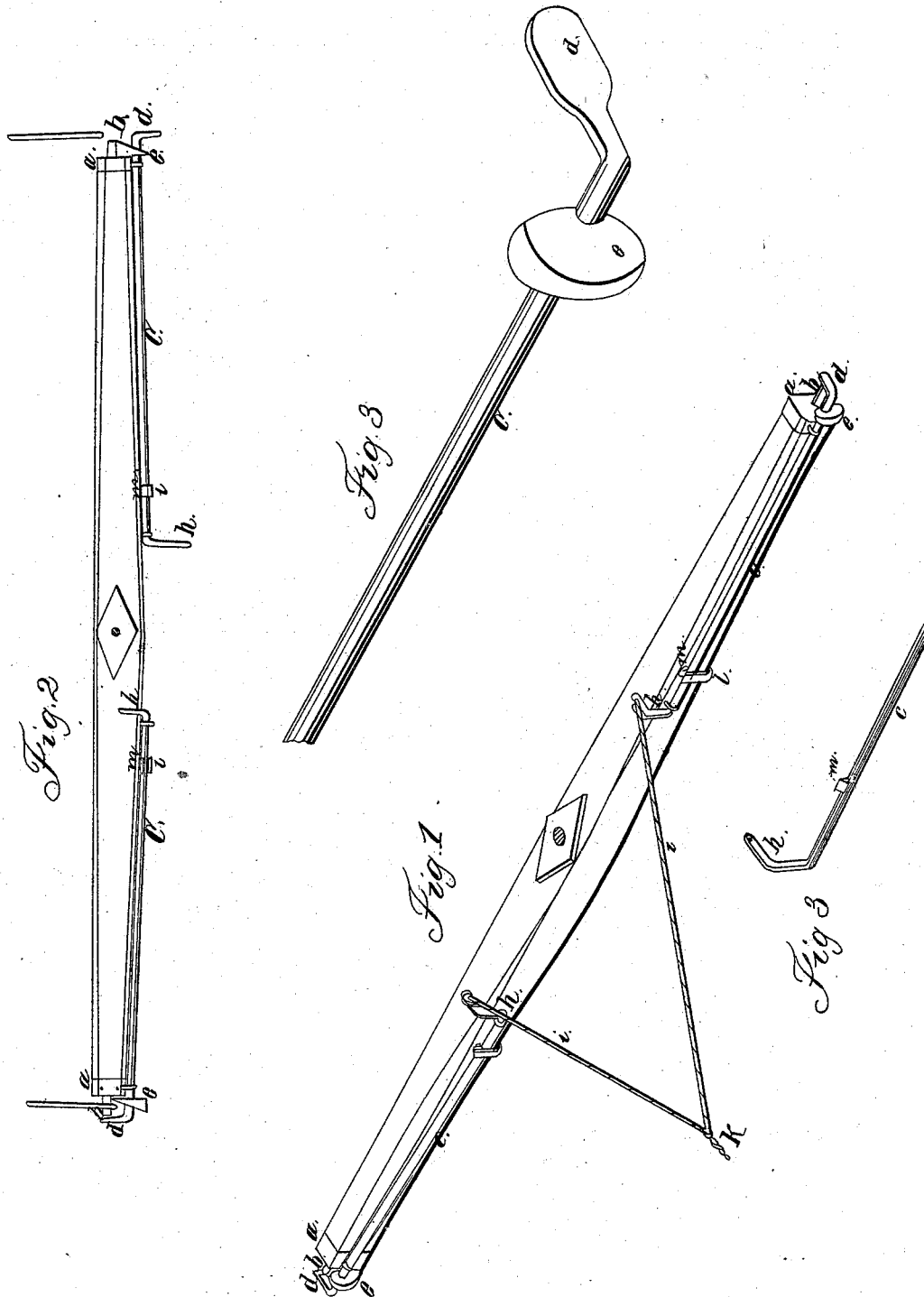


J. MADDEN.

Detaching Horses.

No. 3,652.

Patented July 9, 1844.



# UNITED STATES PATENT OFFICE.

JOHN MADDEN, OF WARREN, OHIO.

## MANNER OF DETACHING HORSES FROM CARRIAGES.

Specification of Letters Patent No. 3,652, dated July 9, 1844.

*To all whom it may concern:*

Be it known that I, JOHN MADDEN, of Warren, in the county of Trumbull and State of Ohio, have invented a new and useful Improvement in Whiffletrees; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which forms a part of this specification, in which—

Figure 1, is a general view of the whiffle-tree. Fig. 2, a top plan. Fig. 3, the shaft, &c., detached.

The nature of my invention consists in affixing an apparatus to a whiffle-tree by which the traces are thrown off to free the horse from the carriage.

In construction, my whiffle-tree is formed something like the common wooden one; each end has an iron ring (*a*) around it, and a round pin (*b*) is driven into the ends. Along the back side of the whiffle-tree there are shafts (*c*), that extend from each of the ends inward nearly to the center; this shaft is made to revolve in staples by which it is connected with the whiffle-tree; the outer end has an arm (*d*) on it at right angle to said shaft that extends forward over the end of the pin (*b*) and holds on the trace; between this arm (*d*) and the end of the whiffle-tree where the shaft extends beyond it and parallel with the pin there is a spiral faced cam (*e*) concentric with

the shaft, but the face is thinner on one side than the other, the back of which lays against the end of the whiffle-tree and the face of the thin part of the cam has the trace rest against it; as the shaft turns the thick part of the cam runs in between the trace and the end and forces the trace off the end at the same time the arm (*d*) turns around and releases it. The shafts are turned by means of an arm (*h*) on the cam end of each, said arm being bent up and forward over the whiffle-tree and their forward ends being connected by a chain (*i*) to which a strap (*k*) is connected that extends up to the driver's hand, and by pulling which the operation of releasing the horses is performed. The whole of this improvement can be made of iron or other suitable material as well as wood as described. The shaft is thrown back by a spring (*l*) acting on a cam (*m*) on the shaft.

What I claim as my invention and desire to secure by Letters Patent is—

The combination of the revolving shaft arms and cam with the whiffle-tree in the manner and for the purpose herein described the whole being constructed and arranged as before specified.

JOHN MADDEN.

Witnesses:

WM. BENEDICT,  
EDWARD E. HOYT.