

W. M. POND.
DRAFT GEAR.
APPLICATION FILED MAY 18, 1908.

905,360.

Patented Dec. 1, 1908.

Fig. 1.

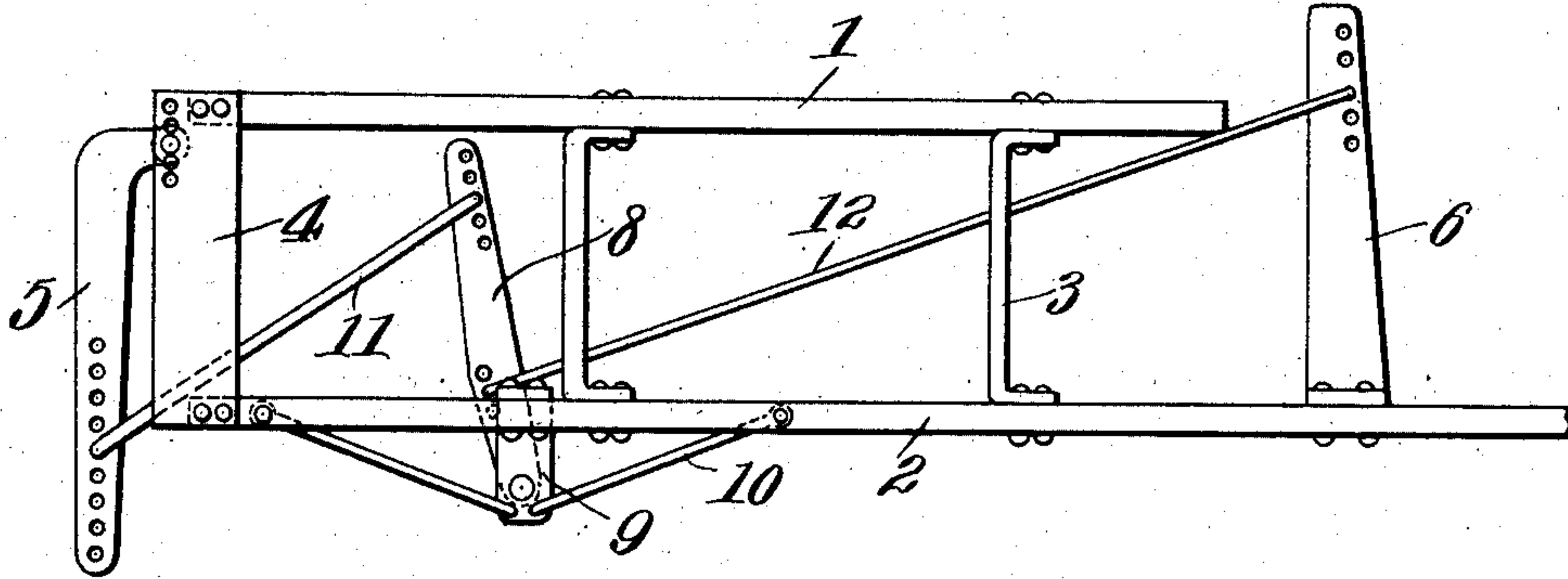


Fig. 2.

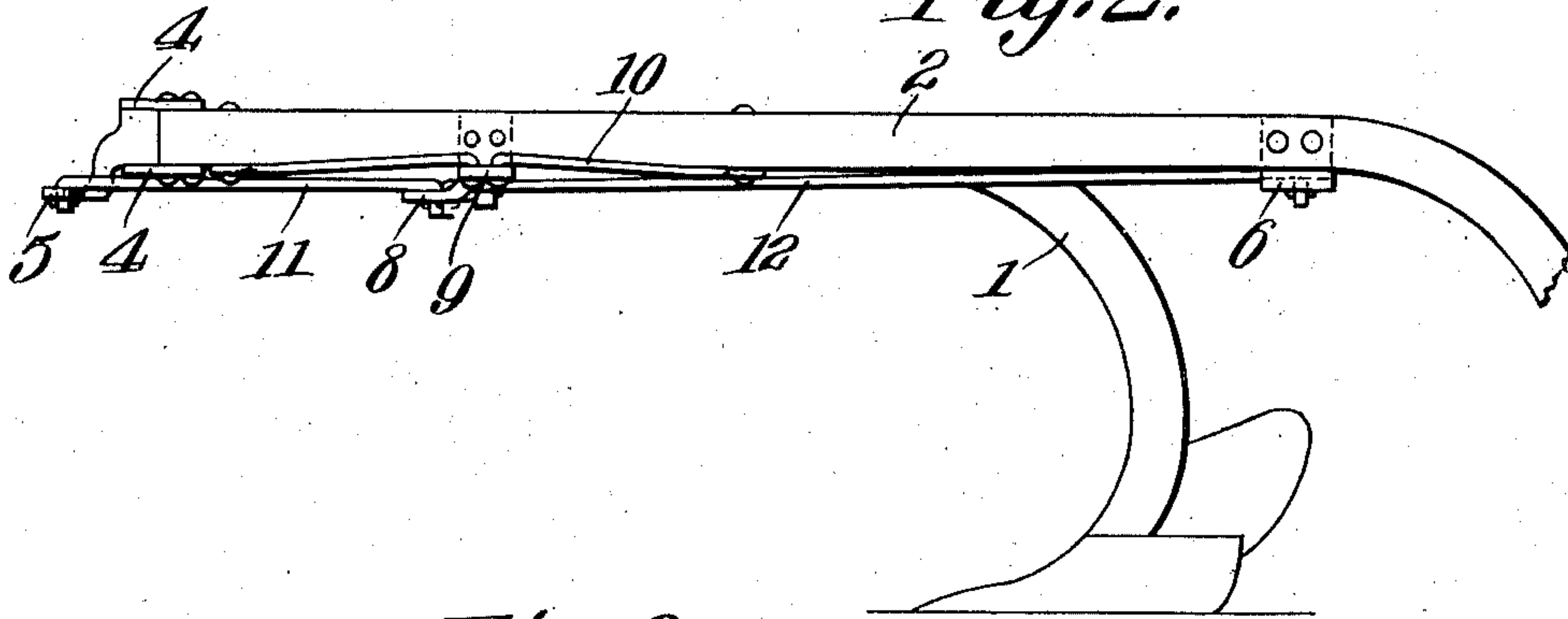
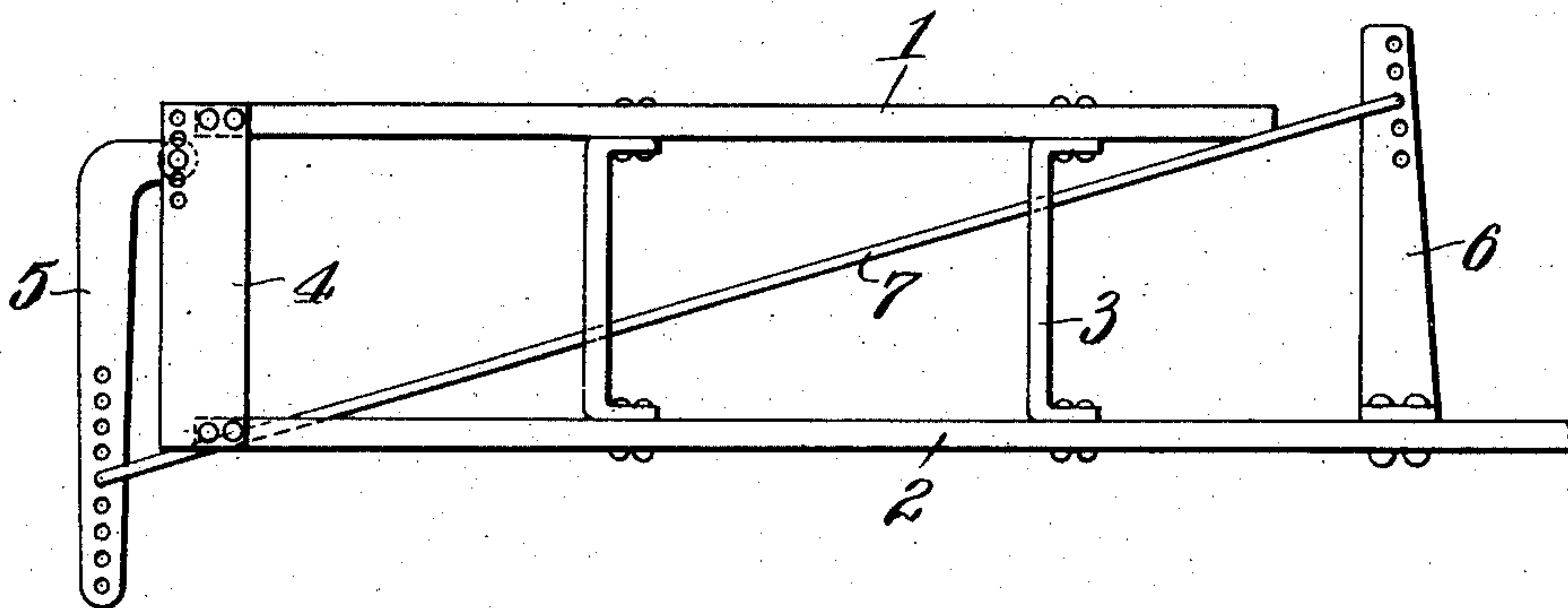


Fig. 3.



Witnesses

E. J. Stewart
E. Hand

Inventor,
William M. Pond,

By *C. A. Snow & Co.,*
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM MARTAIN POND, OF GREENVIEW, ILLINOIS.

DRAFT-GEAR.

No. 905,360.

Specification of Letters Patent.

Patented Dec. 1, 1908.

Application filed May 18, 1908. Serial No. 433,616.

To all whom it may concern:

Be it known that I, WILLIAM M. POND, a citizen of the United States, residing at Greenview, in the county of Menard and State of Illinois, have invented a new and useful Draft-Gear, of which the following is a specification.

This invention has relation to draft-gears and it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide a draft-gear adapted to be used to advantage upon gang plows or upon harvesters or other moving objects which have tendency to side draft.

The gear consists primarily of beams which are secured together in predetermined relation. A lever is fulcrumed at the forward portion of the gear and in the vicinity of the forward end of one of the beams and lies transversely with relation to the other beam. An arm is attached to the rear portion of the last said beam and means is provided for connecting the free end of the lever with the free end of said arm. The free end of said arm lies transversely with relation to the beam opposite to the one to which it is attached. A lever mechanism may be mounted upon one of the beams at a point intermediate of the first said lever and the said arm for the purpose of increasing the stress from the lever to the bar or arm. From such an arrangement it will be seen that when a draft-means is connected with the first mentioned lever that the draft is applied to one of the beams at its end portion and to the other beam at an intermediate portion whereby the strain is divided to such extent as to hold the body to which the draft gear is attached in alinement and against the side draft.

In the accompanying drawings, Figure 1 is a top plan view of the draft-gear. Fig. 2 is a side elevation of the same, and Fig. 3 is a plan view of a modified form of the gear.

The draft-gear consists of the beams 1 and 2 which are held in predetermined relation by means of the cross-braces 3. The plates 4 are attached to the forward ends of the beams 1 and 2. The lever 5 is adjustably fulcrumed between the plates 4, and in the vicinity of the forward end of the beam 1 and the free end portion of the said lever 5 lies transversely with relation to the beams 2. The arm 6 is attached to the rear portion of

the beam 2 and its free end lies transversely with relation to the beam 1. From their points of attachment the lever 5 and the arm 6 extend in opposite direction.

In the form of the invention as shown in Fig. 3, the link or rod 7 is pivotally connected at its opposite ends and adjustably connected with the free end portion of the lever 5 and the arm 6. In the form of the invention as shown in Fig. 1, the lever 8 is interposed between the lever 5 and the arm 6. The said lever 8 is fulcrumed upon a lug 9 which is supported at the side of the beam 2 and the said lug is held in place by the brace-rods 10. The ends of the link or rod 11 are pivotally and adjustably attached to the free end portions of the levers 5 and 8. The free end portion of the lever 8 lies between the beams 1 and 2. The ends of the links or rods 12 are pivotally and adjustably attached to the lever 8 and the free end portion of the arm 6.

The operation of the draft-gear is as follows:—A draft-means is attached to the free end portion of the lever 5 and the tug or strain is transmitted through the said lever 5 to the forward end portion of the beam 1, at the same time the tug or pull is also transmitted through the means connecting the free end portion of the lever 5 with the arm 6 to the rear end portion of the beam 2 and is applied to the side of the same, thus it will be seen that the tug or pull is applied to one of the beams in a straightforward direction and to the other beam in a lateral direction. This disposition or distribution of the tug or pull has a tendency to break up any side draft that the object to which the draft-gear is attached may have. By providing beams for adjustably attaching the links or rods with the levers and arms, the strain of the tug or pull may be distributed to a nicety between the beams.

In both forms of the invention the same principles are involved but in the form as shown in Fig. 1 the tug or pull which is applied to the sides of the beam 2 is augmented through the lever 8 and its connections.

Having described the invention what I claim as new and desire to secure by Letters-Patent is:—

1. In combination with beams fixed in predetermined relation, a draft gear comprising a lever fulcrumed in the vicinity of the front end of one beam lying at its free

end portion transversely of the other beam,
and adapted to swing in a horizontal plane,
an arm attached to the rear portion of the
last said beam, and lying at its free end
5 portion transversely with relation to the
first said beam, a second lever fulcrumed
upon a support carried by the last said beam,
and adapted to swing in a horizontal plane,
a connecting means between the free ends
10 of said lever, and a connecting means be-
tween said second lever and the arm.

2. In combination with beams fixed in
predetermined relation, a draft gear com-
prising a lever fulcrumed in the vicinity of
15 the front end of one beam, and lying at its
free end portion transversely of the other
beam, and adapted to swing in a horizontal
plane, an arm attached to the rear portion of
the last said beam and lying at its free end

portion transversely with relation to the 20
first said beam, a fulcrum carried by the
beam to which the arm is attached, being
located at the opposite side of the beam from
the arm, a second lever pivoted to said ful-
crum and adapted to swing in a horizontal 25
plane and lying at its free end portion trans-
versely with relation to the first said beam, a
connecting means between the free ends of
said levers and a connecting means between
the second said lever and the arm. 30

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

WILLIAM MARTAIN POND.

Witnesses:

A. R. ALLISON,
A. J. POND.