G. W. HARRINGTON.

DRAFT-EQUALIZER.

No. 176,305.

Patented April 18, 1876.

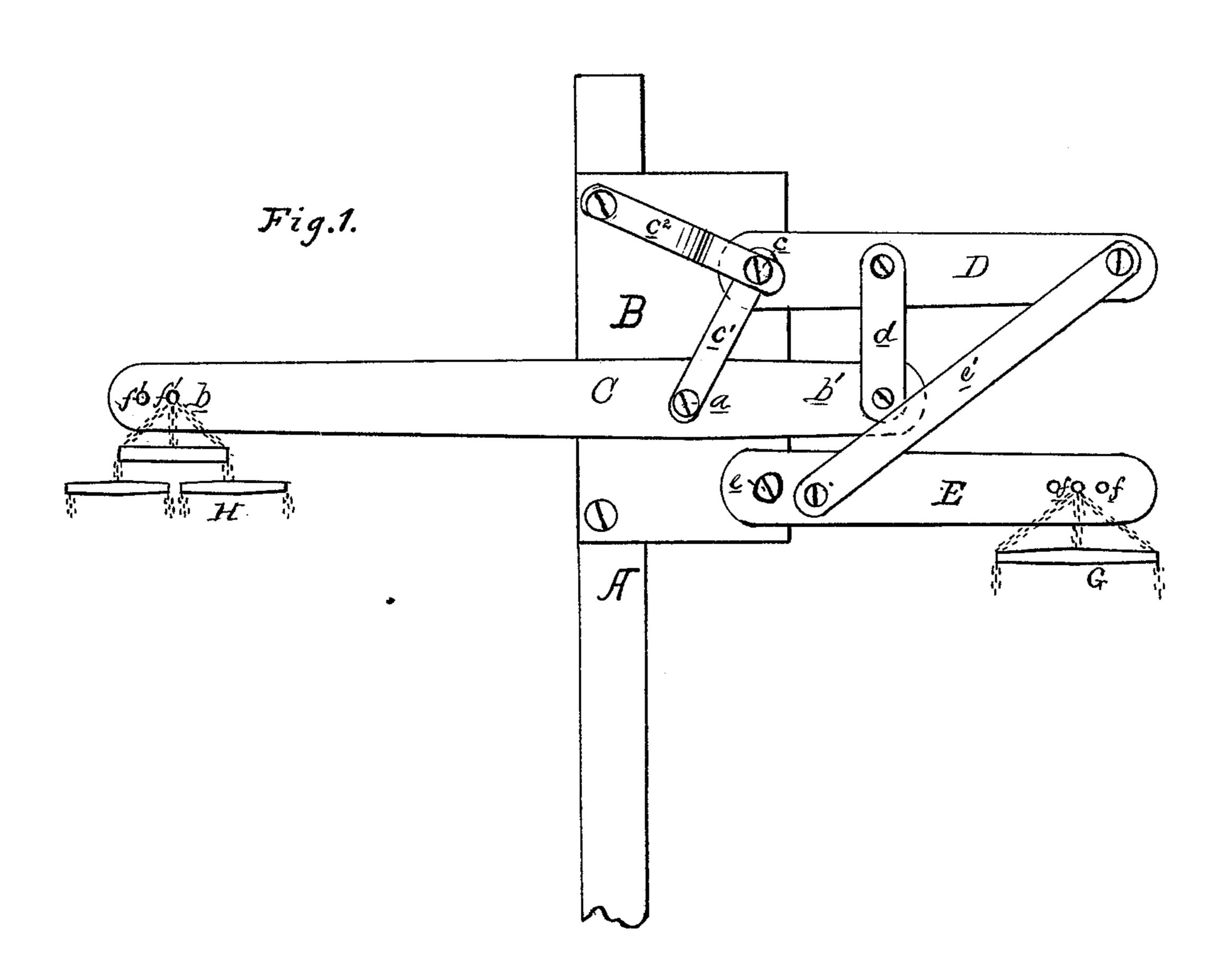
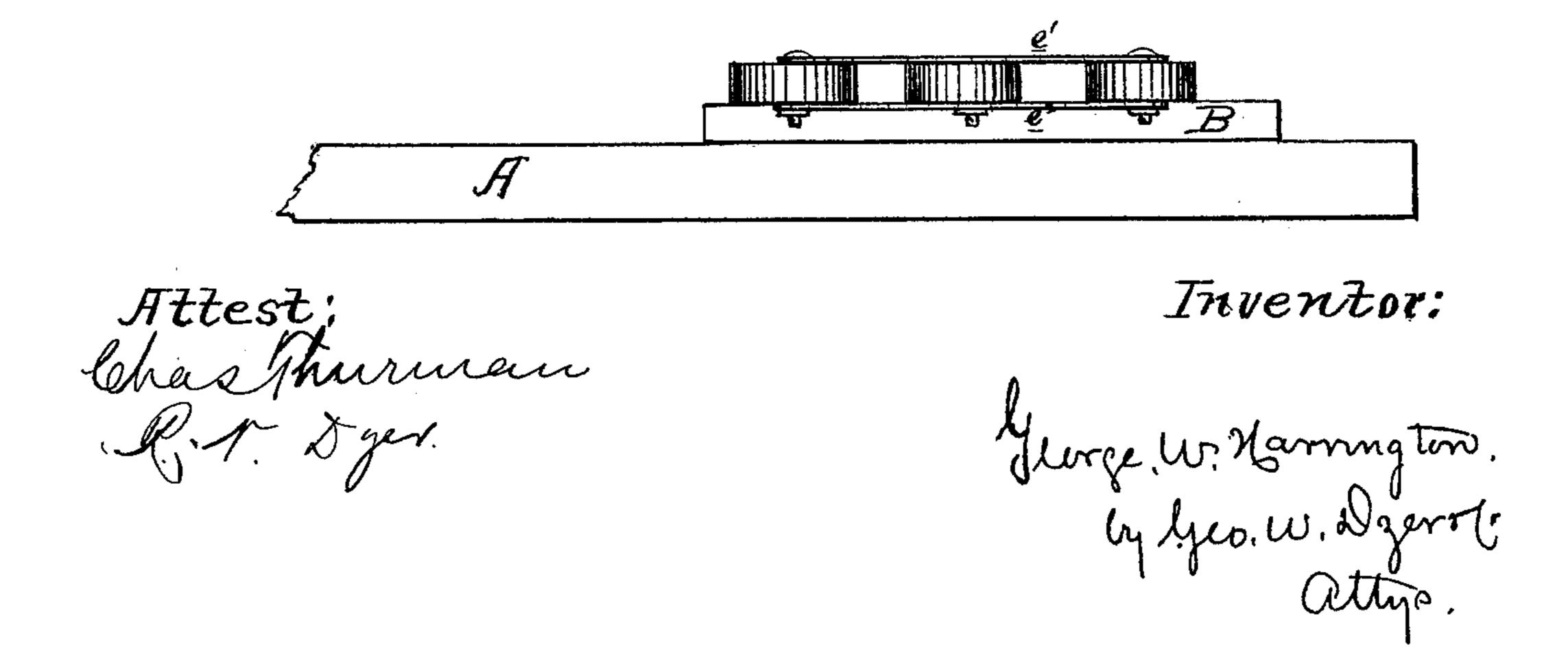


Fig.2.



UNITED STATES PATENT OFFICE.

GEORGE W. HARRINGTON, OF PLAIN VIEW, MINNESOTA.

IMPROVEMENT IN DRAFT-EQUALIZERS.

Specification forming part of Letters Patent No. 176,305, dated April 18, 1876; application filed January 25, 1876.

To all whom it may concern:

Be it known that I, GEORGE W. HARRING-TON, of Plain View, in the county of Wabasha and State of Minnesota, have invented a new and useful Improvement in Draft-Equalizers; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of my invention is a three horse equalizer, wherein the side draft is obviated, and a simple and efficient contrivance obtained. My invention therein consists in the construction and arrangement of the several parts composing the equalizer, all as more fully hereinafter explained.

To enable others skilled in the art to make my device, I describe the same in connection with the drawings, in which—

Figure 1 is a top view, and Fig. 2 a side elevation.

Like letters denote corresponding parts in each figure.

A represents the pole. B is a plank, plate, or block rigidly secured to such pole, and projecting only on one side of the same. C is a long lever pivoted to the plank, plate, or block B, at a, on one side of the pole, the long arm of such lever being represented by b, and the short arm by b'. D is a short lever, pivoted to the plank at its inner end c, and projecting on the opposite side of the pole from the arm b of the lever C, and in the rear of such lever. The pivots of the levers C and D are connected by a brace, c^{1} . The pivot of the lever D is also stayed by a brace, c^2 . The end of the short arm b' of the lever C is connected to the lever D by two rigid plates, d d', pivoted to each lever on the upper and lower sides. E is a lever, equal in length to the lever D, and pivoted to the plank at its inner end e, in

front of the lever C, the short arm b' of the said lever C playing between the levers D and E. This lever is connected to the lever D by the diagonal straps $e^1 e^2$, which connect the outer end of the lever D to the lever E near its inner end.

A one-horse whiffletree, G, is attached to the outer end of the lever E, which has a series of holes, f, for securing the whiffletree and allowing it to be adjusted to obviate any irregularity in the levers. A two-horse whiffletree, H, is attached to the outer end of the lever G by holes f'.

The pivots of the different levers are all on one side of the pole, which is to do away with the side draft caused by the room necessary on one side of the pole for two horses, and the length of the lever required. This defect in three horse equalizers has made them almost worthless heretofore. The arrangement of the plank, plate, or block, the levers, and their connections makes a compact equalizer, and one not liable to be broken or worn out easily.

Having thus fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. The combination, with the pole A, of the plank, plate, or block B and the levers C D E, all pivoted to such plank on the same side of the pole, substantially as described and shown.

2. In combination, the pole A, the plank B, the levers C D E, the plates d d', and the diagonal straps e^1 e^2 , all constructed and arranged substantially as described and shown.

This specification signed and witnessed this 15th day of January, 1876.

GEORGE W. HARRINGTON.

Witnesses:

J. F. Pope,

D. D. HARRINGTON.