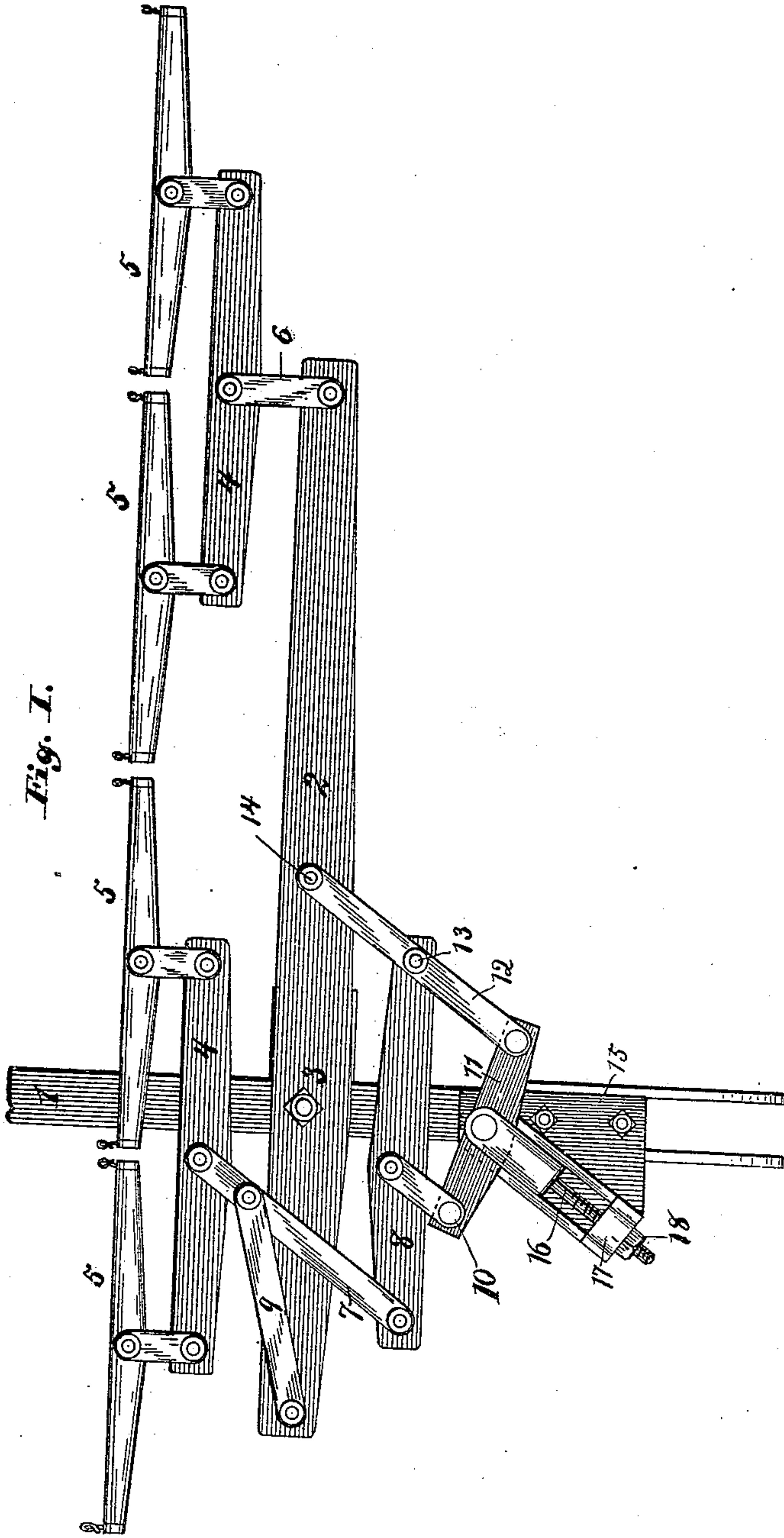


(No Model.)

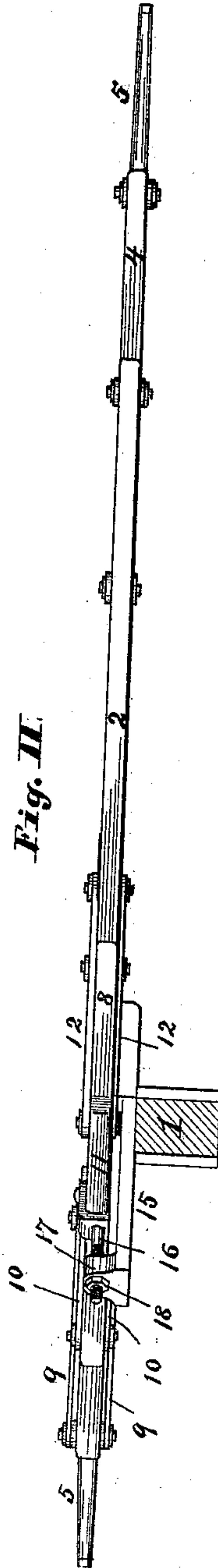
D. B. CROFT.  
DRAFT EQUALIZER.

No. 448,129.

Patented Mar. 10, 1891.



Attest:  
S. Cotton  
George E. Bruce



Inventor  
Daniel B. Croft  
By Knight Bros  
Atty.

# UNITED STATES PATENT OFFICE.

DANIEL B. CROFT, OF SWEET WATER, ILLINOIS.

## DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 448,129, dated March 10, 1891.

Application filed November 24, 1890. Serial No. 372,485. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL B. CROFT, of Sweet Water, in the county of Menard and State of Illinois, have invented a certain new and useful Improvement in Four-Horse Eveners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 My invention relates to equalizing devices whereby each of four horses will be caused to draw evenly when placed side by side; and my invention consists in features of novelty hereinafter fully described, and pointed out  
15 in the claim.

Figure I is a top or plan view illustrative of my invention. Fig. II is a rear edge view.

Referring to the drawings, 1 represents a draft-tongue, upon which a beam 2 is pivoted  
20 by a bolt 3.

4 represents doubletrees, to which the whiffletrees 5 are connected in any suitable manner. The outer doubletree 4 is connected to the long end of the beam 2 by a strap 6. The  
25 inner doubletree 4 is connected by a strap 7 to one end of a short beam 8, and the strap 7 is connected by means of a strap 9 to the short end of the beam 2. The beam 8 is connected by a strap 10 to one end of the beam 11, the  
30 other end of which is connected by a strap 12 to the beam 8 at 13 and to the beam 2 at 14.

15 represents a bracket secured to the draft-tongue, to which the beam 11 is connected by a rod 16, passing through a perforation in the  
35 head 17 of the bracket, and having a nut 18

on either side of the head 17 by which it may be lengthened or shortened. A pivotal connection is made between the straps 7 and 9 and between the other straps and the various beams and doubletrees, so as to permit the  
40 parts to move at their points of connection with each other. By the use of these various beams and straps arranged as I have shown and described them a perfect conformity of draft is assured, and each animal is obliged  
45 to pull his proportion of the load and no more. By the use of the bolt 16 and its adjusting-nuts 18, in connection with the bracket 15, the wear in the various beams at the connecting-points of the straps may be taken up,  
50 and thus the perfection in the equality of draft maintained.

I claim as my invention—

In a four-horse evener, the combination of the draft-tongue, the beam 2, secured to the  
55 draft-tongue to one side of its middle, a doubletree 4, provided with whiffletrees and connected to the long end of said beam, a beam 8, a doubletree 4, provided with whiffletrees and connected by a strap 7 to the beam 8, a  
60 strap 9, connecting the short end of the beam 2 to the strap 7, a beam 11, a strap 10, connecting the beam 11 to the beam 8, and a strap 12, connecting the beam 11 to the beams 8 and 2, substantially as and for the purpose set  
65 forth.

DANIEL B. CROFT.

In presence of—

W. M. GUY,

J. G. STRODTMANN.