

I. W. SYLVESTER.
ADVERTISING MACHINE.

No. 66,055.

Patented June 25, 1867.

Fig. 1.

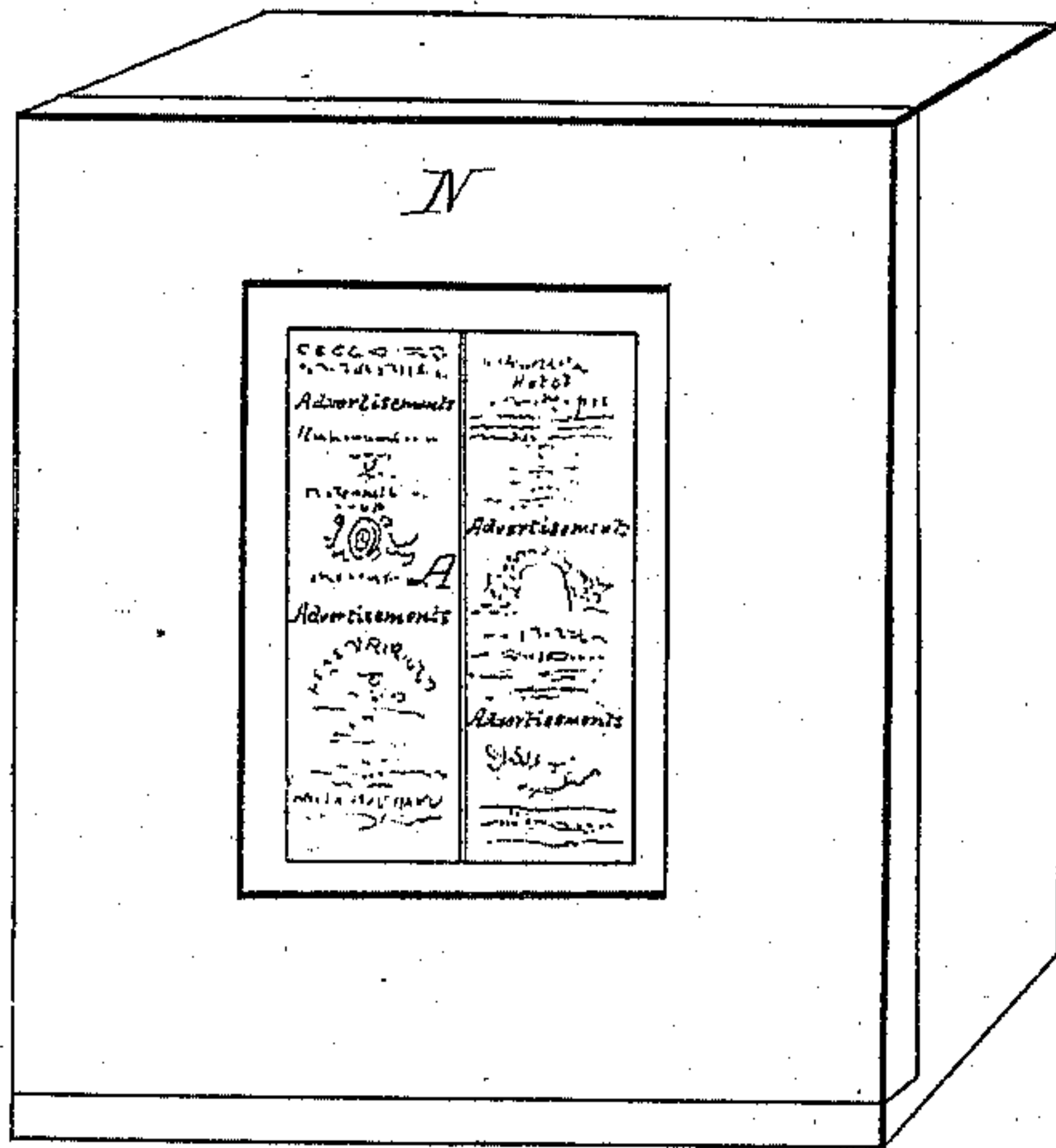


Fig. 2.

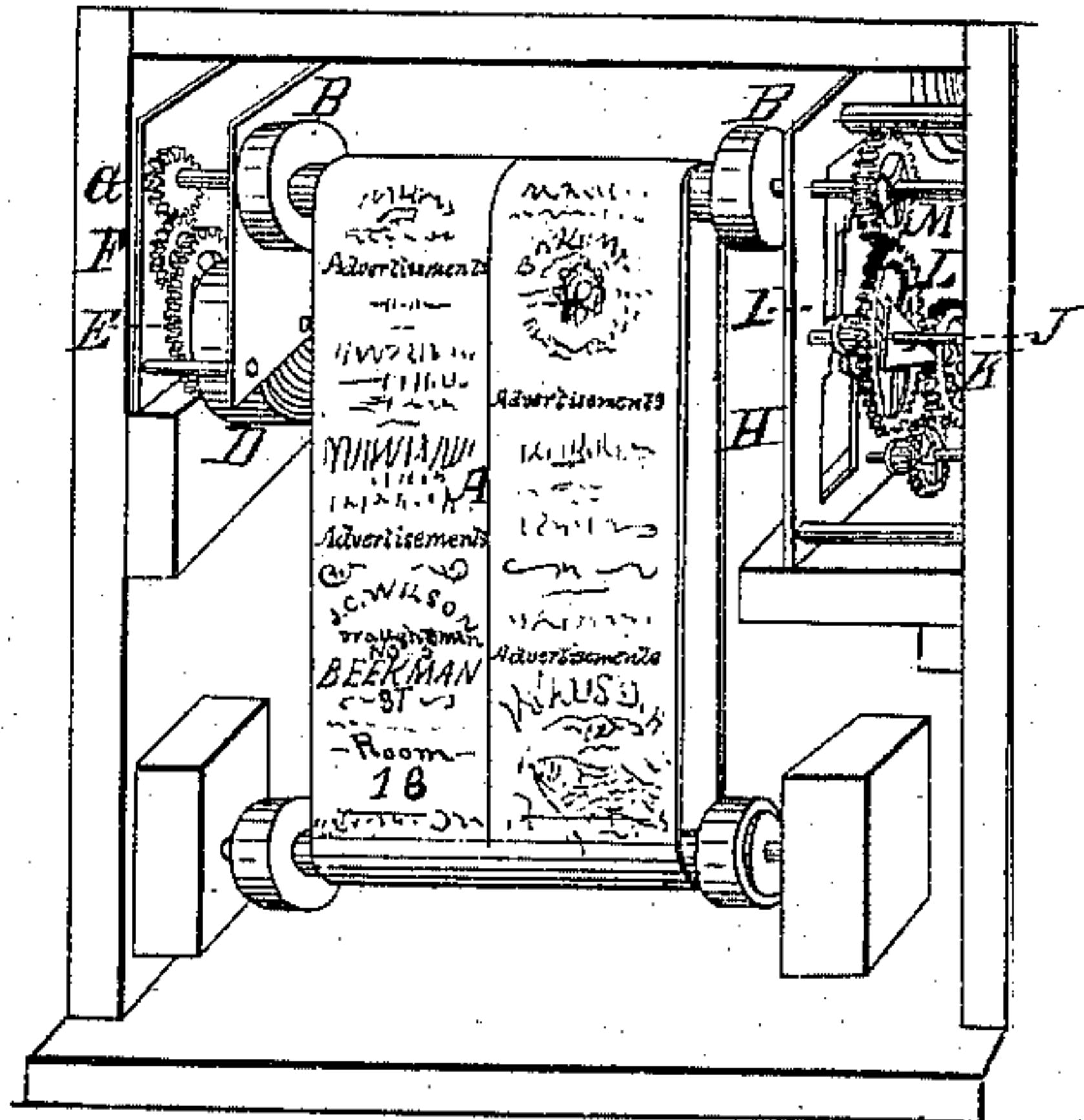


Fig. 3.

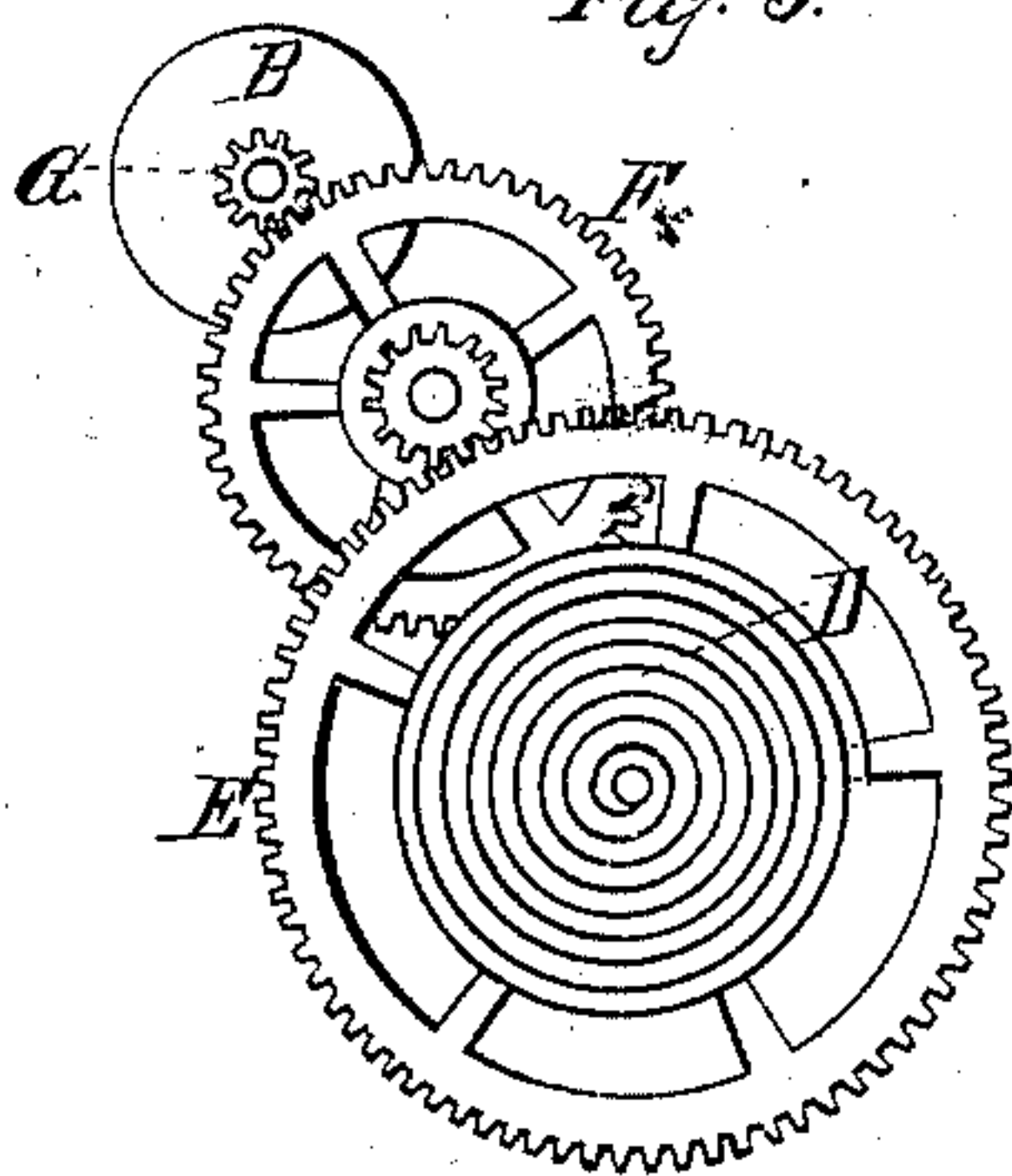
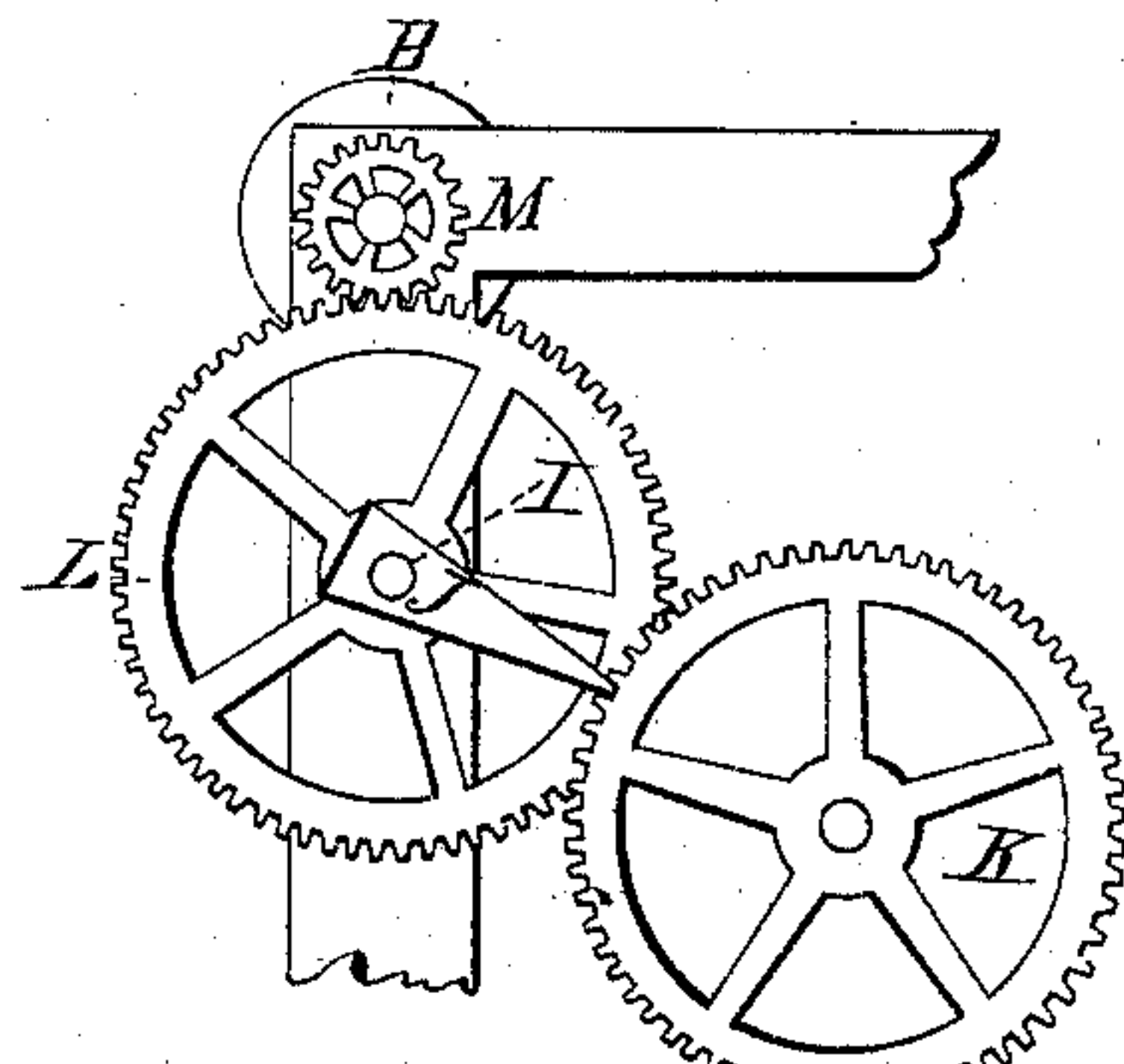


Fig. 4.



Witnesses:

T. D. Perry
Herbert A. Torrey

Inventor:

Isaiah M. Sylvester

United States Patent Office.

ISAIAH W. SYLVESTER, OF NEW YORK, N. Y.

Letters Patent No. 66,055, dated June 25, 1867; antedated June 15, 1867.

ADVERTISING MACHINE.

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

Be it known that I, ISAIAH W. SYLVESTER, of the city, county, and State of New York, have invented a new and useful machine for advertising at hotels and other public places, called by me an "Advertising Machine;" 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 annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine, as seen in actual operation.

Figure 2 is a perspective view of the machinery, the glass door or front being removed.

Figure 3 is a transverse section, showing the machinery which communicates motion to the rollers B and C and the curtain A; and

Figure 4 is a transverse section of a portion of the works at the opposite end of the roller B, designed to check or retard the motion of the rollers B and C.

A is a curtain of paper upon which have been printed a number of business cards or advertisements. B and C are wooden rollers carrying a narrow belt over their centres, to which belt is attached the endless curtain A. D is an ordinary clock-spring attached to the shaft and wheel E, to which are geared the pinion and wheel F, to which are geared the pinion and shaft G. The shaft G connects with the centre of the roller B. Upon winding up the spring D motion is communicated to the rollers B and C and the curtain A. H is an ordinary eight-day marine-movement clock with the strike part removed in order to make room for the following wheels and shafts: shaft i, which has a single tooth or arm, g, notching or gearing into the hour-wheel K of the clock at each revolution, and also the wheel L, gearing into the pinion M, which is placed on a shaft attached to the centre of the roller B. N is a glass door placed over the whole.

In the construction of this machine, the objects sought to be accomplished were, first, the quick revolution of the curtain A at given intervals of say from one to five minutes each; and second, the running of the whole machine for a length of time, so as not to require too frequent winding up. By the quick motion of the curtain it was thought the eye of a stranger would be attracted, as anything in motion naturally attracts attention, while the interval of rest, or apparent rest, would facilitate the reading of the advertisements; the revolution of the curtain would also permit the whole of it to be advantageously employed. To obtain these ends I construct my machine as follows: To communicate motion of the necessary duration of time I use springs, (from one to three springs similar to those used in ordinary eight-day marine-movement clocks, are sufficient for an ordinary machine,) whose power, either singly or combined, is made to operate on a succession of large and small wheels, as illustrated by E, F, and G, fig. 3, and finally on the roller B. The number of revolutions of the roller B, together with the time required for the tooth J to pass through the periphery of the hour-wheel of the clock, together with the time the clock will run, determines the length of time the whole machine will operate. Increasing the number of revolutions of the roller B decreases the power with which it turns, providing the spring remains of the same force; to increase, therefore, the number of its revolutions, greater spring power must be used. Having obtained the requisite spring force to move the rollers B and C, with the curtain attached, a sufficient number of revolutions, I attach the centre of the opposite end of roller B to the shaft on which is wheel M, fig. 4, revolving within the framework of the clock H, and geared into wheel L, also revolving within the framework of the clock. The proportionate number of notches in wheels L and M determines the number of revolutions the roller B will make at each revolution of the tooth J. The distance the curtain travels at each quick movement is determined by the diameter of the roller B and the number of its revolutions. On the same shaft with the wheel L I place the tooth or arm J, so that at each revolution it strikes into the teeth of the hour-wheel of the clock, by which wheel its motion is checked or retarded until it passes through and comes out on the opposite side, when it is relieved and again flies around, to again pass through as before, the periphery of the hour-wheel, and so on continually until the spring D is exhausted. While the tooth J is passing through the periphery of the clock-wheel the motion of the curtain A is so slow as to be imperceptible. By placing a wheel with fewer teeth on its periphery on the same shaft with the hour-wheel of the clock, and causing the tooth J to pass through it instead of the hour-wheel, I obtain a more frequent rapid movement of the curtain. I place the entire machinery in a box of any desired length and width, and of a depth just sufficient to enclose it. I make the rollers B and C to extend the entire width of the box, less the space occupied by the move-

ments, cutting circular holes through the box on either side, for the purpose of winding up the springs. The curtain I make to extend the entire length of the box, revolving over the rollers at each end, and of the width of the rollers, the object being to secure as large a space as possible for advertisements. Roller B, with the machinery at either end, may be at the top while roller C is at the bottom, or the position may be reversed, and roller B be placed at the bottom, with roller C at the top of the case, as may be desired or most convenient for winding up the springs. The centre of the rollers B and C I make a trifle larger, as in ordinary pulleys, and run over them a narrow belt of cloth one to two inches wide, and to this belt I attach the paper curtain A, on which advertisements have previously been printed. When all is completed and placed in the box or case, the front is closed by the door N, which is made partly of glass and partly of wood, so as to conceal the machinery and show only the curtain A with the advertisements. It can then be placed in any conspicuous position.

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

1. The application to advertising of an endless curtain made to revolve automatically at given intervals, quickly, so as to attract attention by its motion, and then slowly, so as to be apparently motionless, and to allow of the easy reading of the advertisements.

2. The device whereby the power moving the curtain is retarded at regular intervals by means of the arm J notching into, passing through, and being relieved from the periphery of the clock-wheel, substantially as herein described and set forth.

ISAIAH W. SYLVESTER.

Witnesses:

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HERBERT G. TORREY.