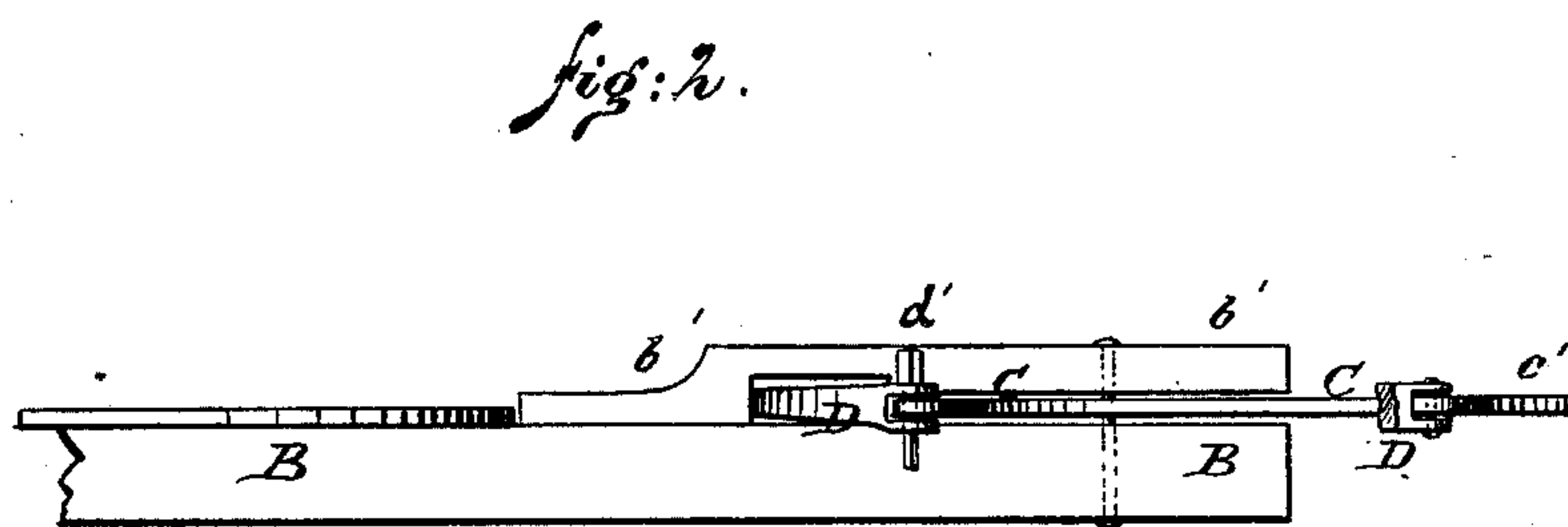
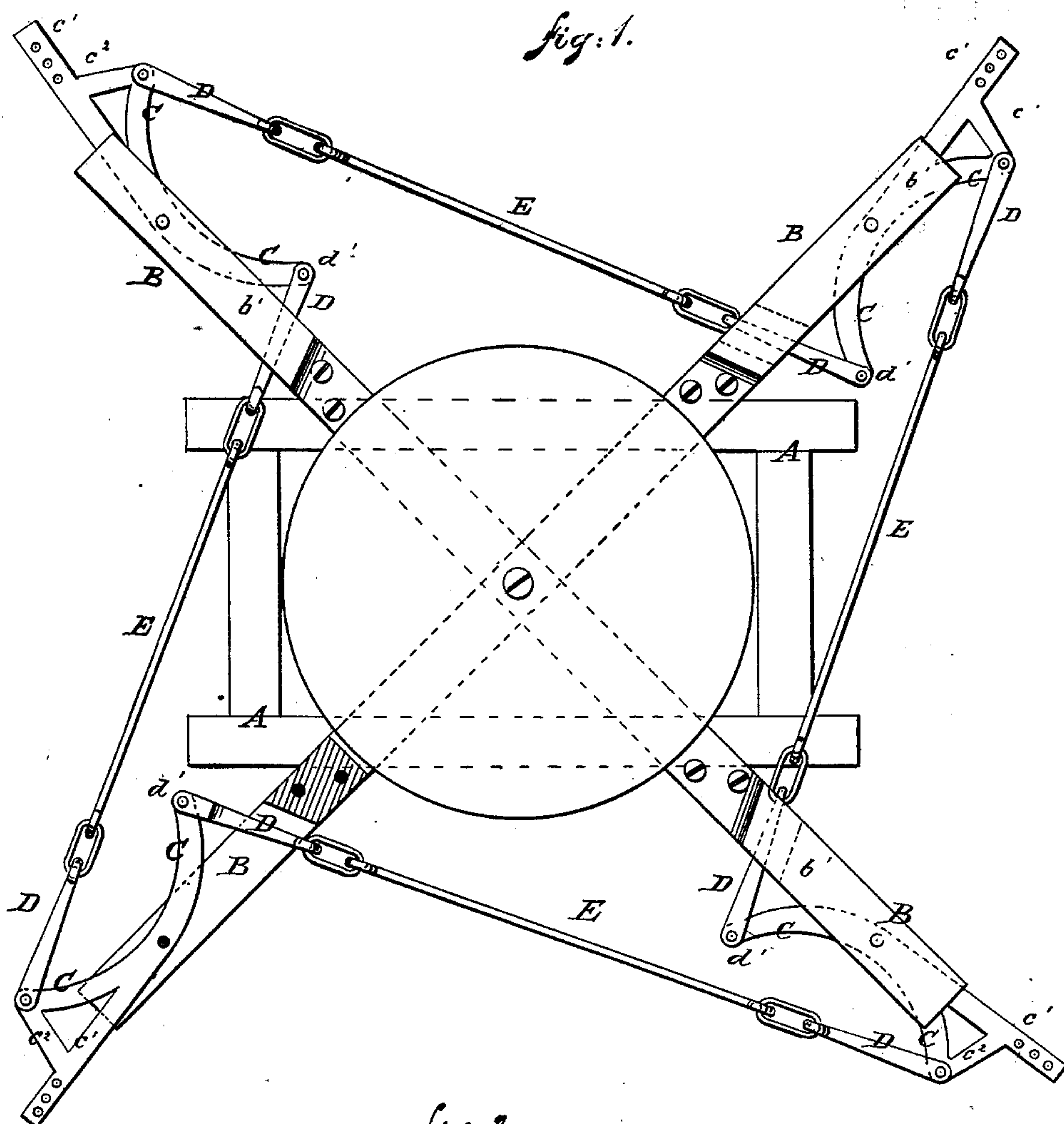


L. B. ROWLAND.
Horse-Power Equalizer.

No. 206,973.

Patented Aug. 13, 1878.



WITNESSES:

Chas. Nidaq.
C. Sedgwick

INVENTOR:

L. B. Rowland
BY *Mumford*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

LOWRY B. ROWLAND, OF MONMOUTH, OREGON.

IMPROVEMENT IN HORSE-POWER EQUALIZERS.

Specification forming part of Letters Patent No. **206,973**, dated August 13, 1878; application filed March 7, 1878.

To all whom it may concern:

Be it known that I, LOWRY B. ROWLAND, of Monmouth, in the county of Polk and State of Oregon, have invented a new and useful Improvement in Horse-Power Equalizers, of which the following is a specification:

Figure 1 is a top view of my improved horse-power equalizer, one of the caps being removed. Fig. 2 is a rear view of one of the sweeps.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved device for applying the draft to the machine in such a way that the draft may be equalized among the teams, which will enable a weaker team to be favored, and will enable a team to have a solid pull when necessary, and which will also hold the master-wheel in a perfect level, even though one or more of the teams may be given more or less to draw than the remainder of the teams, thereby obviating all the friction usually incident upon any one or two teams drawing more than an equal part of the draft, and by which also the motion of the cylinder is regulated almost or quite to that driven by steam-power.

A represents the frame of the machine, and B are the sweeps. To the sweeps B, near their outer ends, are pivoted the middle parts of the curved bars C. To the forward or convex side of the outer part of the bars C are attached, or upon them are formed, arms c^1 , which project parallel with the sweeps, and are strengthened by braces c^2 , extending from them to the ends of the said bars C. In the outer end of the arm c^1 , that projects beyond

the end of the bar B and brace c^2 , are formed a number of holes for the attachment of the draft, so that a weak team may be made to draw less and a strong team more than an equal share when desired.

To the ends of the curved bars C are pivoted short bars or stirrups D. The stirrup of the outer end of each curved bar C is connected with the stirrup of the inner end of the next curved bar C by a connecting-rod, E, as shown in Fig. 1. The curved bars C and the inner stirrups, D, work between the sweeps B and the caps b' , attached to the said sweeps, as shown in Figs. 1 and 2.

The pins or bolts d' , that pivot the inner stirrups, D, to the inner ends of the curved bars C, are made long, so as to strike against the sweep B and cap b' , and thus give a team a solid pull should one of the teams refuse to draw, or should it become necessary from any other cause.

I am aware that it is not new to use the levers to which the horses are attached; but they have been hitherto made so that as soon as one pair of horses advances beyond another pair the chain or rod becomes parallel with lever, and therefore destroys the equalization. This is entirely remedied by my crooked lever. Hence,

What I claim is—

The combination, with sweeps B, of the crooked levers C c^1 c^2 , connected by rods D E, substantially as shown and described.

LOWRY BENNETT ROWLAND.

Witnesses:

IRA F. M. BUTLER,
ALICE BUTLER.