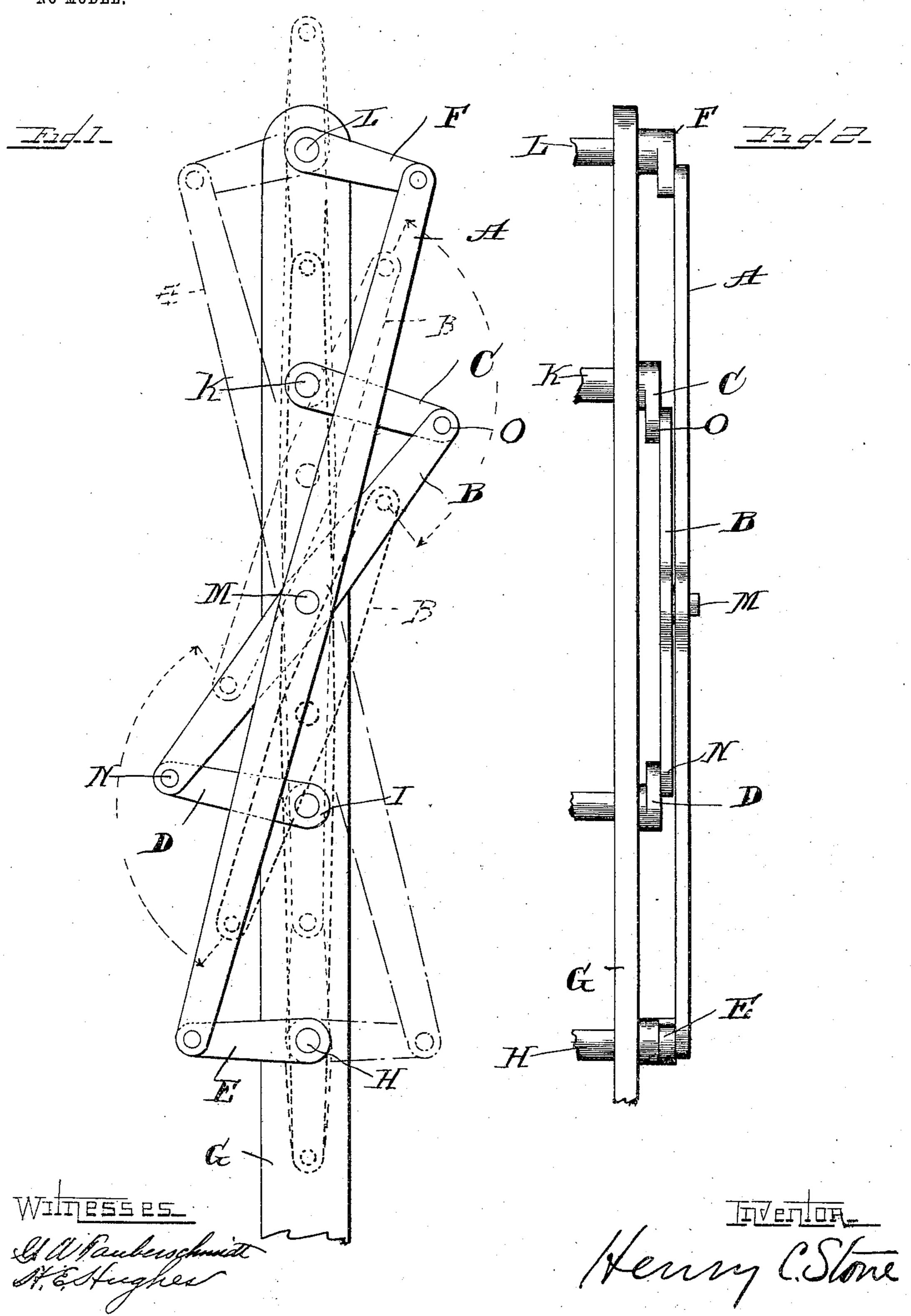
H. C. STONE. MECHANICAL MOVEMENT. APPLICATION FILED AUG. 7, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

HENRY C. STONE, OF EVANSTON, ILLINOIS.

MECHANICAL MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 773,822, dated November 1, 1904.

Application filed August 7, 1903. Serial No. 168,656. (No model.)

To all whom it may concern:

Be it known that I, Henry C. Stone, residing at 919 Hinman avenue, in the city of Evanston, in the county of Cook and State of 5 Illinois, have invented certain new and useful Improvements in Mechanical Movements; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the 10 art to which it appertains to make and use the same.

The object of the invention is to produce rotating movements in opposite directions by means of crank-and-lever connections.

The invention is illustrated in the accompanying drawings, forming part of this specification, wherein the same parts wherever shown are denoted by the same letters of reference.

my mechanical movement shown is different positions by full and by dotted lines. Fig. 2 is a side view of the same shown in one position only.

G is the bed-piece for supporting the working parts. It is shown broken from its support at the bottom end.

E, D, C, and F are crank-arms and are pivoted to the bed-piece G at H, I, K, and L.

The crank-arms E and F are connected to the lever A, which is pivotally connected and fulcrumed at its middle point to the lever B at M. Oscillating lever B is connected with crank-arms D and C at N and O and with lever 35 A at the middle point of both levers. These crank-arms D and C make no complete revolution, but oscillate back and forth in the working of the mechanical movement. These cranks are duplicates in construction and are 40 symmetrically situated as to the driving and driven shafts.

Power may be applied at the pivot extending into a shaft at L or at the pivot at H; but I have shown in the drawings the working 45 relation of the parts with the power applied at H.

Power being applied at H, the crank E will revolve in one direction, and the crank F will

thereby be revolved in an opposite direction by the lever A. The fulcral point M will 50 then be moved reciprocally back and forth by and with the lever A in a direct line between the points H and L.

Having thus described my invention, I desire to be understood as contending for a com- 55 prehensive interpretation of the claims, not believing the invention to be limited to any mere details of construction or arrangement of its parts, but that it admits of a wide variation in the same without departure from 60 its spirit or scope.

What I claim as new and useful, and what I desire to secure by Letters Patent, is as follows:

1. In a mechanical movement, in combina- 65 tion with a bed-plate, a driving and a driven shaft, their cranks and wrist-pins, a connect-In the drawings, Figure 1 is a front view of | ing-lever A connected at its ends to said wristpins, a reciprocating fulcrum to which said lever is pivoted consisting of the lever B and 7° oscillating cranks connected thereto and to the bed-plate.

> 2. In a mechanical movement, in combination, a bed-plate a driving and a driven shaft, cranks and wrist-pins connected thereto, re- 75 spectively, the connecting-lever A connecting the wrist-pins, fulcrumed at its middle, the oscillating cranks connected to said bedplate, the oscillating lever connecting the oscillating cranks, rotatably connected at its 80 middle to the lever A.

> 3. In a mechanical movement, in combination, a bed-plate, a driving and a driven shaft, cranks and wrist-pins, a lever connecting the wrist-pins, a second lever to which said first-85 mentioned lever is fulcrumed at the middle, two oscillating cranks connected to said lastmentioned lever and located symmetrically relatively, to the driving and driven shafts.

> In testimony of which I have hereunto signed 9° my name in the presence of two witnesses.

> > HENRY C. STONE.

Witnesses:

G. A. TAUBERSCHMIDT,

H. E. Hughes.