

H. M. PAINE.
Electro Magnetic Motor.

No. 112,841.

Patented Mar. 21, 1871.

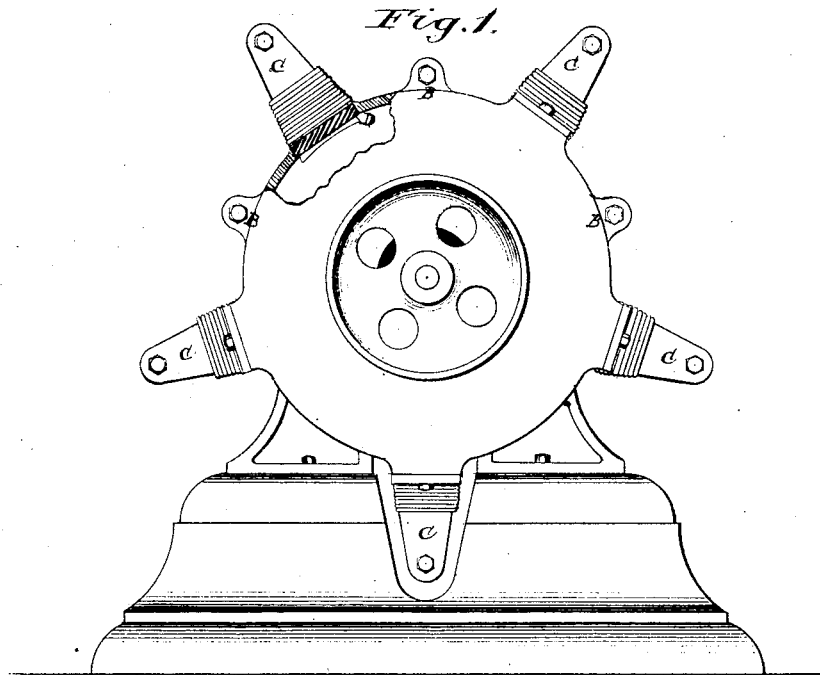
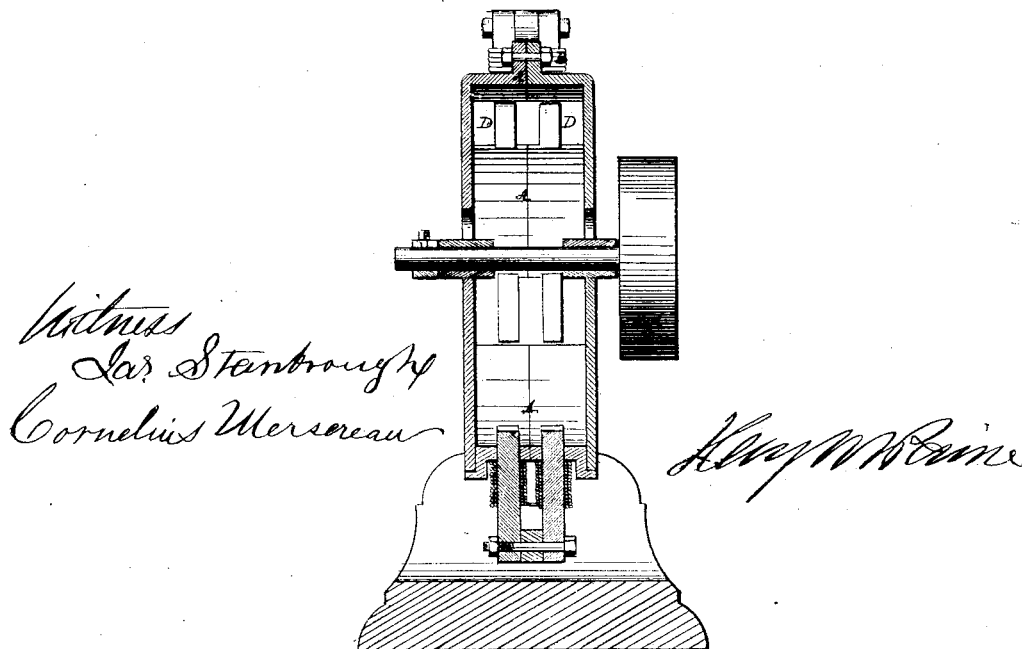


Fig. 2.



United States Patent Office.

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Letters Patent No. 112,841, dated March 21, 1871.

IMPROVEMENT IN ELECTRO-MAGNETIC MOTORS.

The Schedule referred to in these Letters Patent and making part of the same.

I, HENRY M. PAINE, of the city of Newark, county of Essex, and State of New Jersey, have invented certain Improvements in Electro-Magnetic Motors, of which the following is a specification.

I have found, in the application of my sector-magnets to the construction of motors, great difficulty in securing stability of frame when the same bore any reasonable proportion of weight or size consistent with the power developed.

The attraction of the magnets being inversely as the square of the distance, it is essentially necessary that they should be in as close proximity as possible in order to secure the best results.

Practical experiment has proven that the movable and fixed magnets may be adjusted and worked with a space of one-sixtieth of an inch intervening between them, providing there be no yield or spring in the frame-work; and in order to prevent such yield of the frame, I construct it in the form of a circular box,

as shown in the accompanying drawing, Figure 1, which is a side elevation.

The box opens through the center, as shown at A, Figure 2, and is bolted together by flange-bolts B, figs. 1 and 2.

The fulcrum or stationary magnets are arranged on the periphery of the box, upon plates which rest on shoulders on the sides, and the ends of the magnets extend through the plates to the interior of the box, as shown at D, figs. 1 and 2.

I claim as my invention—

A box-frame with openings in its periphery to receive fulcrum-magnets, substantially as and for the purpose herein set forth.

HENRY M. PAINE.

Witnesses:

JAS. STANBROUGH,
CORNELIUS MERRILL.