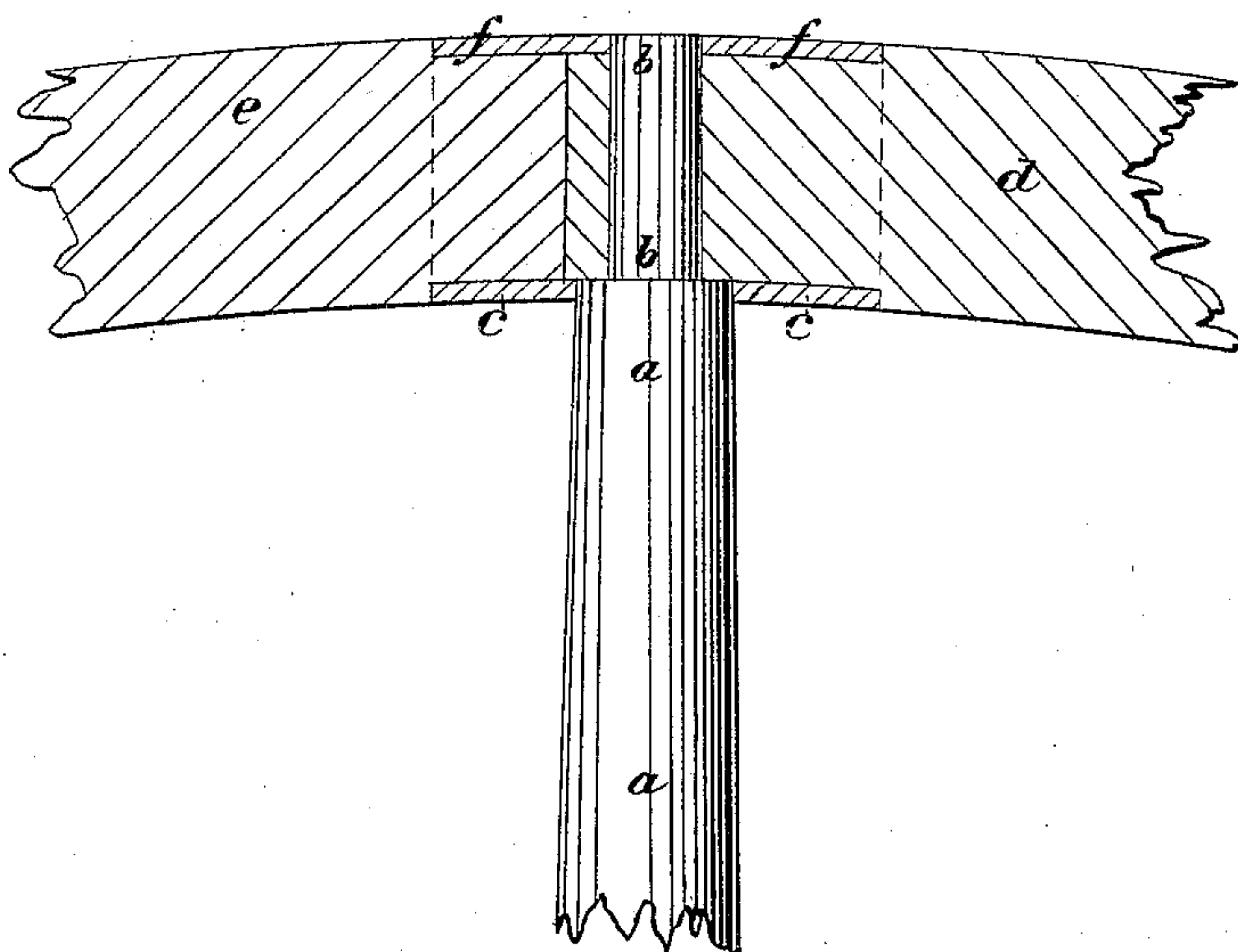


D. A. JOHNSON.

Spoke-Socket.

No. { 1,942. }
 { 32,946. }

Patented July 30, 1861.



Witnesses:

L. B. Crosby
M. H. Cade

Inventor:

D. A. Johnson

UNITED STATES PATENT OFFICE.

D. A. JOHNSON, OF CHELSEA, MASSACHUSETTS.

MODE OF SECURING THE SPOKES IN THE FELLIES OF WHEELS.

Specification of Letters Patent No. 32,946, dated July 30, 1861.

To all whom it may concern:

Be it known that I, D. A. JOHNSON, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in the Construction of Wooden Wheels for Carriages; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms a part of this specification, is a description of my invention so full and exact as to enable those skilled in the art to practice it.

My invention consists in certain improvements in the details of the construction of wooden wheels for carriages in parts where the spokes and the divisions or sections of the fellies unite.

It may be stated to be an improvement upon former constructions in which a continuous metallic band is employed to envelop the joint at the sections of the felly in or near which joint and within the band the spoke unites with the felly. In such former constructions the defect exists of having the shoulder, formed by the reduction of the spoke, at the end thereof, to a tenon, bear against the metallic band which being harder than the material of the spoke and practically unyielding soon batters the shoulder and leaves the felly free to work upon the spoke tenon, causing an objectionable rattling of the parts when the wheel is in motion. To avoid this defect I make an open-

ing through the inner side of the band of such size as to receive and to fit around the whole cross section of the spoke, thus the shoulder formed by the reduction of a spoke to a tenon rests upon the material of the felly as do other shoulders of spokes in the most ordinary construction of wooden wheels. This is illustrated in the drawing wherein—

(a) is the spoke, (b) the spoke tenon, (c) the inner side of the metallic band and (d) and (e) the two sections of the felly. The outer side (f) of the band is pierced with a hole for the reception of the end of the tenon. This hole serves a double purpose—viz, to afford facility for wedging the tenon and to reduce the tendency of the spoke to open the joint between the adjacent ends of the felly by receiving the lever like action of the spoke upon the material of the band.

I claim as new—

In coupling spokes to the fellies of wheels at or near the joints thereof so as to support the same by means of the spoke and a metallic band as described, constructing said band with apertures through the inner and outer sides thereof in the manner and operating as specified.

D. A. JOHNSON.

Witnesses:

J. B. CROSBY,
WM. H. CADES.