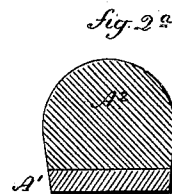
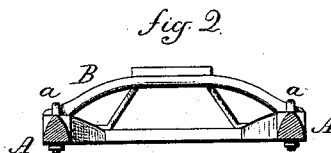
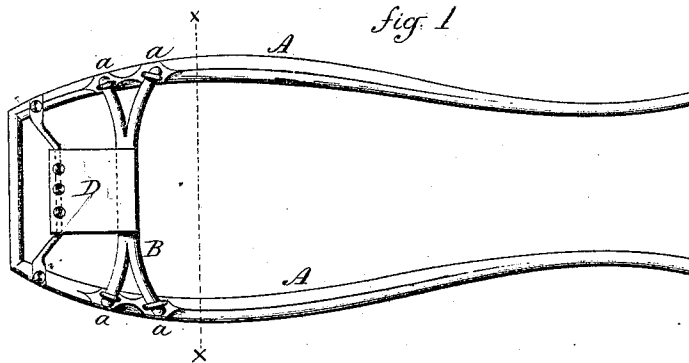


P. JONES.
TROTTER SULKY.

No. 171,937.

Patented Jan. 11, 1876.



Witnesses.

R. H. Mumway
Clara Broughton

Phineas Jones
Inventor

By Atty.

John C. Cole

UNITED STATES PATENT OFFICE.

PHINEAS JONES, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN TROTTING-SULKIES.

Specification forming part of Letters Patent No. **171,937**, dated January 11, 1876; application filed November 16, 1875.

To all whom it may concern:

Be it known that I, PHINEAS JONES, of Newark, in the county of Essex and State of New Jersey, have invented a new Improvement in Trotting Vehicles; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figure 1, plan view; Fig. 2, transverse section on line *xx* of the invention, as applied to a sulky.

This invention relates to an improvement in that class of vehicles used for trotting purposes, commonly called skeleton sulkies.

In the usual construction the seat has been supported by iron braces, and with straight or flat cross-bars between the shafts or frame. This flat cross-bar necessitates the placing of the horse some distance in front of the bar, in order to prevent his legs striking the bar. The iron braces which support the seat add materially to the weight of the vehicle. Again, it is necessary to make the shafts of considerable weight, in order to withstand the strain which is unavoidably brought upon them.

The object of this invention is to overcome these difficulties, and produce a vehicle lighter and stronger than the usual construction; and it consists, first, in supporting the seat upon wood bars crowned to give the necessary elevation, and rigidly attached to the frame at the two ends; second, in constructing the shafts in two sections of different wood, all as more fully hereinafter described.

A A are the two shafts, of substantially the usual outline. At about the point of section, line *xx*, there is usually a cross-bar to connect the shafts, and from the shafts iron braces extend up to give the elevation to the seat. In this construction the horse must necessarily be so far forward of the cross-bar as not to strike it in trotting.

In my improvement I arrange the cross-bar B back beneath the front of the seat, and

crown it to give a suitable elevation above the shafts, and attach the ends rigidly to the shaft, as at *a*, the ends of the bar divided to give it a transverse supporting power. This bar not only supports the seat, but takes the place of the common cross-bar, and allows the horse to be placed far back and close to the seat, and as this bar is no heavier than the common cross-bar, and as by its use the usual iron supports for the seat are dispensed with, a very material reduction is made in the weight of the carriage. The rear of the seat, if necessary, may be supported by any suitable braces.

The second part of this invention, which relates to the shaft, while more particularly adapted to sulkies, has many advantages in trotting-wagons.

A section of the shaft is shown enlarged in Fig. 2^a. This consists of two parts, A¹ A². The part A¹ is formed of thin, tough wood, and to this the upper part A², which may be of a lighter wood, is glued. The shape of the shaft is substantially that of the usual form, but by this combination of woods, owing to the crossing of the grain of the two woods, a very much stronger and more elastic shaft is produced, and one which is very much lighter than the usual construction.

I do not wish to be understood as broadly claiming the combining of woods of different grain for the purpose of strengthening the structure, as such I am aware is not new.

I claim—

1. In trotting-sulkies, the seat-supporting bar B, crowned to give the elevation to the seat, divided at the two ends for transverse support, and these ends rigidly attached to the shaft, substantially as described.

2. As an article of manufacture, the shaft for vehicles herein described, consisting of the upper and lower sections A¹ A² of woods of different grain, substantially as described.

PHINEAS JONES.

Witnesses:

JOHN E. EARLE,
CLARA BROUGHTON.