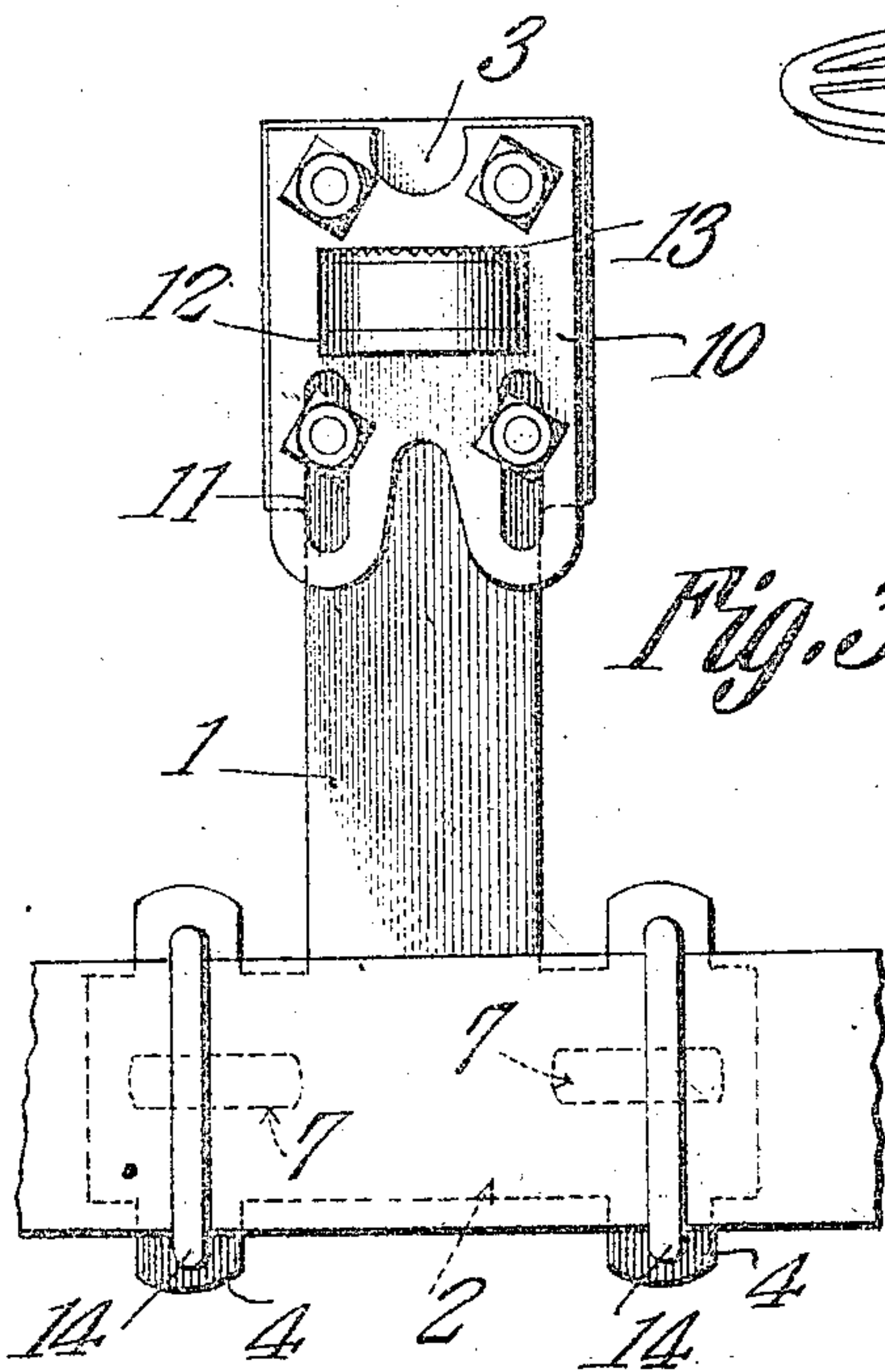
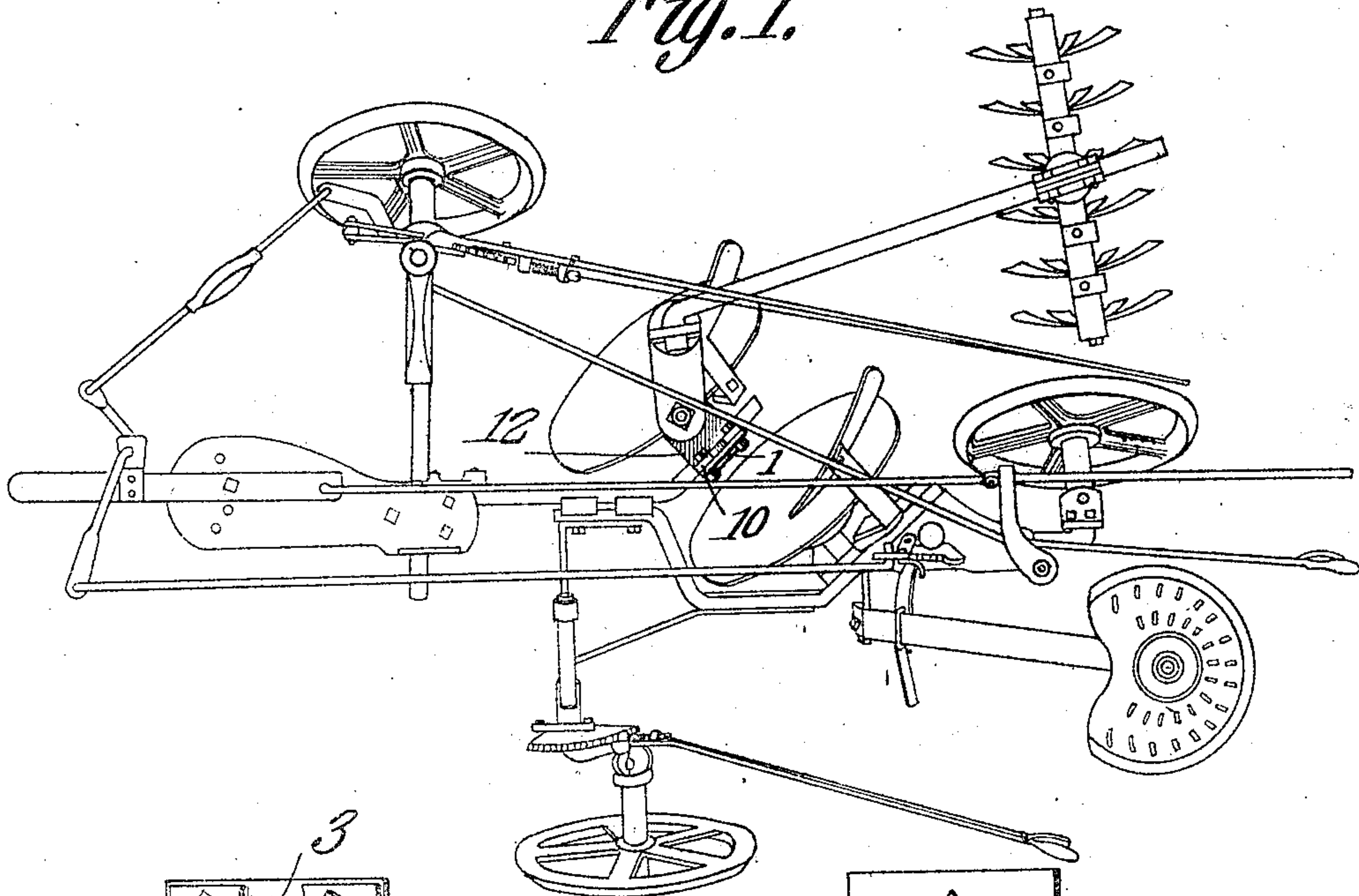


E. M. KRAMER.  
 BRACKET FOR CONNECTING HARROW ATTACHMENTS WITH PLOW FRAMES.  
 APPLICATION FILED MAR. 15, 1909.

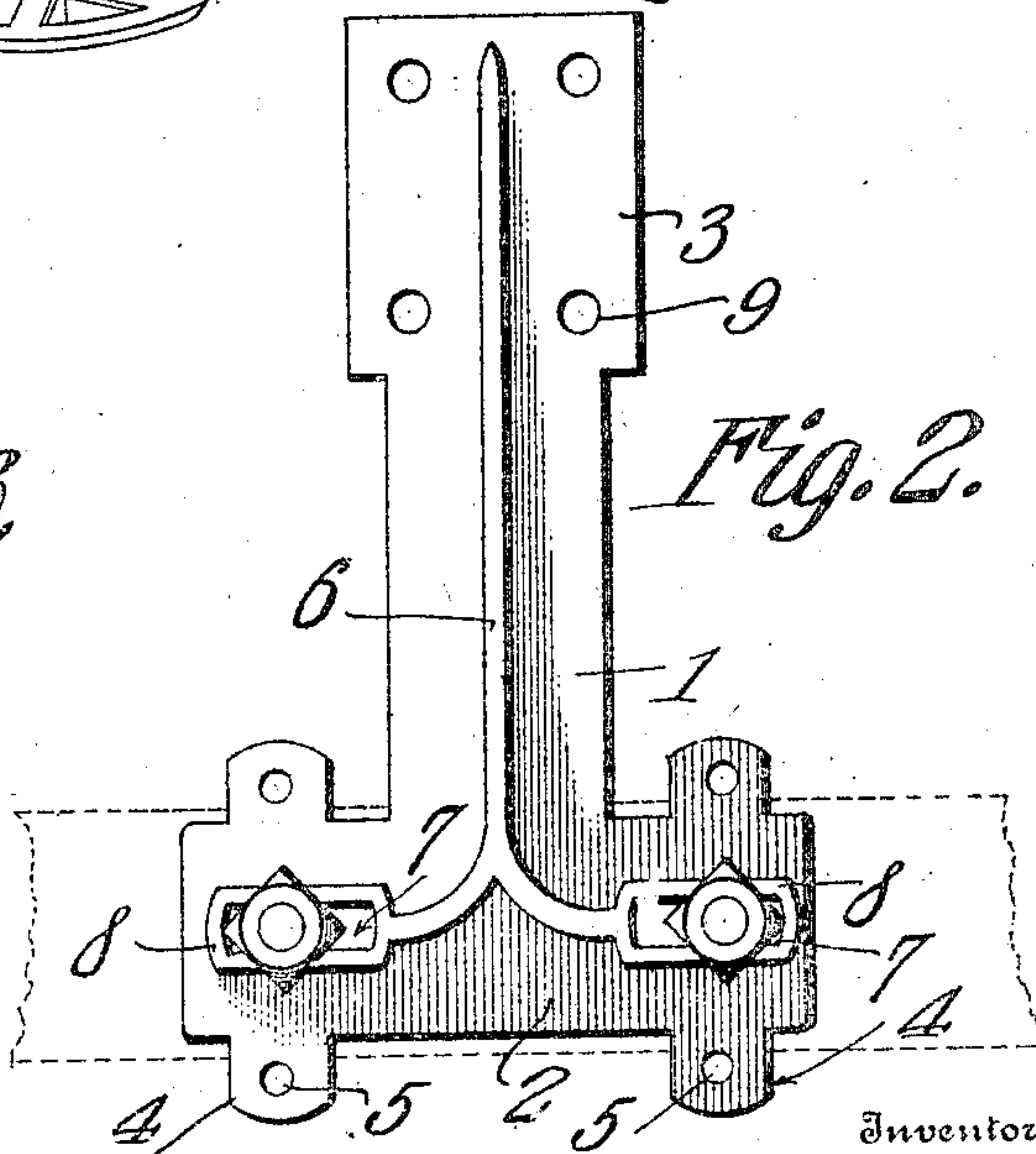
934,443.

Patented Sept. 21, 1909.

*Fig. 1.*



*Fig. 3.*



*Fig. 2.*

Witnesses

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# UNITED STATES PATENT OFFICE.

EMIL M. KRAMER, OF PAXTON, ILLINOIS.

BRACKET FOR CONNECTING HARROW ATTACHMENTS WITH PLOW-FRAMES.

934,413.

Specification of Letters Patent. Patented Sept. 21, 1909.

Application filed March 15, 1909. Serial No. 482,453.

*To all whom it may concern:*

Be it known that I, EMIL M. KRAMER, a citizen of the United States, residing at Paxton, in the county of Ford and State of Illinois, have invented a new and useful Bracket for Connecting Harrow Attachments with Plow-Frames, of which the following is a specification.

This invention has relation to brackets for connecting harrow attachments with plow frames 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 bracket especially adapted to be used in the manner as indicated in the title of invention, and which is of such arrangement and has its parts so disposed as to withstand the strains to which a member would be subjected when in use.

In the accompanying drawings:—Figure 1 is a plan view of a plow showing the harrow attaching standard applied thereto. Fig. 2 is a side elevation of the standard. Fig. 3 is an elevation of the side of the standard opposite the side thereof shown in Fig. 2.

The bracket consists of a member which is approximately T-shaped in side elevation and is formed with a stem portion 1, which merges at one end into the head portion 2, the long dimension of which is approximately at a right angle to the long dimension of the portion 1. The opposite end of the portion 1 merges into an enlargement 3. The end portion 2 is provided at its opposite side edges with the lugs 4. Each lug is provided with a perforation 5. One side of the bracket is plain, while the opposite side is provided with a rib 6, of peculiar arrangement. The portion 2 of the bracket is provided with elongated slots 7, and the rib 6, along the major portion of its length, extends along the median longitudinal dimension of the portion 2 and projects into the same dimension of the portion 3 of the bracket. As the said rib 6 enters the portion 2 of the bracket it is bifurcated or divided; and one branch curves toward one of the slots 7, while the other branch of the said rib curves toward the other slot in the said portion 2. At the said slots the said branches of the rib 6 are formed into loops 8, which completely surround the edges of the said slots. The portion 3 of the bracket is provided with a series of bolt perforations 9.

A harrow support 10 is adapted to be bolted to the enlarged portion 3 of the bracket by means of bolts which pass transversely through the perforations 9 in the said portion 3 and through perforations 11 provided in the said support. The support 10 is provided with an outstanding shelf 12, which is provided at its extremity with a rosette 13, adapted to engage a similar rosette carried by a bearing block forming a portion of the harrow attachment. Or the support 10, may be cast solid with the enlarged portion 3 of the bracket, if desired.

The bracket hereinbefore described is especially adapted to be applied to the frame of a disk plow when it is intended to couple the harrow attachment to the frame of the plow. As is usual in the structure of such plows, they are provided in the portion of the frame immediately behind the disk with two perforations which are adapted to receive bolts which secure the scraper standards to the frame of the implement. In all makes of plows the bolt perforations which receive the said bolts are not the same distance apart, and in those plows which employ such means for securing the scraper standards to the plow frame the original bolts are removed and longer ones are substituted in their stead, and at the same time said bolts are passed through the elongated slots 7 in the portion 2 of the bracket. Thus when the nuts are tightened up upon the bolts they come directly against the outer faces of the loops 8 formed at the divided extremities of the rib 6, and the bracket is securely held in place upon the frame of the plow. However, in other types of disk plows other means are provided for supporting the scraper standards, and when this is the case U bolts 14 are inserted at their end portions through the perforations 5 in the lugs 4 and are passed transversely around the side rail of the plow frame in the manner as indicated. When this is done, nuts 15 are screwed upon the ends of the said bolts 14, and thus provision is made for securing the bracket in place upon the side rail of the plow frame. By reason of the fact that the loops 8 formed at the extremities of the rib 6 pass entirely around the elongated slots 7, and also have their opposite ends lying upon opposite sides of a line connecting the centers of the bolt perforations 5 in the lugs 6 at each end portion of the portion 2 of the bracket, it will be seen that when either form



of securing device is held, the divided portion or extremity of the rib 6 extends transversely with relation to the securing device, while the major or single portion of the said rib extends transversely with relation to the draft or weight of the trailing plow harrow attachment. Thus, a simple and extremely durable structure is effected, and, by reason of the peculiar configuration of the said rib and its disposition upon the bracket, the parts are enabled to withstand strains to which they are usually subjected.

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

1. A bracket for attaching a harrow to a plow frame comprising a standard having a relatively long intermediate portion, and a relatively short end portion, the long dimension of which is at a right angle to the long dimension of the intermediate portion, and a relatively enlarged portion located at the opposite end of the said intermediate portion from the end with which the said transversely disposed portion is connected, said end portion, the longer dimension of which is at a right angle to the long dimension of the intermediate portion, having at its edges perforated lugs, and being provided at its end portions with elongated slots, said standard having upon one face a rib which extends along the longitudinal median dimension of the intermediate portion and the same dimension of the enlarged end portion, and which is divided at the opposite end portion into branches, which branches are provided at their extremities

with loops which encircle and form portions of the edges of the said elongated slots.

2. A standard for connecting a harrow attachment with a plow frame having a relatively long intermediate portion with a relatively enlarged portion at one end thereof, and a relatively short portion at the opposite end thereof, the long dimension of which is at a right angle to the long dimension of the intermediate portion, said relatively short portion at one end of the intermediate portion having at its opposite edges perforated lugs, a rib located upon one side of the standard and having its long dimension extending along the long median dimension of the intermediate portion and along the similar dimension of the enlarged portion of the standard, said rib at its point of entrance upon the relatively short portion being divided into branches, said relatively short portion having at its opposite end portions elongated slots, the ends of which are located upon opposite sides of lines drawn through the centers of the perforations of the said lugs carried by the relatively short portion, the divided extremities of the said ribs having at their ends loops which surround the said elongated slots and form portions of the side walls thereof.

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

EMIL M. KRAMER.

Witnesses:

J. W. KAUFMANN,  
AMANDA V. ROZENE.