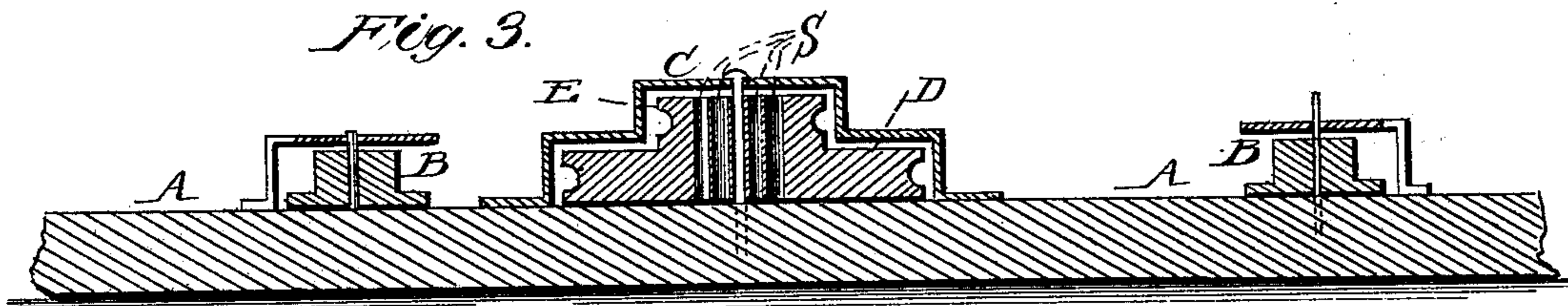
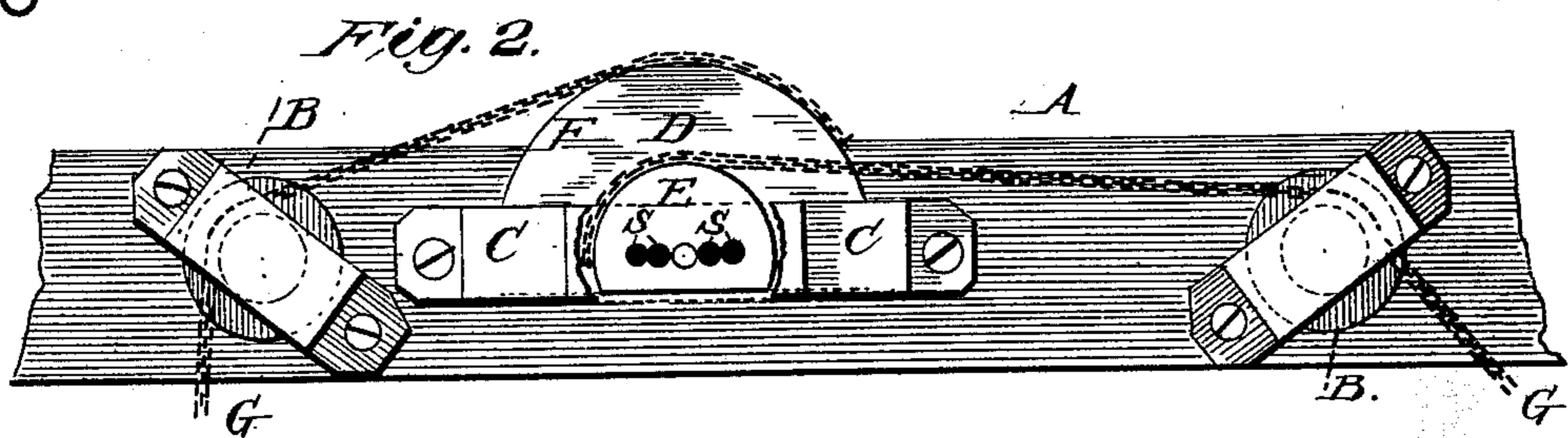
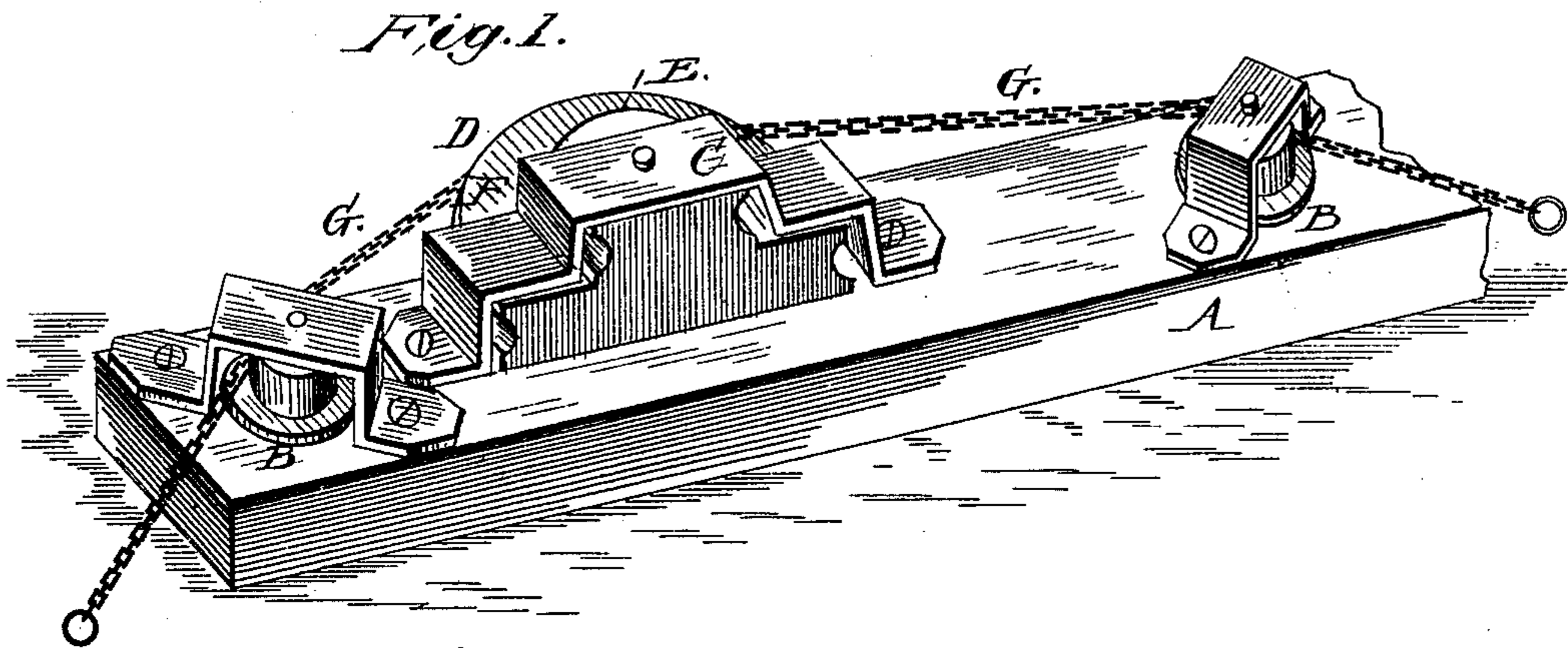


E. R. ANGELL.
Draft-Equalizer.

No. 218,807.

Patented Aug. 26, 1879.



Witnesses;
Ad G Dieterich

J. R. Little,

Inventor;
Edwin R. Angell,
by *C. A. Snow & Co.*
attorneys.

UNITED STATES PATENT OFFICE.

EDWIN R. ANGELL, OF DECORAH, IOWA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO FRED HENCKE, OF SAME PLACE.

IMPROVEMENT IN DRAFT-EQUALIZERS.

Specification forming part of Letters Patent No. **218,807**, dated August 26, 1879; application filed
July 2, 1879.

To all whom it may concern:

Be it known that I, EDWIN R. ANGELL, of Decorah, in the county of Winneshiek and State of Iowa, have invented certain new and useful Improvements in Draft-Equalizers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a top view, and Fig. 3 is a longitudinal sectional view.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to three-horse equalizers; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings, A represents the triple-tree, at the ends of which suitable boxes or bearings are provided for grooved pulleys B B. At a suitable point between pulleys B B is arranged a stepped box or bearing, C, for a cone-pulley, D, consisting of two grooved pulleys, the smaller of which, E, is one-half the diameter of the larger one, F. Chains or ropes G G are attached to the pulleys E F, respectively, and passed over pulleys B B, for attachment of the double and single trees.

To economize space a portion of the cone-pulley may be cut off, as represented in the drawings.

The operation of my invention will be readily understood. The single horse attached to the chain secured to the large pulley has the advantage in pulling of twice as much leverage as the two horses which are attached to the chain secured to the small pulley. When it is desired to adjust the draft to a different ratio of leverage, the cone-pulley may be pivoted eccentrically, and it is for this purpose provided with two or more extra perforations or bearings, S, for the axle or pivot.

My improved draft-equalizer is simple, strong, and durable—important advantages when the strain and wear to which devices of this class are subjected are taken into consideration.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The improved three-horse equalizer herein described, consisting of the triple-tree A, pulleys B B, cone-pulley D, having perforations S S, by means of which it may be pivoted eccentrically, and chains G G, all arranged and operating substantially as herein described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

EDWIN R. ANGELL.

Witnesses:

E. M. FARNSWORTH,
E. CARTWRIGHT.