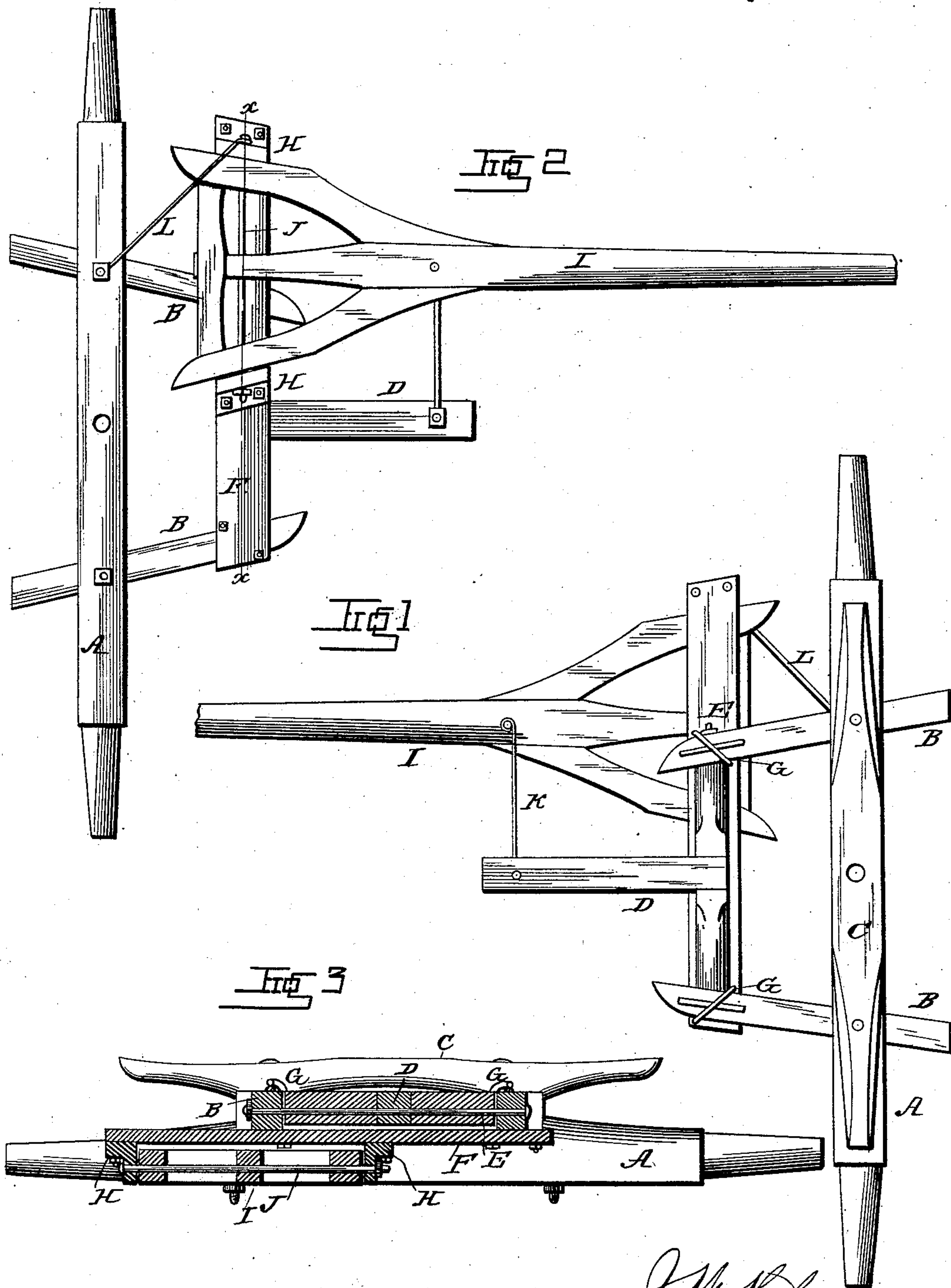


(No Model.)

J. W. HELME.
DRAFT EQUALIZER.

No. 281,505.

Patented July 17, 1883.



WITNESSES:

Wm. L. Dietrich
J. R. Little

J. W. Helme
INVENTOR.

by *C. A. Brown & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN W. HELME, OF ORLAND, INDIANA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 281,505, dated July 17, 1883.

Application filed May 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. HELME, a citizen of the United States, residing at Orland, in the county of Steuben and State of Indiana, have invented a new and useful Draft-Equalizer, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to three-horse equalizers; and it has for its object to produce a device which shall possess superior advantages in point of simplicity, durability, and general efficiency.

To this end it consists in the improved construction and arrangement of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a plan view illustrating my invention. Fig. 2 is a bottom view of the same, and Fig. 3 is a transverse sectional view on the line *x x* in Figs. 1 and 2.

The same letters refer to the same parts in all the figures.

A in the drawings designates the front axle of the vehicle or running-gear to which my invention is applied.

B B are the hounds, and C the bolster.

D is a short tongue pivoted between the hounds, at the front ends of the latter, in the usual manner, by means of a transverse bolt, E, and to the under side of the hounds, directly below the bolt E, is secured a transverse cross-bar, F, which may be attached to the hounds by means of a pair of clips, G G. The cross-bar F extends laterally to one side of the hounds, as clearly shown in the drawings, and to its under side are secured a pair of flanged castings, H H, one of which is at the outer end of said cross-bar, while the other is about centrally between the hounds B B. Between these flanged castings the tongue proper, I, is pivoted in the usual manner upon a transverse bolt, J.

K is a brace connected pivotally to the upper side of the tongue I, and to the under side of the short tongue D, at the front end of the latter. It will thus be seen that both tongues have a corresponding up-and-down motion; also that in turning to either side the strain is communicated from the long tongue to the short one, and thus thrown centrally upon the axle of the vehicle. A diagonal brace, L, likewise connects the outer flanged casting, H, with the under side of the

axle at a point directly below the nearest hound B. By means of the said brace excessive strain upon the outer end of the cross-bar F is prevented, and it also assists in equalizing the strain upon the axle in turning.

I claim as my invention and desire to secure by Letters Patent of the United States—

1. In a three-horse equalizer, the combination of the axle, the hounds, a short tongue pivoted between the latter, a transverse cross-bar secured to the under side of the hounds and extending laterally to one side, and a tongue pivoted under the said cross-bar, at the outer end of the latter, substantially as set forth.

2. In a three-horse equalizer, the combination of the axle, the hounds, a short tongue pivoted between the latter, a transverse cross-bar secured to the under side of the hounds and extending laterally to one side, the flanged castings secured under the said cross-bar, a diagonal brace connecting the outer casting with the axle, and the tongue pivoted between the said flanged castings, substantially as herein set forth.

3. In a three-horse equalizer, the combination of the axle, the hounds, a short tongue pivoted between the latter, a cross-bar secured transversely to the under side of the hounds and extending laterally to one side, a tongue pivoted under the said cross-bar, at the outer end of the latter, and a pivoted rod connecting the said tongue with the front end of the short tongue, substantially as and for the purpose herein set forth.

4. As an improvement in three-horse equalizers, the combination of the axle, the hounds, a short tongue pivoted between the latter, a cross-bar secured transversely to the under side of the hounds and extending laterally to one side, the flanged castings secured under the said cross-bar, a diagonal brace connecting the outer casting with the axle, the tongue pivoted between the said flanged castings, and a pivoted rod connecting the said tongue with the front end of the short tongue, all arranged and operating substantially as and for the purpose shown and specified.

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

JOHN W. HELME.

Witnesses:

W. E. PURDY,

H. D. WEYER.