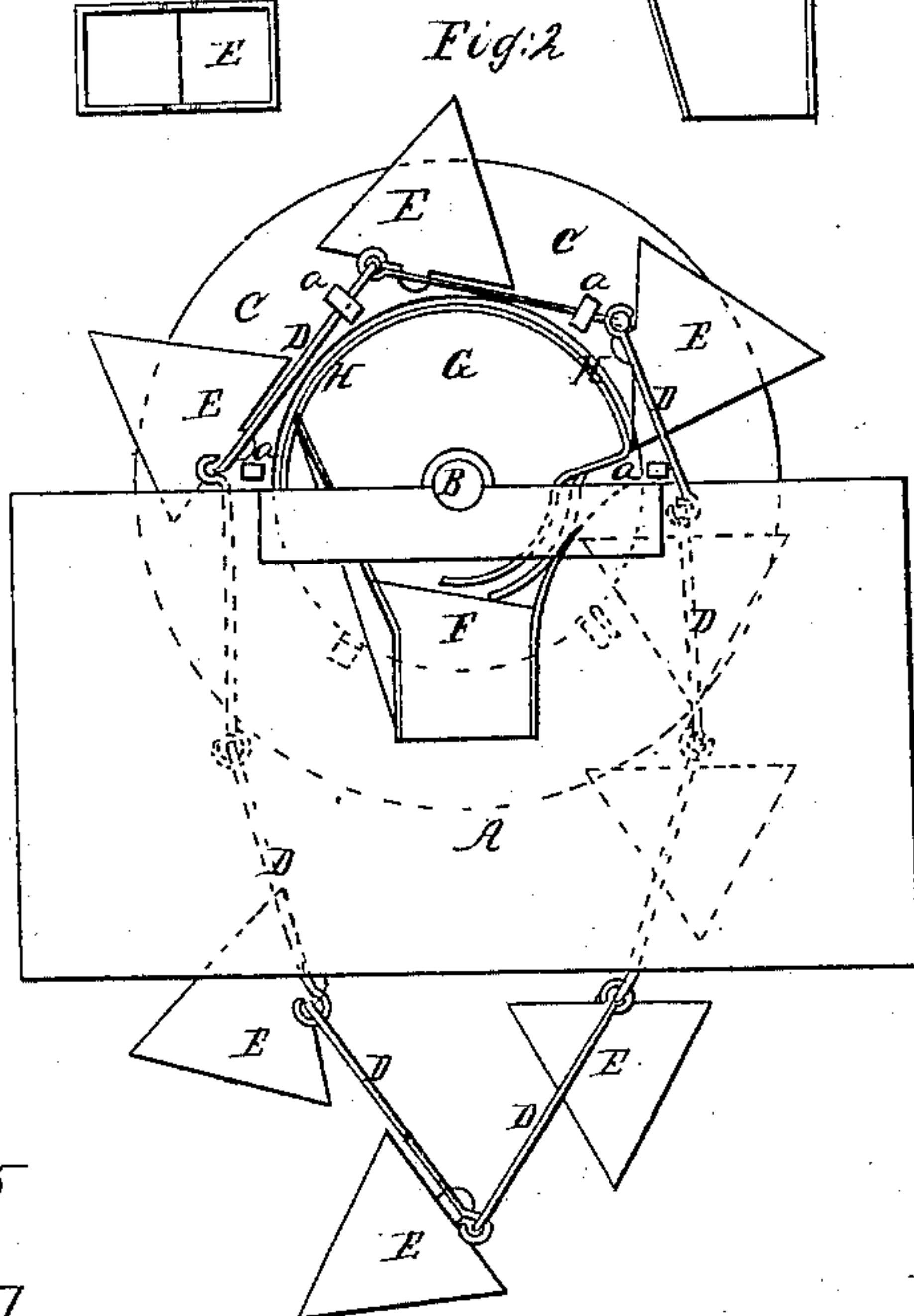
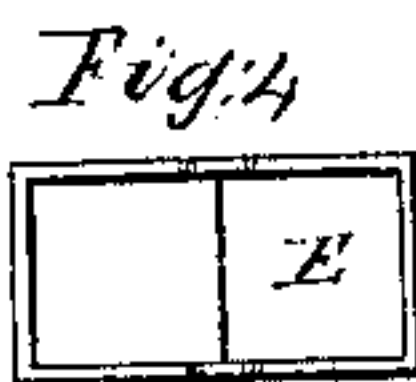
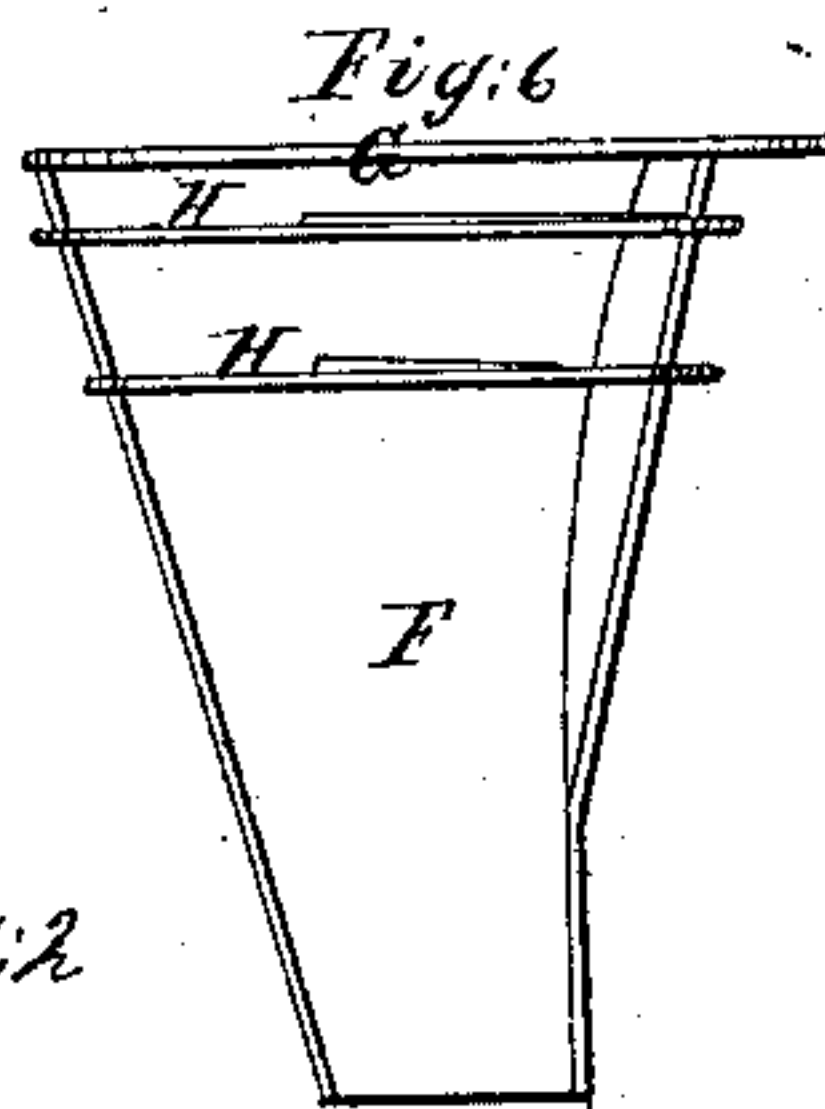
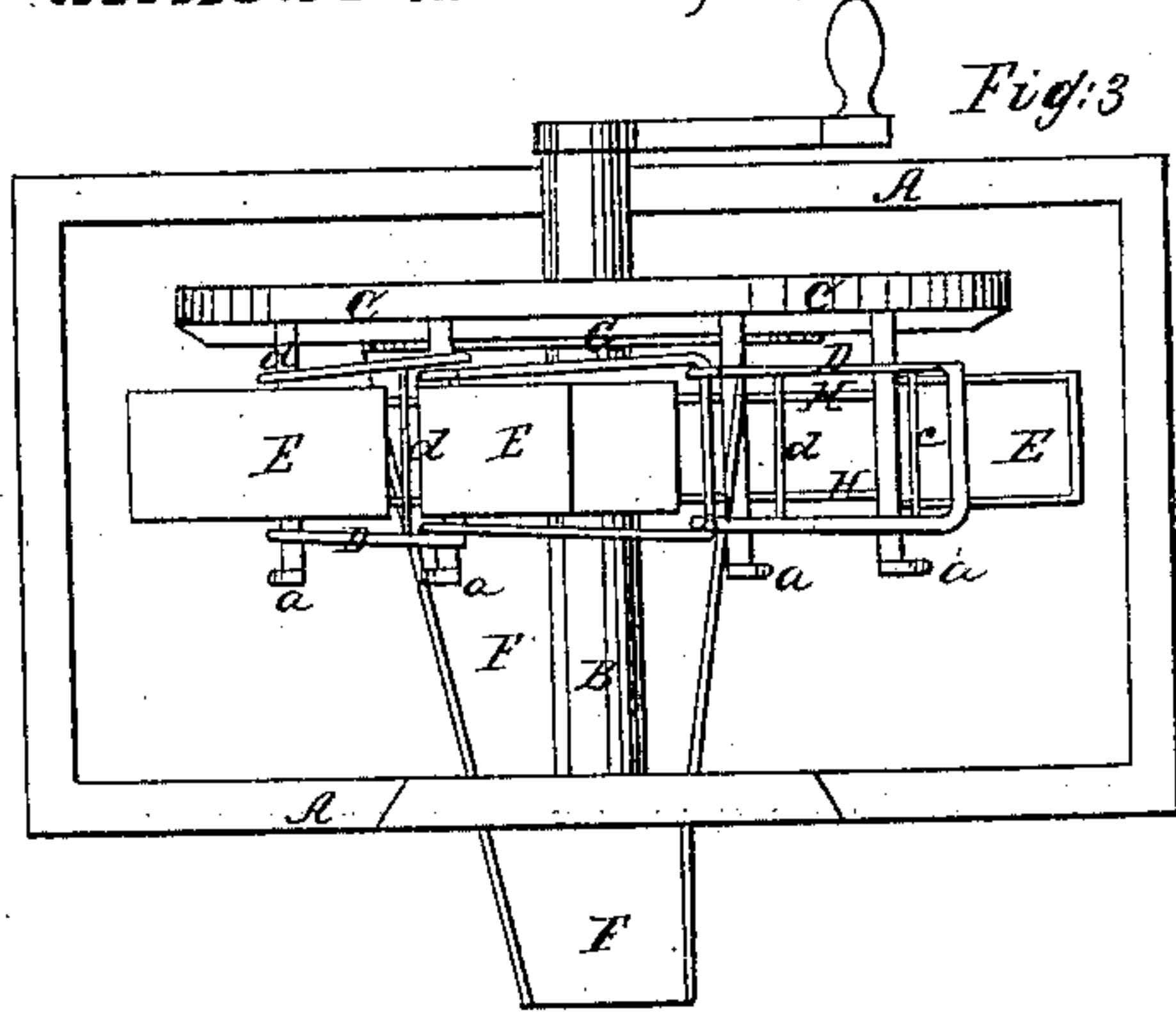
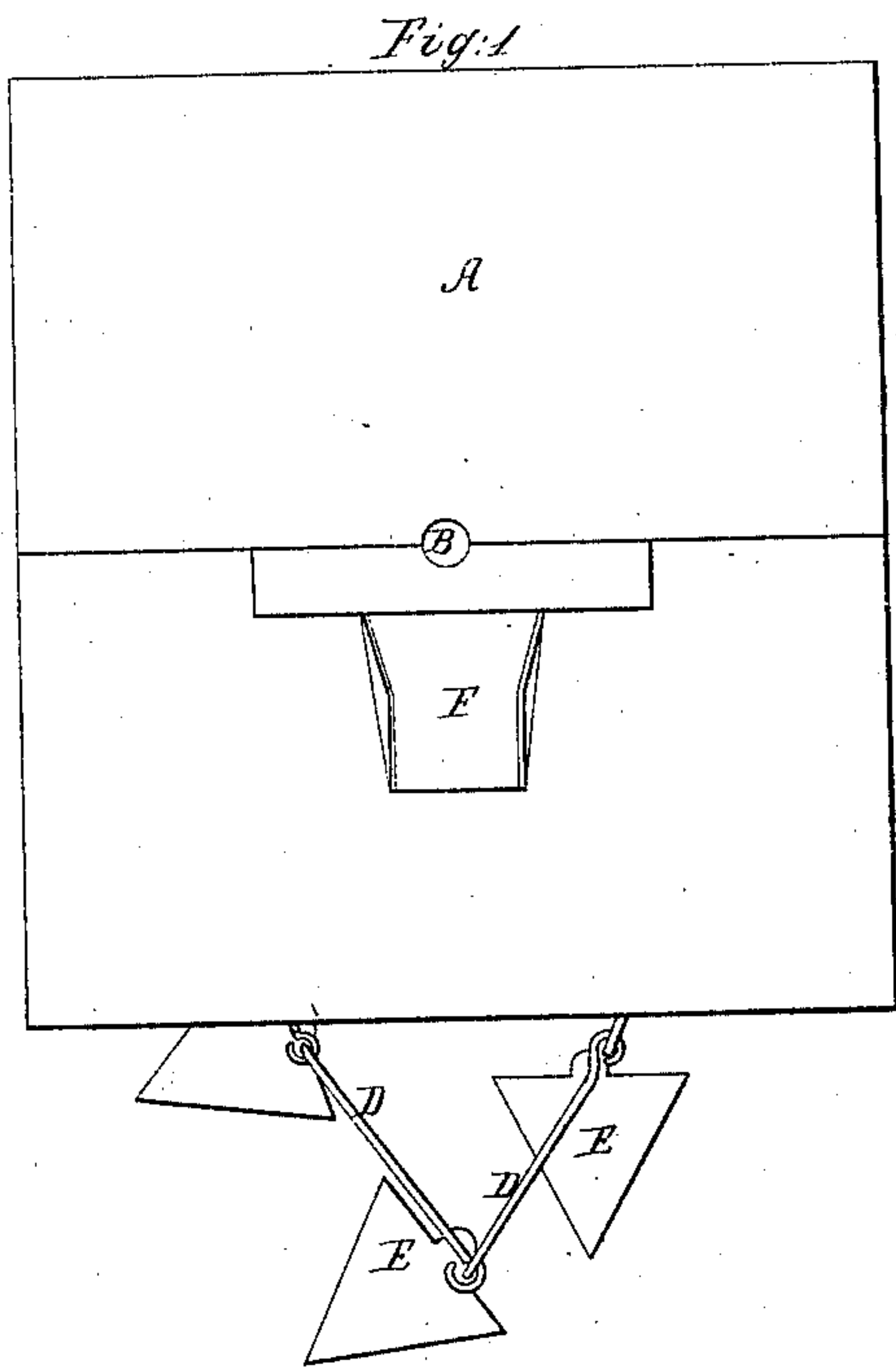


A. W. Dewey Chain Pump.

N^o 32,620.

Patented June 25, 1861.



Witnesses
J. H. Bowers
Arthur Hill

Inventor

A. W. Dewey

UNITED STATES PATENT OFFICE.

AUGUSTUS W. DEWEY, OF BOSTON, MASSACHUSETTS.

WATER-ELEVATOR.

Specification of Letters Patent No. 32,620, dated June 25, 1861.

To all whom it may concern:

Be it known that I, AUGUSTUS W. DEWEY, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Apparatus for Raising Water; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1, denotes a side elevation of the said apparatus. Fig. 2, denotes a side elevation of the operative parts, as they appear when the top part of the box or case is removed. Fig. 3, represents a top view of the same. Fig. 4, a top view of one of the buckets. Fig. 5 a side elevation of the same. Fig. 6 a top view of the discharging trough, and its curved cams or trippers.

In the drawings, A, denotes a rectangular frame or box, for supporting the operative parts of the machine.

B, is a cranked shaft, which extends transversely across the frame and has its journals supported in bearings in the said frame, as seen in Fig. 3. On the said shaft, a wheel, C, is mounted, the same having a series of bent frames, *a, a, a*, &c., extending around it in manner as shown in the drawings. Around the said arms, an endless chain, D, is made to pass, the latter having a series of buckets, E, E, so applied to it, as to be capable of being moved in a vertical direction. These buckets are of an equilateral form, and have two ears projecting from them, by which they are secured to the endless chain, by means of a rod, *e*, passing through them, in manner as seen in the drawings.

d, d, represent guide rods, which are arranged transversely across each link of the chain, and serve to support the buckets while in rotation.

The peculiar shape of the bucket, and the manner in which it is suspended, causes its lower outer edge when striking the surface

of the water, to stand at a slightly higher elevation than its back edge, thereby causing the water, as it enters, to rush into and fill the bucket.

F, represents the spout for the reception and discharge of the water, the same having a sectoral head, G, applied to its upper end; such head resting against the head, C, and being maintained in position by the shaft, B, the same running through such head; the other end of the spout being supported by the box, A, as shown in the drawings.

H, H, represent two bent wires, cams or trippers, each of which has one of its ends respectively attached to the outer edge of the spout, while its other end is affixed to the inside of the spout, in manner as shown in Fig. 6, which denotes a top view of the said spout. The object of these cams is not only to tip the edge of the bucket, when it reaches its proper elevation for having its water emptied into the spout, but to cause the buckets to be completely inverted, so that all the water contained in them, shall be discharged into the discharging spout, F.

An apparatus constructed in the above described improved manner, when applied on board of a ship operates to excellent advantage in freeing its hold of water, and in fact, is adapted to raising water in any situation where great quantities are required to be elevated.

I claim—

My improved water elevator, having its separate parts, viz., its wheel C, bent arms, *a a* &c., chain, D, buckets E E &c., and the cams or trippers H, H, constructed and arranged in relation to each other, and so as to operate together, substantially as shown and described.

A. W. DEWEY.

Witnesses:

F. P. HALE, Jr.,
R. H. EDDY.