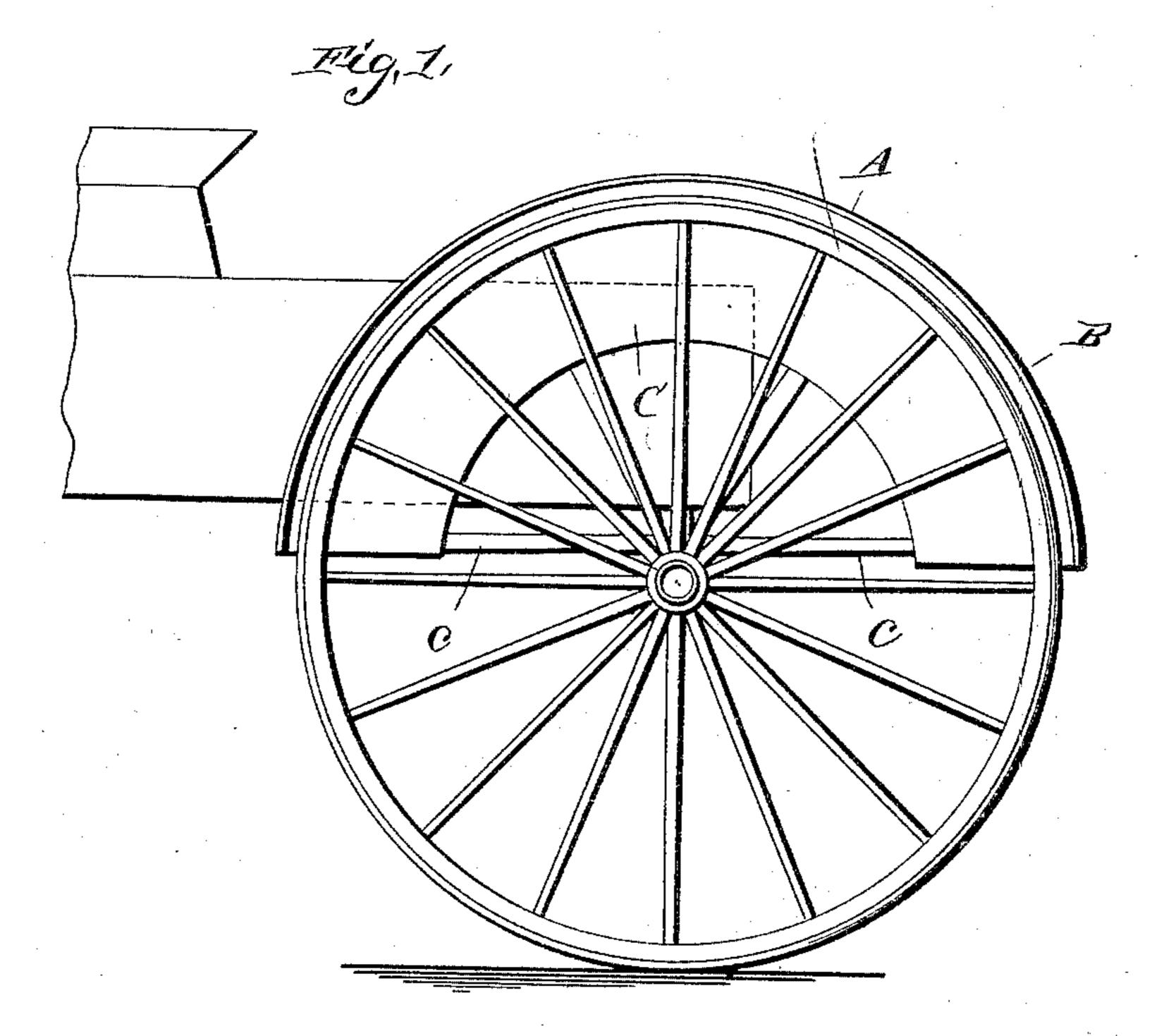
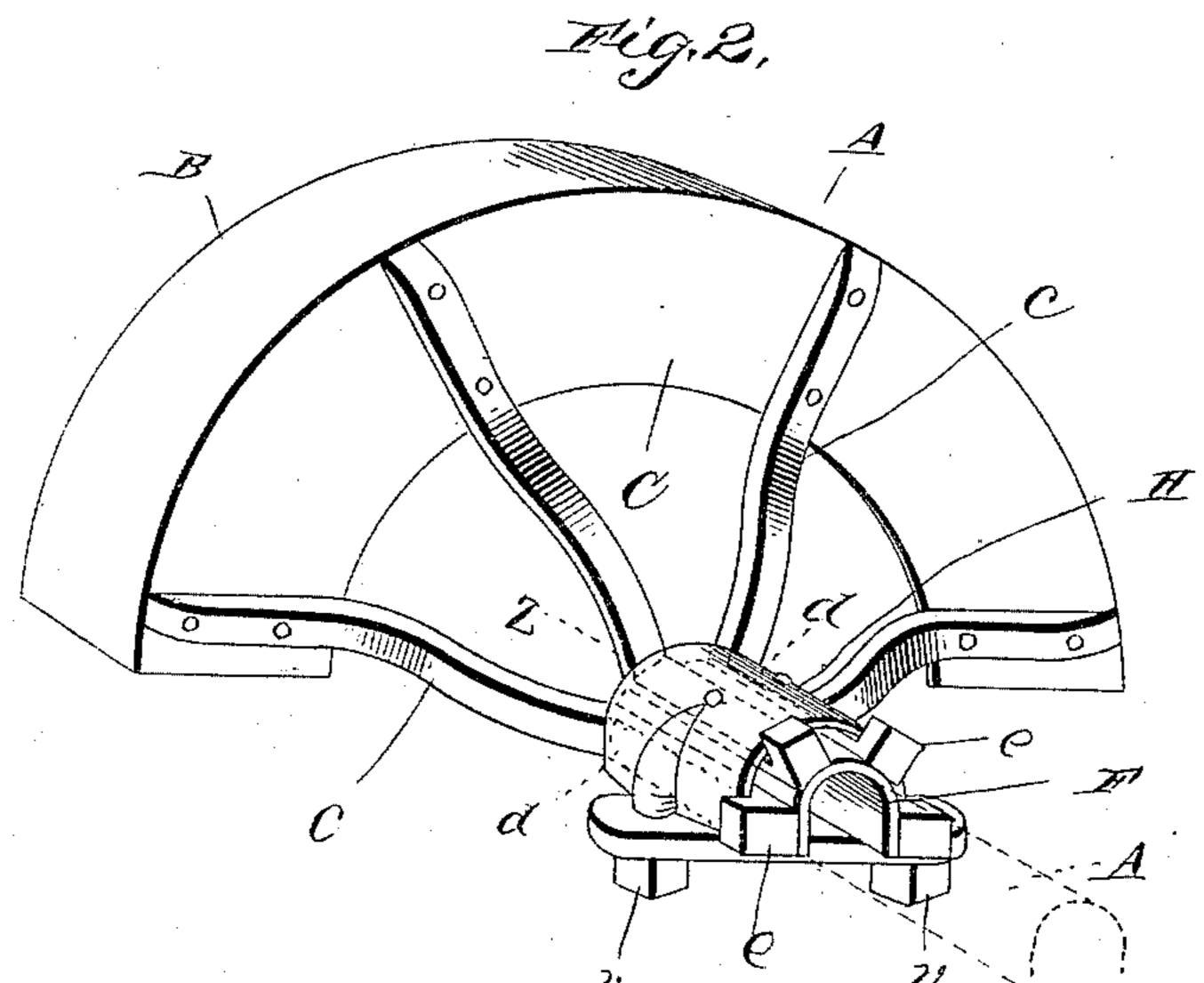
(No Model.)

## D. S. PAINE. SHIELD FOR CARRIAGE WHEELS.

No. 460,053.

Patented Sept. 22, 1891.





Witnesses

Inventor

By his Attorney

EW. audisan,

## United States Patent Office.

DUTEE S. PAINE, OF CEDAR FALLS, IOWA.

## SHIELD FOR CARRIAGE-WHEELS.

SPECIFICATION forming part of Letters Patent No. 460,053, dated September 22, 1891.

Application filed October 12, 1889. Renewed November 28, 1890. Serial No. 372, 936. (No model.)

To all whom it may concern:

Beit known that I, Dutes. Paine, a citizen of the United States, and a resident of Cedar Falls, in the county of Black Hawk and State of Iowa, have invented certain new and useful Improvements in Shields for Carriage-Wheels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a front elevation, and Fig. 2 is a perspective view, of my invention.

This invention has relation to shields for carriage and wagon wheels; and it consists in the novel construction and combination of parts, as hereinafter described, and pointed out in the claim.

In the accompanying drawings, the letter A designates the shield proper, consisting of an outer semicircular rim or plate flange B and an inner circular vertical shield plate C, forming a right angle with said rim-plate, secured within the arc of said rim at a right angle to the plane of the latter. The shield is supported from the axle by brace arms ccc radiating therefrom and secured to the back of the shield. These brace-arms are curved inward from their points of attachment to the shield to the axle connection to provide room for the hub to revolve, and their inner or connecting ends d extend horizontally inward from the arms and terminate in the up-

ward-projecting endlugs e. An arched plate F, to which the extensions d of the arms are riveted, spans the axle and bears upon the 40 clip-bar A' under the same. The clip H extends over the end d of the brace-arms, and its threaded ends pass through the perforations of said clip-bar A' to receive the nuts v. The lugs e of the extensions d of said arms 45 engage the inner end of the arched clip, to which, as also to the inner arched plate, said ends are riveted. The clip H is bound over the extensions d of the brace between the angular bends at z and the upward-projecting 50 lugs e of said extensions, said lugs serving to prevent horizontal displacement of the extensions, should one or more of the rivets securing them to the clip and arched plate F be broken. The shield A, when clipped to the 55 axle, is supported by its curved arms over the wheel, and the circumferential or rim portion of the wheel is completely guarded at the side of the vehicle.

What I claim as new is—

The shield attachment for vehicle-wheels, consisting of the inner circular vertical shield-plate, and the curved rim-flange extending at right angles therefrom, the curved brace-arms, their horizontal extensions terminating 65 in lugs, the arch-plate and clip, and their rivet connections to the extensions of said brace-arms, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

DUTEE S. PAINE.

Witnesses:

H. C. HEMENWAY, D. AUFEAR KNAPP.