

E. Morris,

Chain Pump.

No 12,296,

Patented Jan. 23, 1855.

Fig. 1

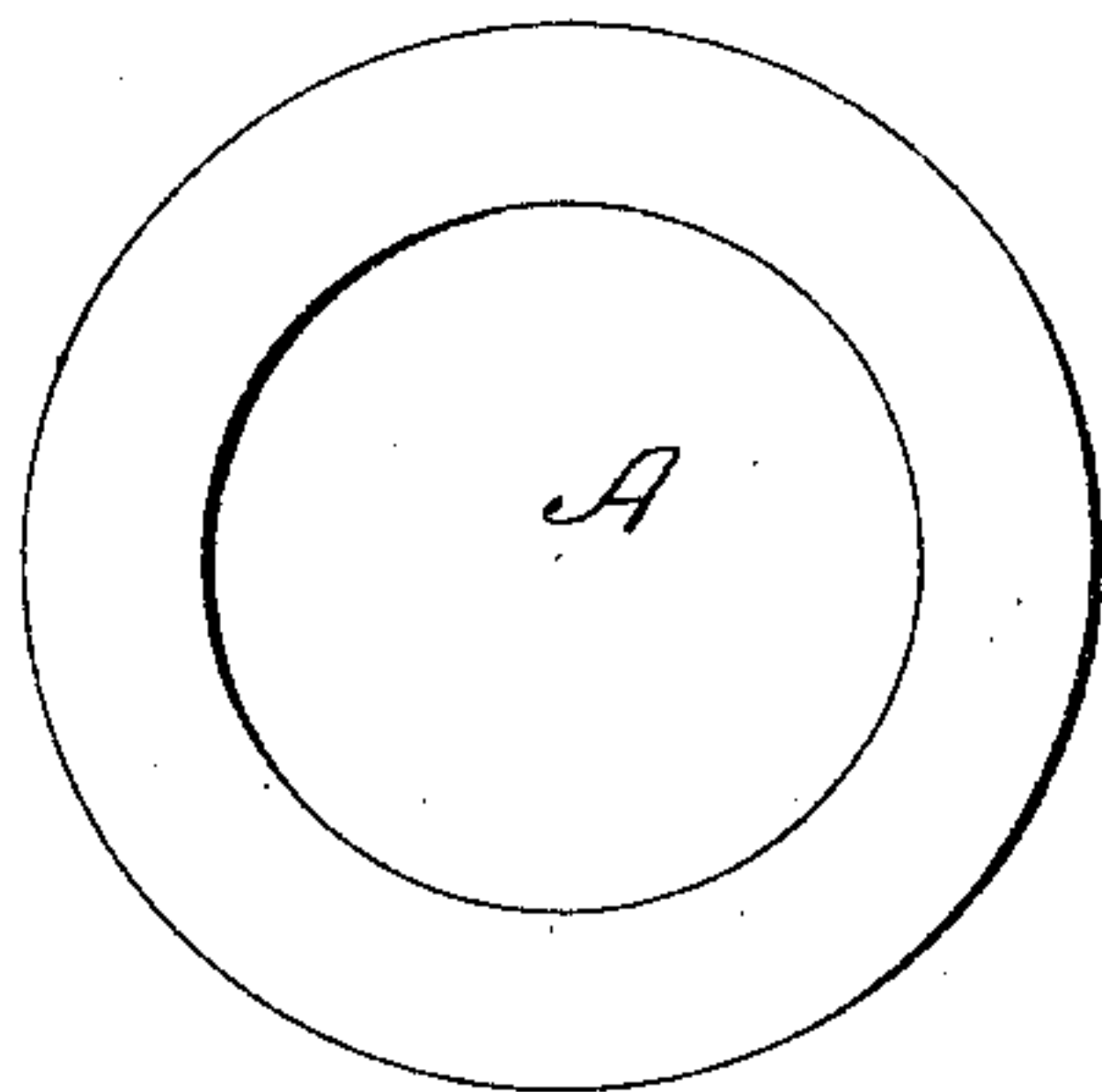


Fig. 2

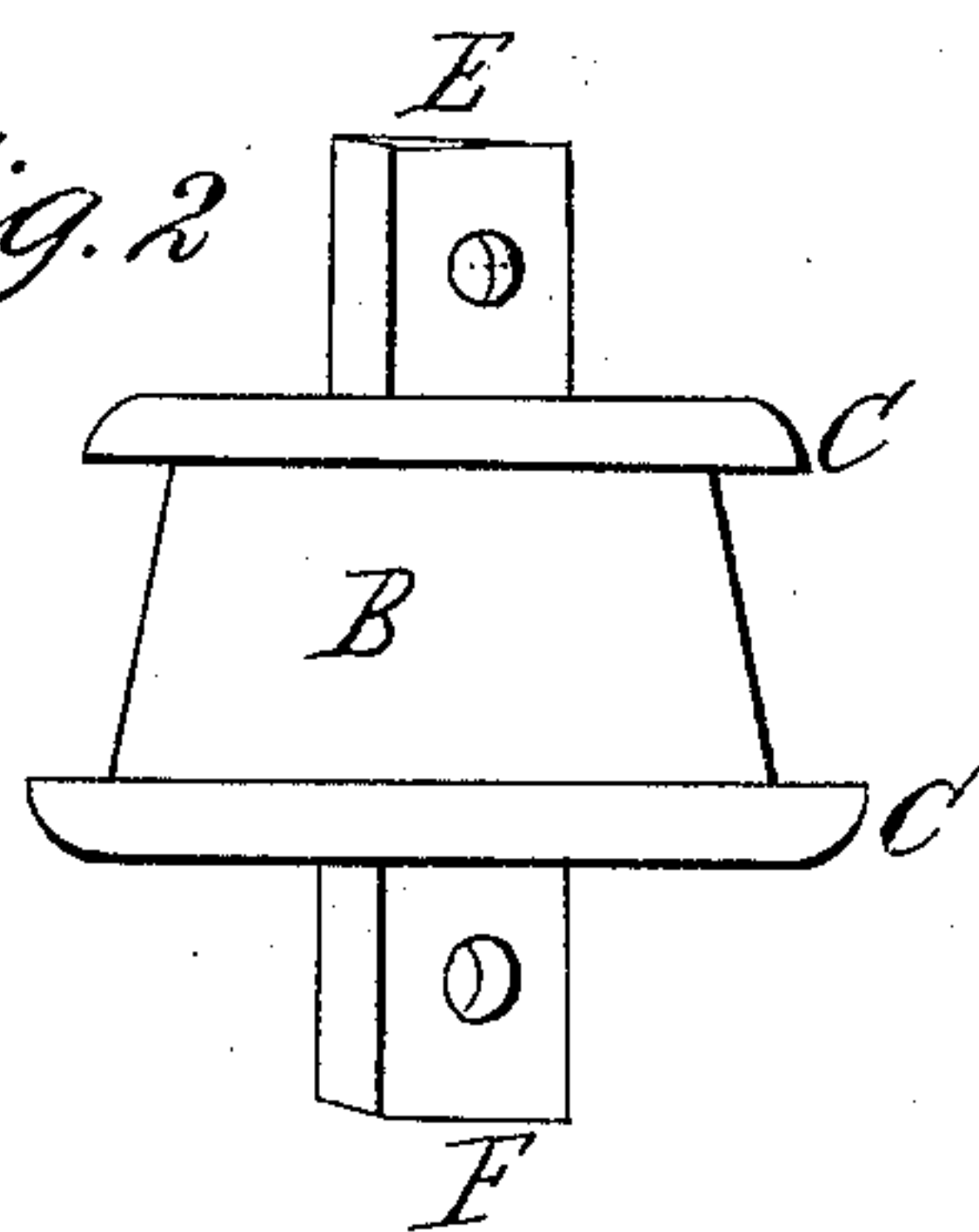
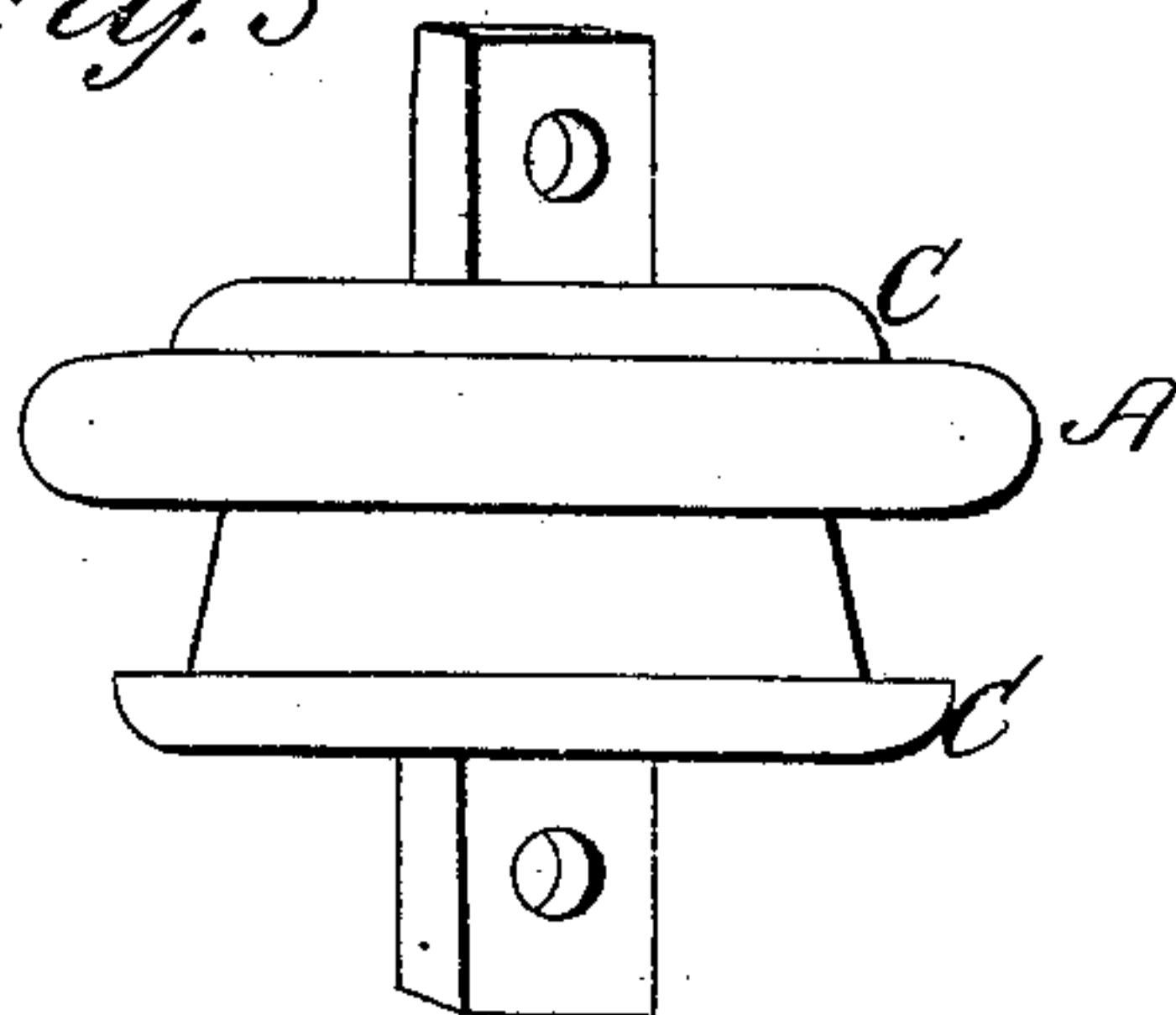


Fig. 3



UNITED STATES PATENT OFFICE.

EDMUND MORRIS, OF BURLINGTON, NEW JERSEY.

BUCKET FOR CHAIN PUMPS.

Specification of Letters Patent No. 12,296, dated January 23, 1855.

To all whom it may concern:

Be it known that I, EDMUND MORRIS, of the city of Burlington, county of Burlington, State of New Jersey, have invented a new and Improved Bucket for Chain Pumps, the construction of which is such that it changes the common lifting chain pump into a suction-pump, without any additional expense.

10 This improved bucket is made as follows, reference being had to the accompanying drawings.

15 A ring of india rubber A, is strained over and on to the conical neck B of the bucket as shown in Figure 2. At each end of this cone are flanches C C, which prevent the ring from being forced off the cone. E E are spurs cast on the ends of the bucket, to which the chain is riveted. The gum ring 20 is made so small that when placed on the cone, it will remain, by its own contractile power, at the top or smaller end of the cone. But when the bucket is in use in a pump

tube, the friction against the sides of the tube will force the ring down to or toward the base of the cone just enough to make an absolutely water-tight fit, as the ring will in this way expand just sufficient (and no more) to produce and maintain this fit. The lower flanch prevents the ring from getting off as the bucket ascends, and the upper one when it is descending. The water acts as a lubricator, making the operation of pumping perfectly easy.

The bucket may be cast in iron, or made of wood, and at an extremely trifling cost.

Fig. 3 represents the complete bucket.

I claim—

The combination and arrangement of the gum ring with the cone, substantially as above described, for the purpose therein set forth.

EDMUND MORRIS.

In presence of—

HENRY HARRON,
JOHN M. HOUGH.