

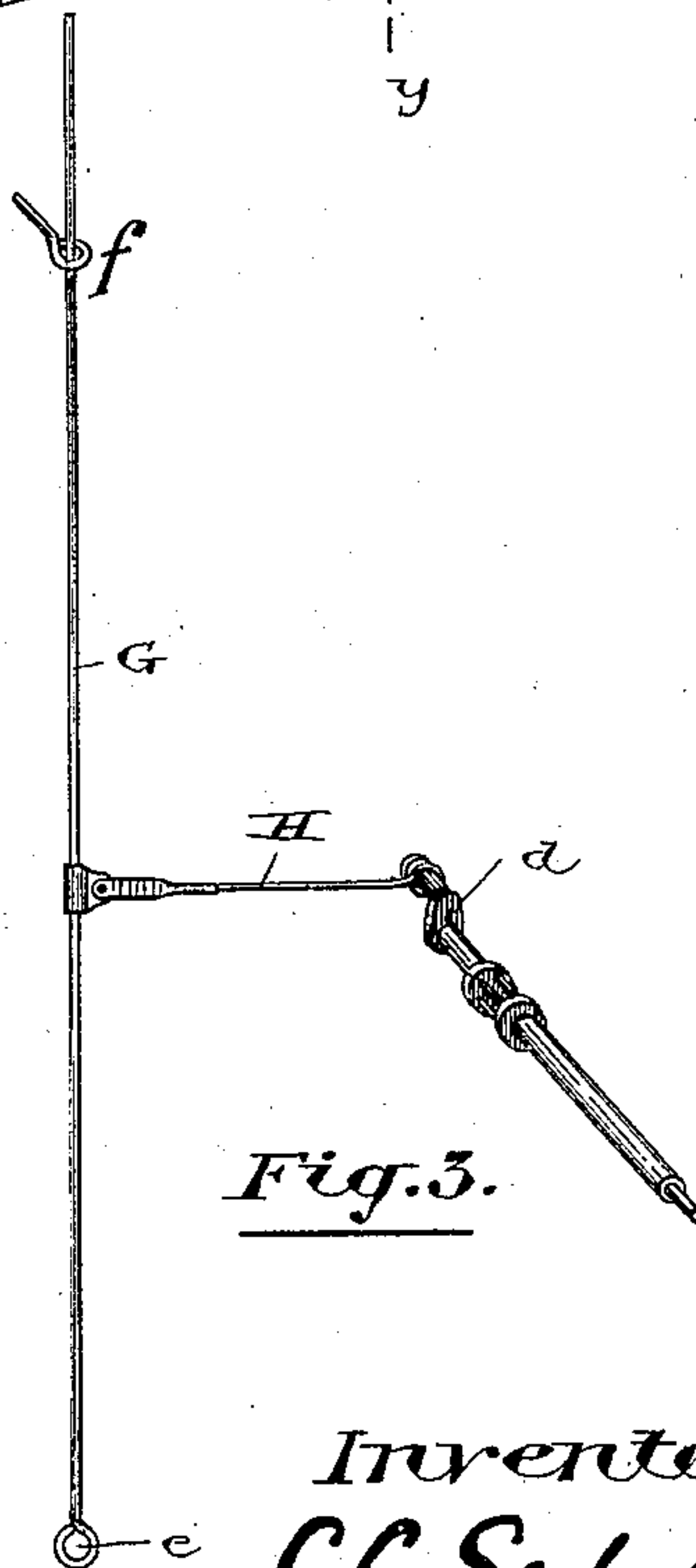
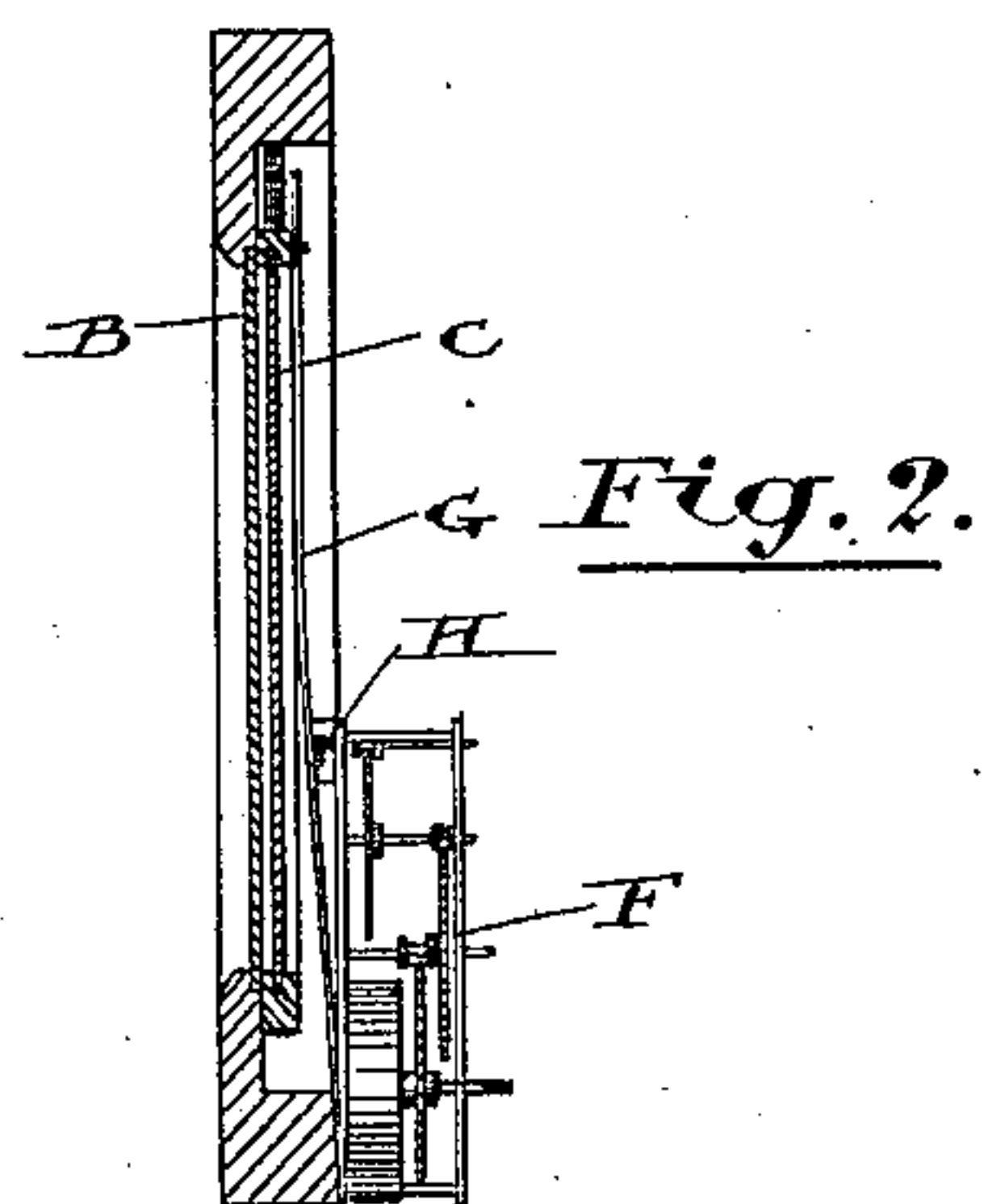
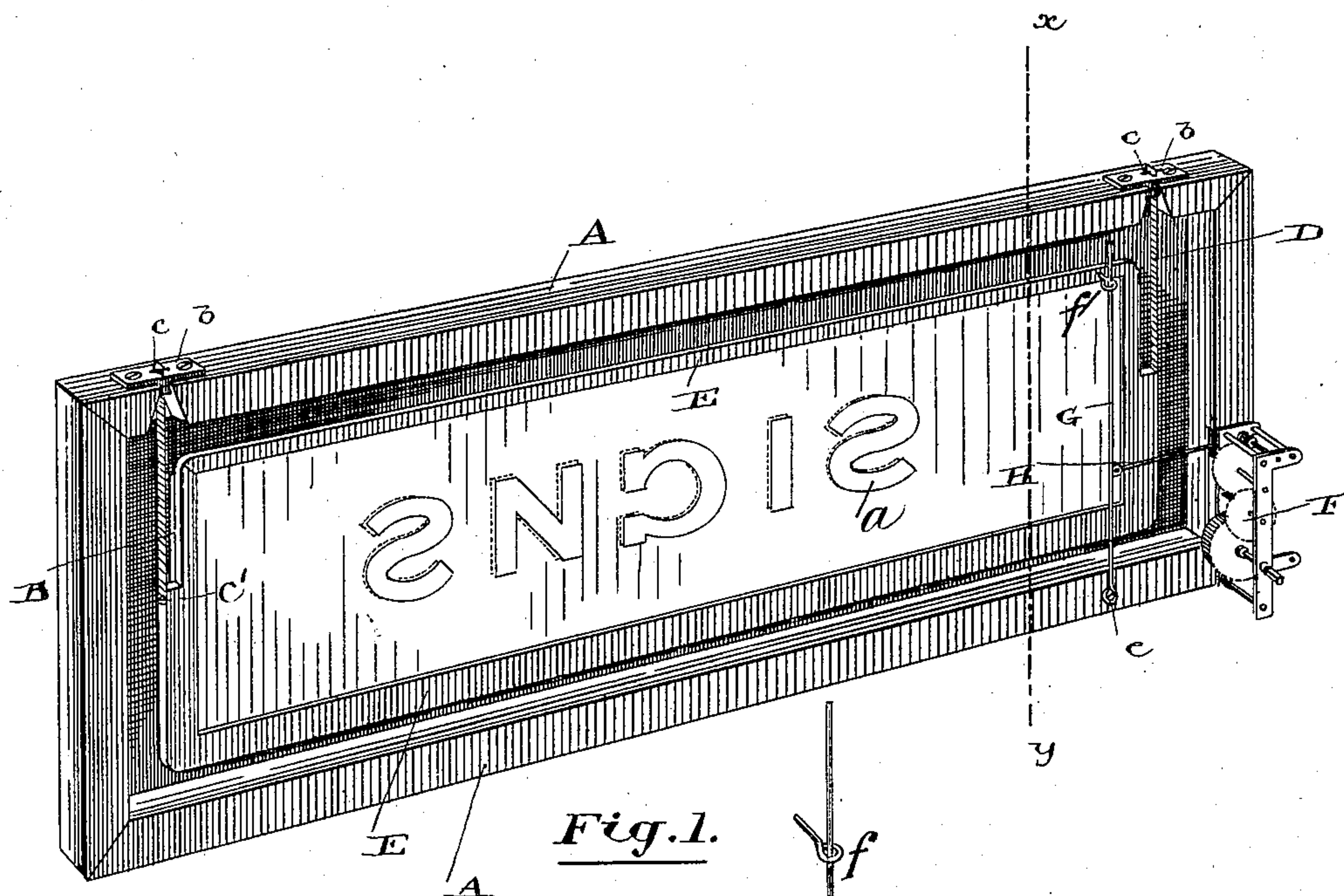
(No Model.)

C. C. SCALES.

SIGN.

No. 321,252.

Patented June 30, 1885.



Witnesses.
C.C. Baldwin
W.D. Graham.

Inventor.
C.C. Scales
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Atty.

UNITED STATES PATENT OFFICE.

CHRISTOPHER C. SCALES, OF TORONTO, ONTARIO, CANADA, ASSIGNOR OF
ONE-HALF TO EUGENE HARMON DAVIS, OF SAME PLACE.

SIGN.

SPECIFICATION forming part of Letters Patent No. 321,252, dated June 30, 1885.

Application filed August 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER COLUMBUS SCALES, a citizen of the United States of America, of the city of Covington, in the county of Kenton, in the State of Kentucky, one of the United States of America, now residing in the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented a new and useful Improvement in Signs; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of the invention is to construct a sign in which the letters shall have a changing variegated character calculated to attract attention; and it consists, essentially, of a sign composed of transparent or translucent letters burned or otherwise made in a sheet of colored glass held stationary within a frame, and having flexibly suspended behind it a similar sheet of glass of a color contrasting with that of the stationary sheet, transparent or translucent letters corresponding with those in the stationary sheet being burned or otherwise made in the suspended sheet of glass, which is caused to vibrate behind the sign, substantially as and for the purpose herein-after explained.

Figure 1 is a perspective back view exhibiting the manner of suspending and operating the movable part of the sign. Fig. 2 is a cross-section through X Y. Fig. 3 is an enlarged perspective detail exhibiting the connection between the motor and movable portion of the sign.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is a frame arranged to hold a sheet of colored glass, B, having burned or otherwise formed on it transparent or translucent letters required for the sign desired. These letters are indicated in Fig. 1 by the dotted lines as they are hid by the sheet of glass C, which has letters *a* corresponding with the letters made in the glass B. This glass C is of colored glass, contrasting with the color of the stationary glass B, and flexibly suspended within the frame A by the flexible hangers D, a frame, E, being made to contain and hold the glass C. It will be noticed that the bottom end of the hangers D are pinned to the frame E at or about its lon-

gitudinal center; and it will also be seen that the upper portion of the frame E, above the pivot-point of the hangers, is cut away, so as to leave ample clearance between the ends of the frame E and the hangers D, in order that they shall not come in contact with each other during the period that the frame is swinging on the flexible hangers D. It will also be noticed that the top ends of the hangers D are connected to the top rail of the frame A by passing through the plate *b*, provided for each hanger, and resting on top of the frame A. A small pin, *c*, passing through the end of each hanger D, forms a pivot-point for the hanger, so as to suspend the hangers D with as little friction as possible, the top rail of the frame A being cut away, so as to permit the free swinging motion required for the hangers.

While the main principle of my invention consists in arranging a flexibly-suspended sheet of colored glass having transparent or translucent letters burned or otherwise made on it, and caused to swing behind a stationary sheet of glass, colored to contrast with the swinging sheet, and having transparent or translucent letters made in it to correspond with those in the swinging sheet, it is of course important to provide simple cheap means for imparting the required reciprocating motion to the swinging sheet of glass. With that view I provide gearing F, carried in a suitable frame attached to the frame A, and driven by an ordinary clock-spring. On the end of the main driving-spindle of this gearing I form a crank, *d*, (see Fig. 3,) which I connect to the rod G by the pitman H. The lower end of the rod G is pivoted at *a* to the frame A. Its other end passes through the eyebolt *f*, attached to the frame E. The rod G is a free fit within the eyebolt *f*, so as to cause as little friction between the two as possible.

When the gearing F is put into action by its spring, the crank *d* is caused to revolve, which motion imparts a reciprocating motion to the pitman H, and through it and the rod G the glass C, which, being flexibly suspended as described, swings with the least possible power. Consequently a spring of very little strength is sufficient to impart the required motion.

I do not confine myself to the employment

of the spring or to gearing, as described, as any power might be used without altering the main principle of the invention.

In referring to Letters Patent it will of course be understood that I include numerals, or, in fact, any device capable of being shown on a sign.

I am aware of the Patent No. 248,327, and make no claim to the construction shown therein as forming part of my invention. I attach importance to the two sets of letters, for by their use the appearance of the sign is constantly changing, the letters appearing of different colors at different times, and the effect is different from that produced by a sign having letters on the front plate only, the back plate being covered with tinsel or some other bright material to attract attention, in which case the color or appearance of the letters is always the same.

What I claim as my invention is—

1. A sign composed of transparent or translucent letters burned or otherwise made in a sheet of colored glass held stationary, in combination with a contrastingly-colored sheet of glass having transparent or translucent letters corresponding with those in the stationary sheet, and flexibly suspended behind the stationary sheet, so that it can receive a vi-

bratory swinging motion, substantially as and for the purpose specified. 30

2. A stationary glass, B, having transparent or translucent letters made on it, in combination with the glass C, having letters *a* made in it to correspond with those on B, and flexibly supported by the hangers D, substantially as and for the purpose specified. 35

3. The flexible hangers D, suspended from the top rail of the frame A on the pin *c*, and pivoted at *c'* to the frame E, which is shaped as specified, and contains the lettered glass C, in combination with a stationary glass, B, lettered as specified, and contained in the frame A. 40

4. The combination, with the frame A, cut away as shown, and provided with the plates *b*, of the frame E, flexible hangers D, pivoted at one end to the ends of the frame E near its longitudinal center, and their other ends passing through the plates *b*, and the pins *c*, passed through the free ends of said hangers above said plates, substantially as and for the purposes specified. 45 50

Toronto, August 4, 1884.

C. C. SCALES.

In presence of—

CHARLES CLINTON BALDWIN,
M. BRAY.