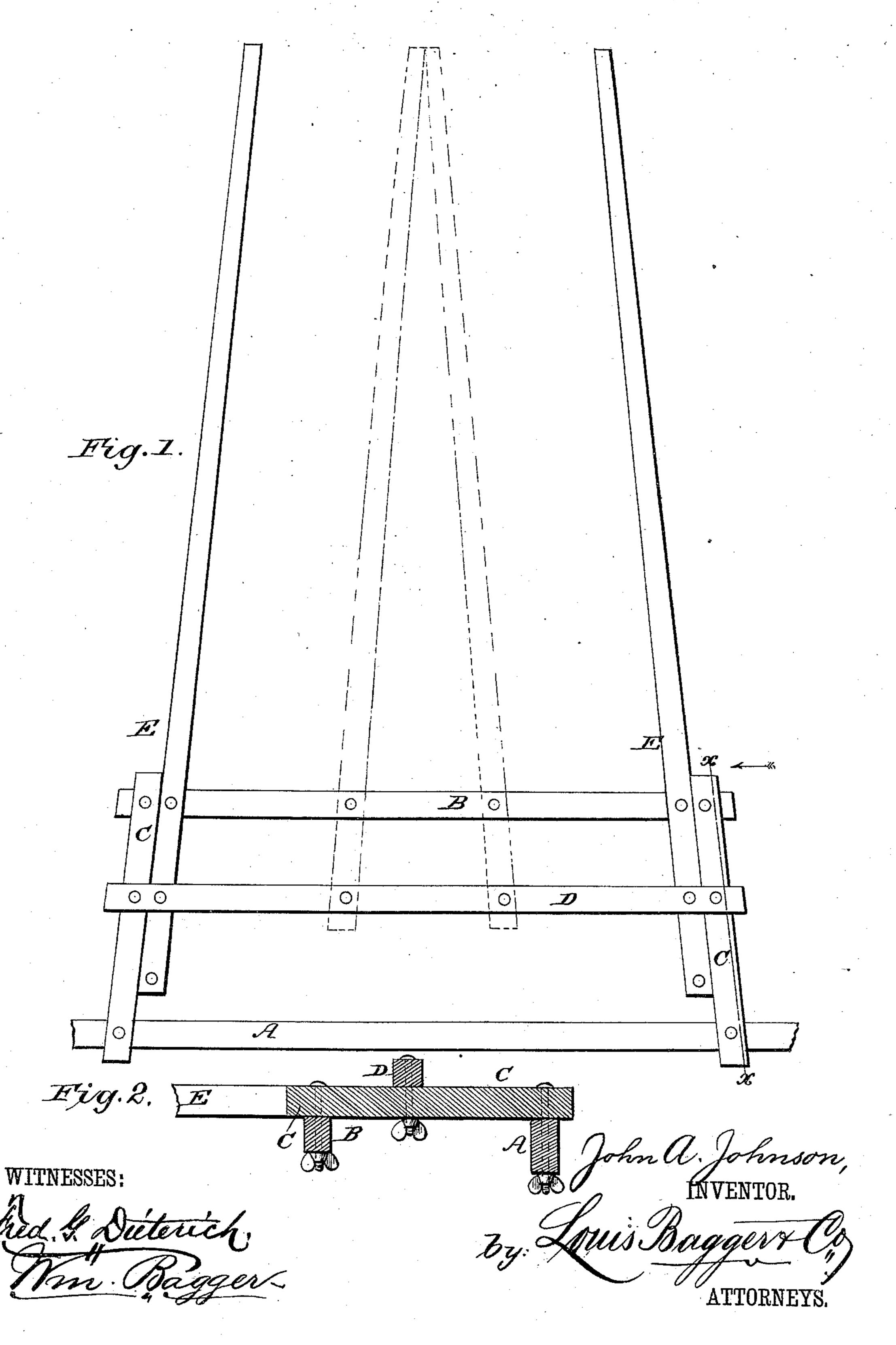
## J. A. JOHNSON.

SULKY FRAME.

No. 319,264.

Patented June 2, 1885.



## United States Patent Office.

## JOHN A. JOHNSON, OF MADISON, WISCONSIN.

## SULKY-FRAME.

SPECIFICATION forming part of Letters Patent No. 319,264, dated June 2, 1885.

Application filed March 2, 1885. (No model.)

To all whom it may concern:

Be it known that I, John A. Johnson, a citizen of the United States, and a resident of Madison, in the county of Dane and State of 5 Wisconsin, have invented certain new and useful Improvements in Sulky-Frames; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to ro which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a plan view of my improved 15 sulky-frame, with dotted lines showing the thills moved together for the attachment of a double team; and Fig. 2 is a longitudinal vertical sectional view taken on the line x x in Fig. 1.

The same letters refer to the same parts in both the figures.

This invention relates to that class of sulkyframes which are used in agricultural implements—such as horse hay-rakes, sulky-culti-25 vators, and the like—in which the thills are made adjustable, &c., so that when it shall be necessary or desirable to attach a double team instead of a single horse the said thills may be moved together so as to constitute a tongue, 30 thereby effecting a saving not only in material, but also in the time required for making the necessary changes and adjustments.

The detailed construction and arrangement of the parts constituting my invention are as 35 will be hereinafter more fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, A designates the axle of my improved sulky-frame, and B is a cross-bar arranged in front of and 40 parallel to the same and connected to the axle by means of braces C C, secured on top of the said axle and cross-bar and converging toward their front ends, as shown.

D is another cross-bar, arranged intermedi-45 ately between and parallel to the axle A and | and desire to secure by Letters Patent of the cross-bar B, and bolted or otherwise secured on top of the braces C C. In this manner a stiff, rigid, and durable frame is constructed.

E E designate the thills, which are of the 5c ordinary construction and secured to the crossbars B and D, adjoining the braces C C by

means of bolts or in any suitable manner. When bolts are used for the attachment of the thills, I prefer to secure them by means of thumb-nuts, in order that they may be read- 55 ily detached when required, although this is not indispensable, as ordinary nuts may be used. The thills E E extend in rear of the cross-bar D, and are provided with supplemental perforations or bolt-holes, enabling the 60. said thills to be moved forward or lengthened, if required. The cross-bars B and D are also provided with supplemental bolt-holes near the middle, for the attachment of the thills when the latter are moved together, the holes in 65 the cross-bar B being enough closer together than those in D as to cause the front ends of the thills to touch each other while the rear ends are separated, thus causing one thill to brace the other and make a stronger tongue than if 70 the thills were parallel, unless they are bolted together at their ends, thus requiring an extra piece of mechanism. By placing the holes to each side of the center of the cross-bars B and D, and on an oblique line with the center, 75 either one of the thills can be set in without changing the remaining thill, thus enabling the horse to be hitched to either side, instead of directly in front, to accommodate the driver or for bunching grain that has been cut and 80 laid in a swath, and the like.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. When the thills 85 are attached to the sulky-frame adjacent to the braces C C, the lap-joint thus formed of the thills and braces insures great strength and rigidity to the device. When it is desired to attach a double team, the thills are moved to 90 the position shown in dotted lines in Fig. 1, when they will practically form a tongue of the kind and construction generally employed in this kind of devices.

Having thus described my invention, I claim 95 United States—

As an improvement in sulky-frames, a rigid frame having forwardly-converging side pieces and parallel cross-pieces, said cross-pieces be- 1 o ing provided with four series of forwardly-converging adjusting-holes, two of said series of

holes being to the right of the center of the cross-pieces and two being to the left, in combination with a pair of adjustable thills, each thill being provided with a series of adjusting-holes by which they can be adjustably secured upon said cross-pieces, substantially as and for the purpose set forth.

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

JOHN A. JOHNSON.

Witnesses:

W. R. BAGLEY, M. W. KRUEGER.