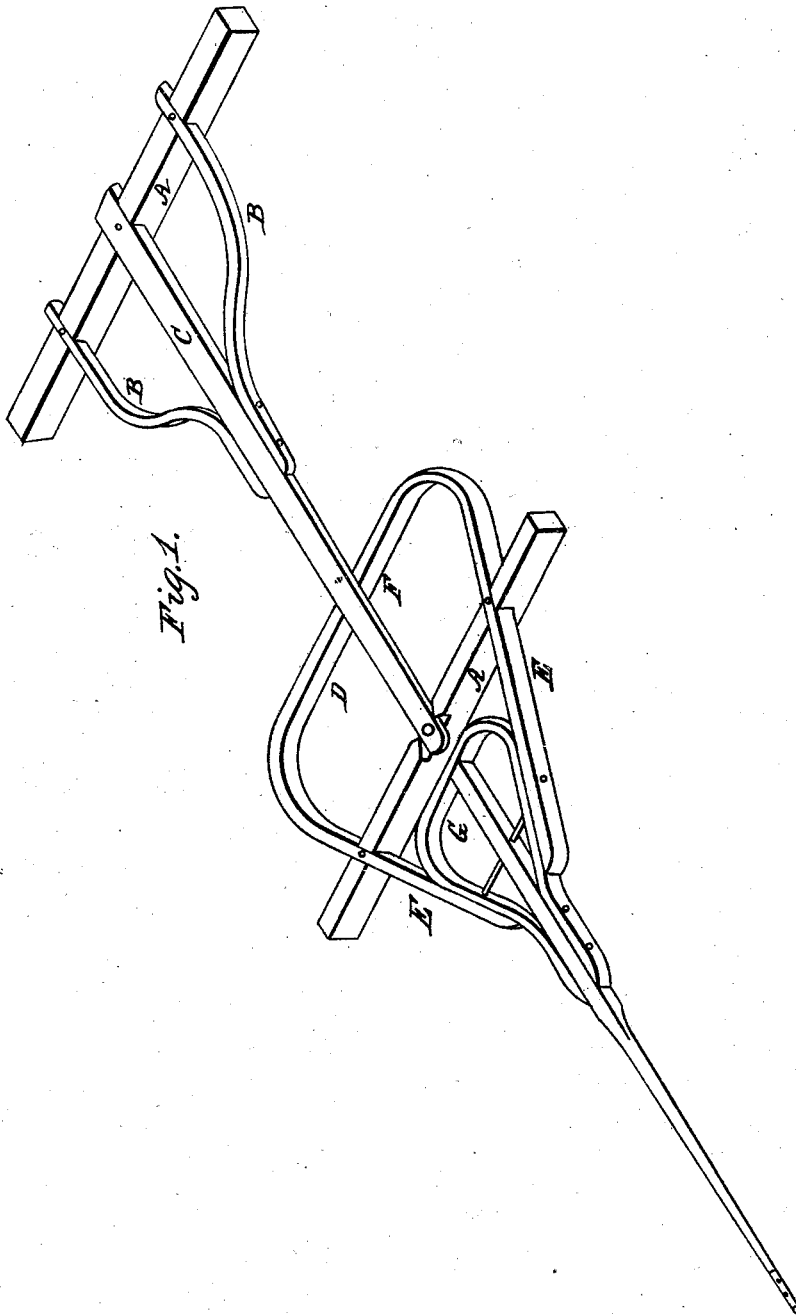


DOAN, WALLIS & MORELAND.

Wagon Hound.

No. 111,046.

Patented Jan. 17, 1871.



Witnesses:

A. Bennett
H. Rep

Inventors:

Gerard Doan
Theodore Wallis
King, D. Moreland

UNITED STATES PATENT OFFICE.

GERARD DOAN, THEODORE WALLIS, AND GEORGE D. MORELAND, OF
FLEMING, N. Y., ASSIGNORS TO THOMAS M. JONES, OF CHICAGO, ILL.

IMPROVEMENT IN HOUNDS, SWAY-BARS, TONGUE-BRACES, AND CROSS-BARS OF VEHICLES.

Specification forming part of Letters Patent No. **111,046**, dated January 17, 1871.

To whom it may concern:

Be it known that we, GERARD DOAN, THEODORE WALLIS, and GEORGE D. MORELAND, of the town of Fleming, in the county of Cayuga and State of New York, have invented Improvements in the Hounds, Sway-Bar, Tongue-Braces, and Cross-Bar of Vehicles; and in order that others skilled in the art may know how to make and use our invention, we will proceed to describe its construction and mode of operation.

Figure 1 is a perspective view of all the parts having reference thereto.

A A are portions of the two axle-trees. B B are the crotch-braces supporting the rear end of the reach C, and are steamed and bent in the form represented in the drawings.

D is one piece of wood steamed and bent into the form indicated in the drawings, said form constituting and making the three portions of the wagon—to wit, the two hounds E E, and the sway-bar F—all in one piece.

G is one piece bent into the form indicated as above, and, when constructed as represented, performs the functions of two braces, H H, and a cross-bar framed through both, as well as the tongue I, for supporting the same.

We are aware that the hounds and sway-

bar of a vehicle have been formed of a single piece of wood bent into nearly the full arc of a circle, and each end then bent at right angles thereto, for the purpose of fitting upon and bracing the tongue. By this method the ends are bent and the fiber along the whole line of the curve is strained into shape, while we bend only at two points, on short arcs, between the hounds and sway-bar.

Having above described the construction and mode of operating our invention, what we claim as new, and wish to secure by Letters Patent, is—

1. The hounds E E and sway-bar F, formed of a single piece of wood, bent only at the junction of said hounds with said sway-bar, in the manner described.

2. The single piece of wood G, bent as set forth, combined with tongue and hounds E E, to perform therefor the functions of both a cross-bar and pair of braces, as described.

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