C. C. LEE.

Whiffletree.

No. 51,597. Patented Dec. 19, 1865.

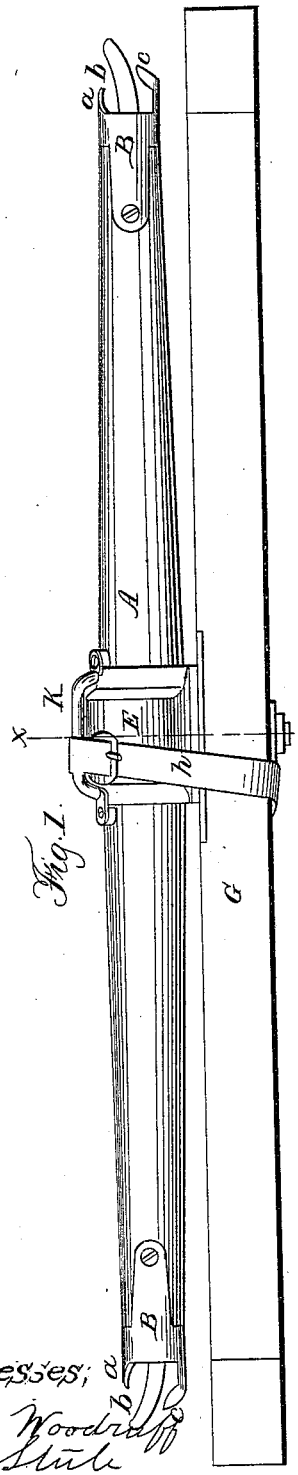

Fig. 1.

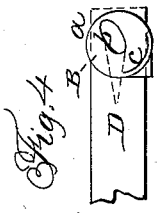

Fig. 4

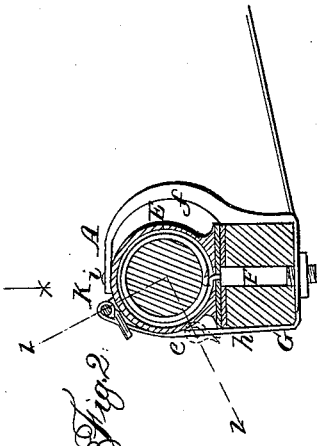

Fig. 2.

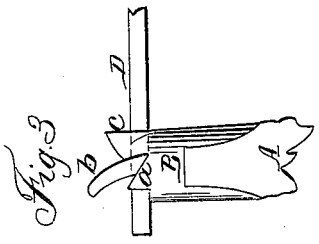

Fig. 3

Witnesses;
J. B. Woodruff
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Inventor;
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UNITED STATES PATENT OFFICE.

CHARLES C. LEE, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVED ROTATING WHIFFLETREE.

Specification forming part of Letters Patent No. **51,597**, dated December 19, 1865.

To all whom it may concern:

Be it known that I, CHARLES C. LEE, of the city and county of Washington, in the District of Columbia, have invented certain new and useful Improvements in Whiffletrees for Vehicles, so that by semi-rotating the traces will unhitch; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a whiffletree complete, placed to operate upon the cross-bar. Fig. 2 shows a section through the center of fastening whiffletree and cross-bar. Fig. 3 shows a broken-off end of the whiffletree, with the hook on which the trace is placed, and the incline for relieving the traces when the whiffletree is semi-rotated. Fig. 4 is an end view of same as Fig. 3.

The object of my invention is to furnish such an improved form of socket-fixtures for attaching the harness-traces to whiffletrees that they may be easily hitched on and as readily unhitched, in any emergency, when the greatest strain is on the traces.

My invention consists in making strap-sockets for the ends of turned whiffletrees, they having a center prong or finger so curved and inclined up and forward when the whiffletree is in its position for draft as to hold the traces on by the aid of a curved under lip and a straight upper lip projecting longitudinally with the finger or prong, and the arrangement and combination of a thimble-socket into which the turned-wood whiffletree is fitted in its center, so as to semi-rotate, by the action of a strap or other connection, at the will of the driver, by which means the position of the prongs and lips are changed so that the traces are forced off the prongs by the strain or draft on them, and thus liberated, so that a horse can be instantly detached from a vehicle in any emergency, the whiffletree being made to assume and retain its proper position for draft by means of a coiled spring or its equivalent incased within the thimble-socket, the same being supported substantially to vibrate on the cross-bar by means of a back-brace or other device suitable for the purpose.

To enable others skilled in the art to make and use my improved semi-rotating whiffletrees, I will describe the parts more in detail, referring to the drawings and the letters thereon.

I make my improved rotating whiffletrees A out of hickory or other suitable hard wood, turned in suitable form for strength. On the ends are fitted strap-sockets B, made of malleable cast-iron, in the center of which is a projecting finger or prong, *b*, suitably curved and inclined up and forward, on which the cockeye or trace is to be hitched. Underneath the prong *b* is a hooked lip, *c*, it being straight on the rear edge in a line with the periphery of the whiffletree-bar A and strap-socket B, the front edge of the lip *c* inclining back at an angle of about 45°. Above the prong *b* is made an upper lip, *a*, which is straight on its front part, the angle being the reverse of the lip *c*, so that when the whiffletree is turned or rotated backward the two lips *a* and *c* serve the purpose of cams to push or force the trace D off the prong *b*, the curve of the prong or finger also aiding in the operation. The hard-wood bar A is turned to fit the thimble-socket E, which is also made of malleable cast-iron, it having a stem or pintle, F, cast onto it to attach the whiffletree to the cross-bar G of the shafts or thills of the vehicle. The thimble-socket E has also a cavity or recess cast in it, into which is fitted and incased a coiled spring, *e*, of sufficient capacity to bring the bar A into the same position and hold it there at all times when it is not semi-rotated for the purpose of unhitching or letting loose the traces. This is easily done by a person in the vehicle by pulling on the strap *h*, which is attached to a link, *h*, secured to the whiffletree-bar A, the strap *h* passing down under the cross-bar G and coming up into the body of the vehicle in some convenient place to be reached by the driver in his seat.

The whiffletree may be firmly secured to vibrate on the cross-bar by having a back brace, *f*, secured to the cross-bar G and curved so as to come up over the center of the socket E and fit onto a projection, *i*, for the purpose.

The brace *f* may have an eye or ring on the lower portion of the strap *k* to pass through, to hold it centrally in position with the cross-bar.

When a person being on the ground wishes to take his horse from the shafts of the vehicle he simply lets the horse straighten the traces,

takes hold of the whiffletree and turns it back one-fourth of a turn, and the traces both immediately let loose and fall to the ground. If a horse falls in the shafts and draws hard on the traces, they can be instantly liberated by turning the whiffletree, either by the strap while the driver is in his seat or by taking hold of it with the hand; and if a horse gets frightened and is determined to run and endanger the life and limbs of those in the vehicle, he can at once be detached, and the danger of a smash-up generally avoided.

It will readily be seen that the above-named and many other advantages may be derived from the use of my mode of constructing and operating the hitching and unhitching of harness-traces to vehicles, the fixtures in themselves being more neat, cheap, and simple and in their arrangement and combination a more sure and efficient operating device for the purpose than have been before known or used.

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

The right and left strap-sockets B B, they having a curved finger or prong, *b*, a hooked under lip, *c*, and straight upper lip, *a*, with their reversed inclined edges, as described, in combination with a thimble-socket, E, pintle F, spring *e*, supporting-brace *f*, all constructed, arranged and operating in the manner substantially as and for the purposes herein set forth.

CHARLES C. LEE.

Witnesses:
J. B. WOODRUFF,
A. B. STEELE.