F. B. DeKERAVENAN.

Mechanical Movement for Lamps.

No. 38,859. Patented June 9, 1863.

Fig. 1.

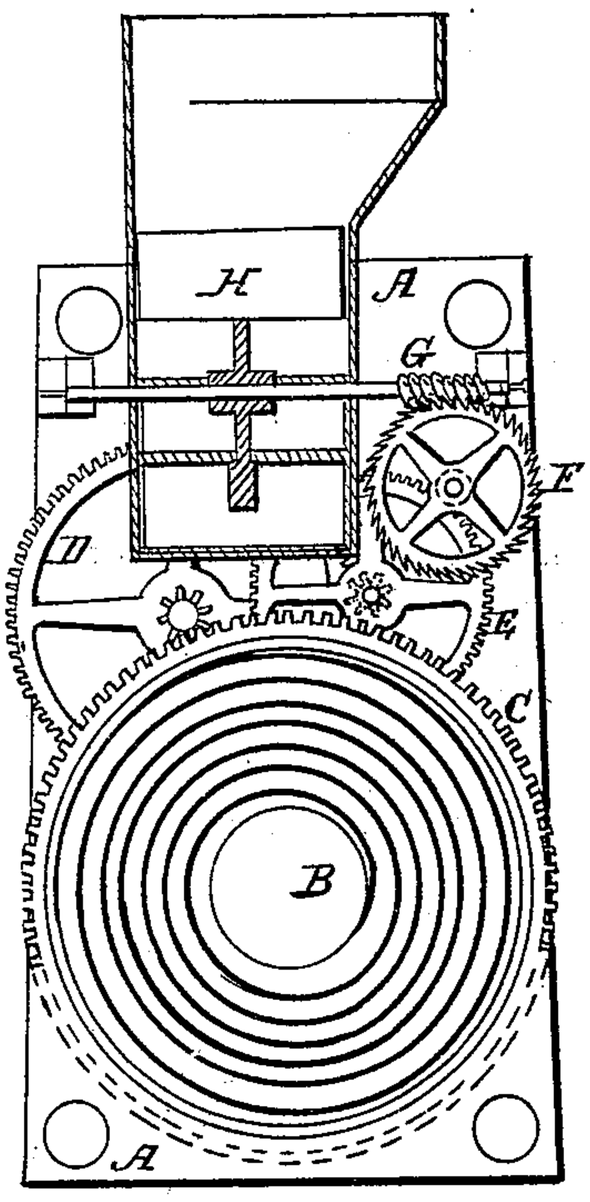


Fig. 2.

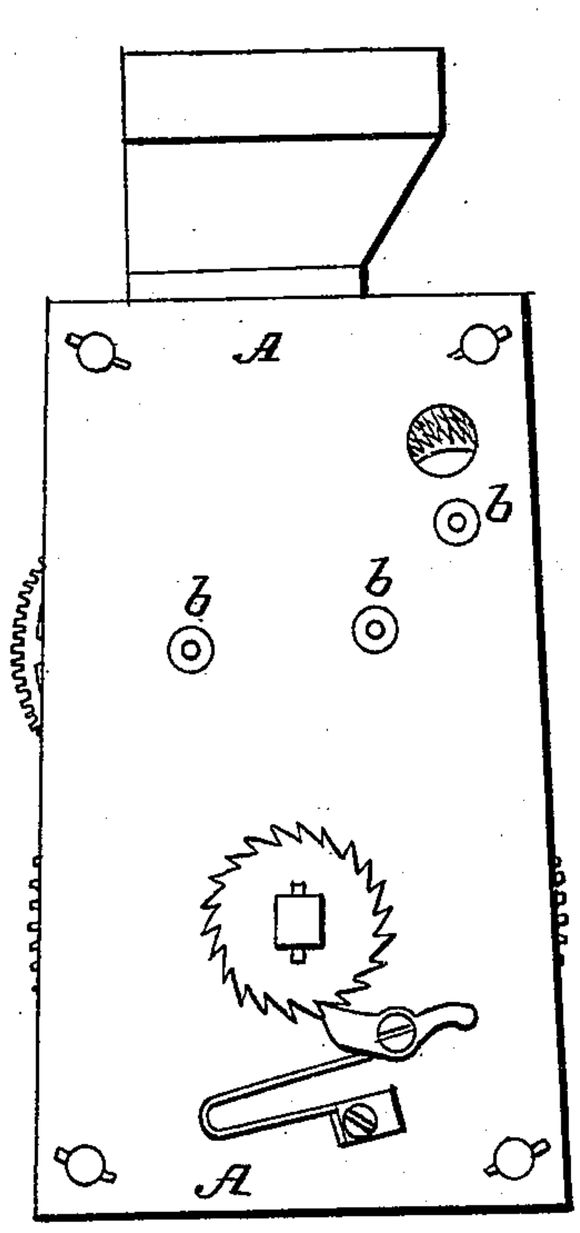


Fig. 3.

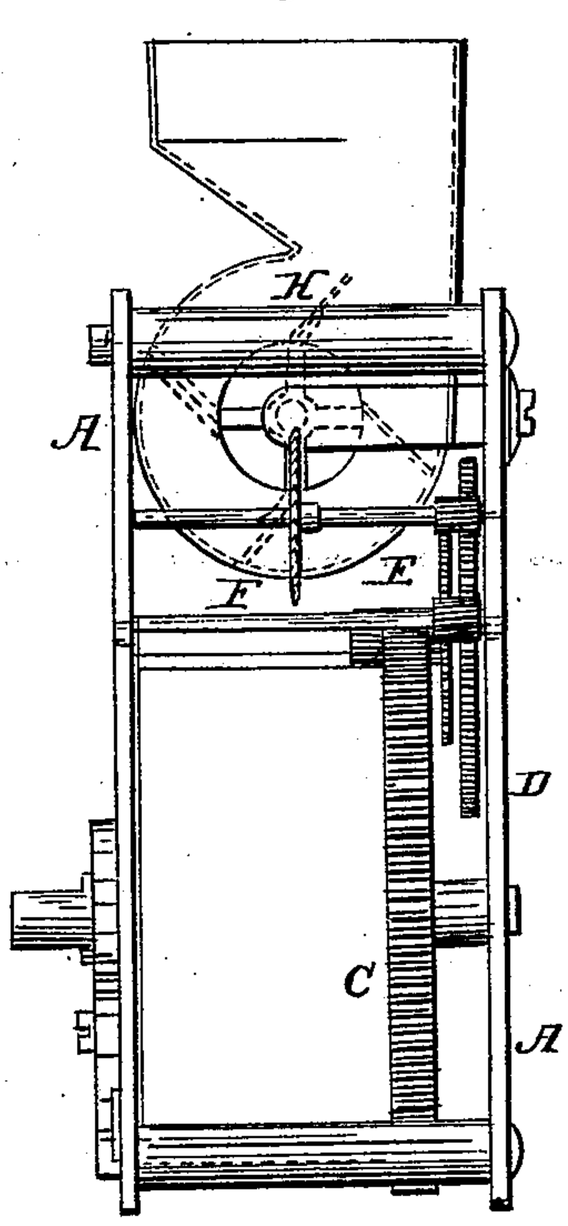
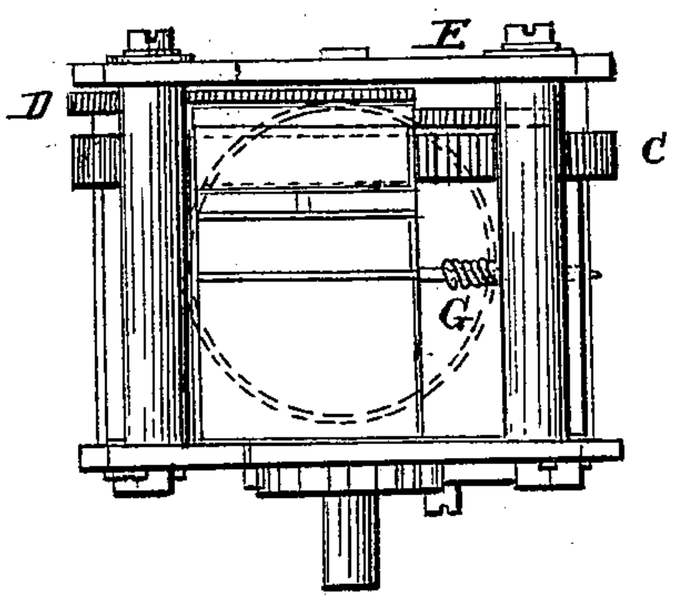


Fig. 4.



Witnesses:

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J. D. Lewis

Inventor:

F. B. de Keravenan

UNITED STATES PATENT OFFICE.

F. B. DE KERAVENAN, OF NEW YORK, N. Y., ASSIGNOR TO JOSEPH H. BAILEY AND GEO. A. JONES.

IMPROVED MECHANICAL MOVEMENT FOR LAMPS.

Specification forming part of Letters Patent No. **38,859**, dated June 9, 1863.

To all whom it may concern:

Be it known that I, FRANCIS BERNARD DE KERAVENAN, of France, but now residing in the city and State of New York, have invented a new and improved mechanical movement for producing an impelled current of air in lamps burning bituminous, kerosene, and other oils and fluids; and I do hereby declare that the following is a full, clear, and exact description thereof, and of its construction and mode or manner of operation, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Figure 1 is a sectional view of the mechanism with one of the case-plates removed, and showing the positions and relative proportions of the parts. Fig. 2 is a front view of one of the case-plates, and showing the bushing of the pivots. Fig. 3 is a side view of Fig. 1. Fig. 4 is a plan view of the mechanism.

This movement is designed for use in producing an impelled current of air to promote more perfect combustion in lamps, constructed on the principle represented and described in Letters Patent of the United States, issued to me on the 23d day of October, A. D. 1860.

In the lamp represented in such patent the current of impelled air was produced by an ordinary blower driven by an ordinary wheel and pinion. Such arrangement is not, however, sufficiently durable, and the parts move with considerable noise. Mechanical movements intended for such use should have compactness of structure, should run for some considerable length of time, should have all necessary rapidity of motion to be effective, and should run without noise.

The movement herein described is believed to possess such requisites in a remarkable degree. It is compact, will run from six to eight hours, has sufficient rapidity of movement to insure all requisite quantity of air, and runs without noise.

The movement consists of a frame of iron, A, which unites strength and cheapness; pivot holes *b b b*, bushed with brass to reduce friction and preserve the pivots; a moving spring, B, inclosed in a barrel, and attached to the main geared wheel C; two multiplying geared wheels, D E; a tangent-wheel, F, which works into the endless screw G and gives a great increase of velocity to the blower H without the noise which is unavoidable when a like speed is obtained by ordinary gearing, and a blower, H, constructed substantially as ordinary blowers.

The spring B gives motion through the several intermediate wheels to the blower H, which, by its revolutions, supplies a continuous current of air to and around the wick, and this without the necessity for any chimney.

The drawings represent a mechanism of full size, and suitable for a lamp having a wick from an inch to an inch and a quarter wide. For the larger classes of lamps it is believed that the blower H will be found most suitable, as large quantities of air will be required to effect complete combustion.

The several parts of the mechanism, taken separately, may not present anything new, but the combination and arrangement above described, when taken together and considered with reference to the result produced, the supply of a continuous current of air for the combustion of oils and fluids rich in carbon is believed to be novel and peculiar.

This mechanism, when enlarged in some degree, may also be applied with good results to aerating aquaria and other receptacles, where increased quantities of air are necessary.

What I claim as my invention, and desire to secure by Letters Patent, is—

The general arrangement and combination of the mechanism herein described, for the purpose of supplying air to lamps, &c.

F. B. DE KERAVENAN.

Witnesses:

F. B. DE KERAVENAN,

S. D. LAW.