

N. W. BREWER.
Whiffletree.

No. 216,648.

Patented June 17, 1879.

fig: 1.

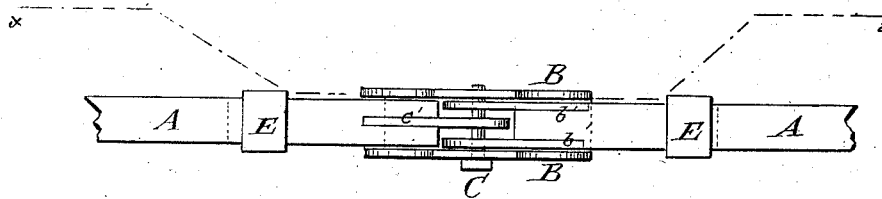
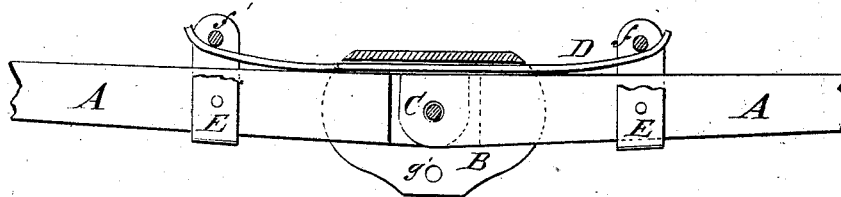


fig: 2.



WITNESSES:

Chas. Nida
C. Sedgwick

INVENTOR:

N. W. Brewer
BY *Mum Ho*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

NELSON W. BREWER, OF WILLIAMSPORT, PENNSYLVANIA.

IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **216,648**, dated June 17, 1879; application filed April 23, 1879.

To all whom it may concern:

Be it known that I, NELSON W. BREWER, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and Improved Single-Tree, of which the following is a specification.

Figure 1 is a front view of the device. Fig. 2 is a plan of the same, partly in section.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide a single-tree that shall prevent all sudden strains or jerks upon the horses or persons driving them and equalize the draft or strain when the horses are pulling.

The invention consists of the two arms A A, on the sides of one of which, at the inner end, two forward-projecting lugs, *b' b'*, are fastened, while in the end of the other is secured one projecting lug, *c'*. These ends are set together within a metallic cap or clip, B, and held and hinged there by the pin C, that passes through the clip and lugs.

The curved steel spring D is held at its center by the clip B against the joint or hinge

formed by the union of the arms, while the upward-inclining ends of the spring are restrained by the pins *f' f'*, which hold together the ends of the small clips E E, that embrace the arms about midway of their length. The ends of the spring may be free to slide on the pins *f' f'*, as shown, or may be bent around them. The holes *g' g'*, seen through the forward projections of the clip B, are intended for the insertion of a strengthening-bolt, if desirable.

The advantages of this flexible tree over a rigid one are very obvious.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The hinged arms A and cap B, connected by the pin C, in combination with the spring D and lugs E, having pins *f'*, as and for the purpose specified.

NELSON W. BREWER.

Witnesses:

W. H. RENNINGER,
G. F. TRAINER.