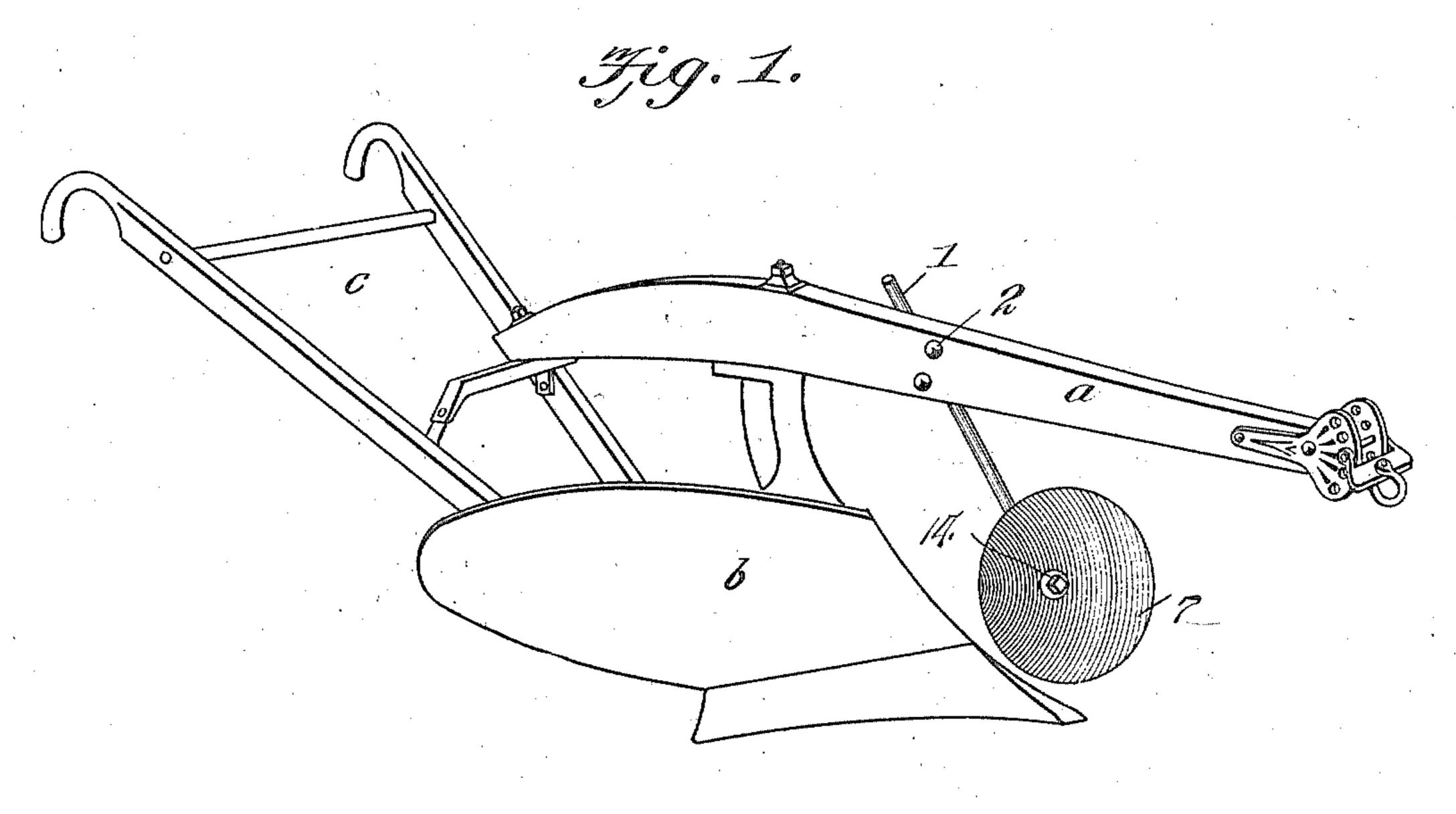
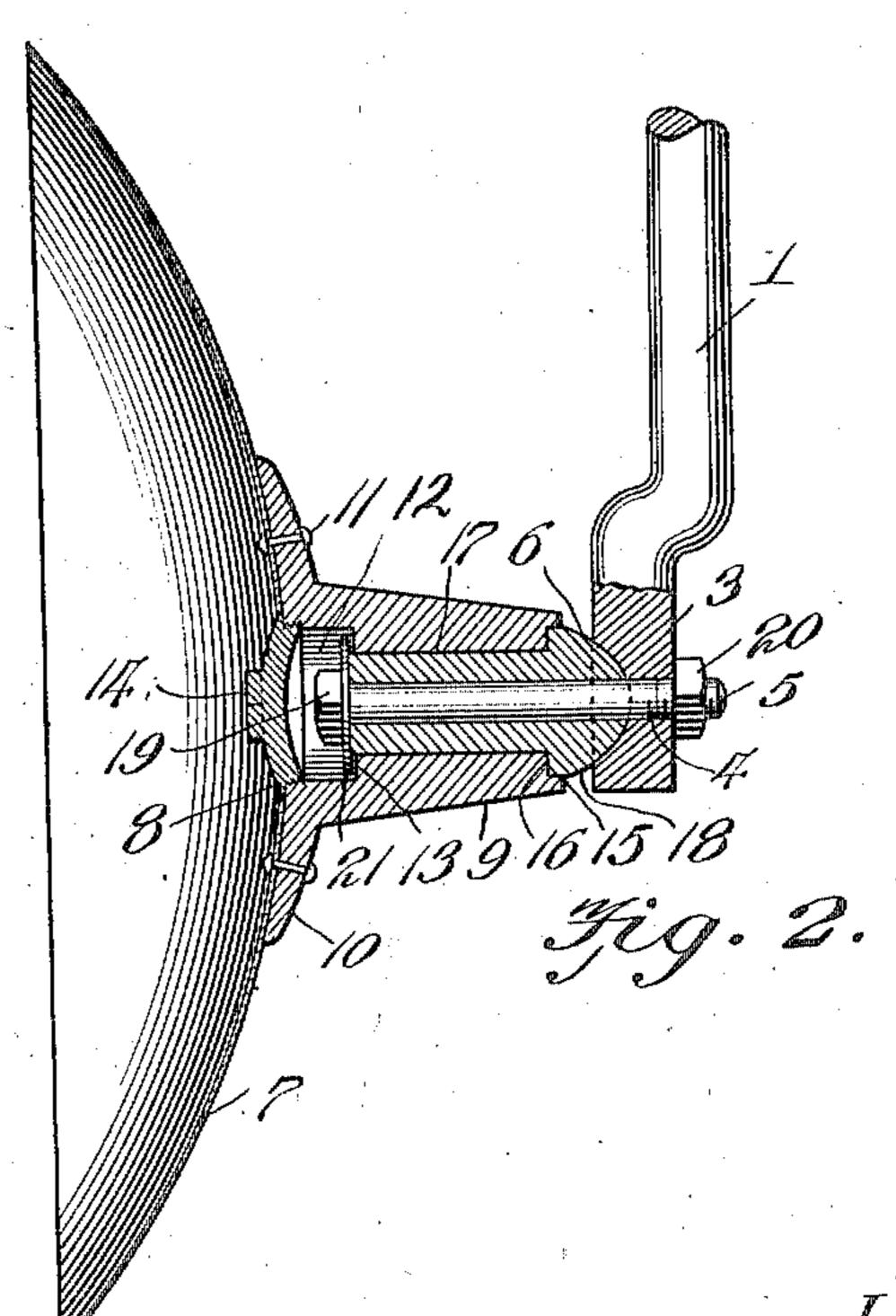
L. E. KIEFFER. JOINTER FOR PLOWS. APPLICATION FILED AUG. 18, 1908.

951,005.

Patented Mar. 1, 1910.





Inventor Leslie E.Kieffer

Witnesses Frank B. Kofman.

334 Victor J. Evans

UNITED STATES PATENT OFFICE.

LESLIE E. KIEFFER, OF SKIATOOK, OKLAHOMA.

JOINTER FOR PLOWS.

951,005.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed August 18, 1908. Serial No. 449,165.

To all whom it may concern:

Be it known that I, Leslie E. Kieffer, a citizen of the United States, residing at Skiatook, in the county of Tulsa and State 5 of Oklahoma, have invented new and useful Improvements in Jointers for Plows, of which the following is a specification.

This invention is an improved jointer for attachment to and used in connection with 10 turning plows, for turning under weeds, grass or stubble in advance of the plow and preventing the plow from becoming choked, and the said invention consists in the construction, combination and arrangement of

15 devices hereinafter described.

In the accompanying drawings:—Figure 1 is a perspective view of a plow provided with a jointer embodying my invention. Fig. 2 is a detailed sectional view of my improved 20 jointer on a larger scale.

The plow here shown in Fig. 1 is of usual construction and may be of any suitable construction, the beam being indicated at a, the

share at b and the handles at c.

25 In accordance with my invention, I provide a standard 1 which is secured to one side of the plow beam at a suitable distance in advance of the share by means of a clip bolt 2. In practice the standard is inclined 30 forwardly and downwardly and its lower end is offset laterally as at 3, and is provided. with a transverse opening 4 and with a substantially semi-spherical recess 6, which recess is on the front or mold side of the said 35 standard.

The disk 7 is concavo-convex in form and is provided with a central opening 8. On the rear or convex side of the disk, at the center thereof, is secured a box or hub 9 40 which is provided at its front end with an annular flange 10, the face of which flange is concave to adapt it to fit on the convex side of the disk. The said flange is secured to the disk by rivets or other suitable devices 45 11. In the front end of the box 9 is a cylindrical recess 12 which is normally covered by means of a cap 14, the said cap and the said box or hub being provided with coacting screw threads to adapt the cap to be readily 50 attached to the hub or removed therefrom. The rear end of the recess 12 forms a shoulder 13. In the rear end of the box or hub 9 is a circular recess 15 which forms a shoul- l der 16.

The axle spindle 15 is provided at its rear 55 end with a substantially semi-spherical hub 18 adapted to fit in the recess 6 and also adapted to bear in the recess 15. The said axle spindle has a longitudinal bore which alines with the transverse opening 4 of the 60 standard and coacts therewith to receive a bolt 5. The hub 19 of the bolt bears on a washer 21 which bears on the front end of the axle spindle and opposite the shoulder 13, and the nut 20, which is on the rear end 65 of said bolt, bears against the rear or under side of the standard, the said bolt serving to clamp the axle spindle securely and yet detachably to the standard, the hub or box of the disk being revoluble on the said axle 70 spindle to adapt the disk to revolve as the plow advances and cause the disk to cut in the soil ahead of the plow to turn under the weeds, grass and stubble and thereby prevent the plow from becoming choked and 75 also insure that the trash will be covered and buried in the furrows made by the plow.

Having thus described my invention, I

claim:

A jointer attachment for plows compris- 80 ing a standard having a recess in one side, a hollow spindle having a head at its rear end disposed in said recess, said head presenting an annular shoulder on its front side, a bolt extending through said spindle and standard 85 and securing them together, said bolt having an element at its front end extending laterally across and beyond the front end of the spindle, a concavo-convex disk having a hub on its convex side, said hub bearing at 90 its rear end against the shoulder on the front side of the head of the spindle, being further provided with a recess for the reception of the head of the bolt and presenting an annular shoulder against which the laterally 95 extending element of the bolt bears, and a cap disposed in the center of the concave face of the disk, screwed in the said recess and covering the head of the bolt.

In testimony whereof I affix my signature 100

in presence of two witnesses.

Witnesses:

ED Boors, W. G. KIEFFER.