

A. Zink,

Trace Clasp.

N^o 23,523.

Patented Apr. 5, 1859.

Fig. 4.

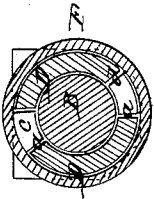


Fig. 1.

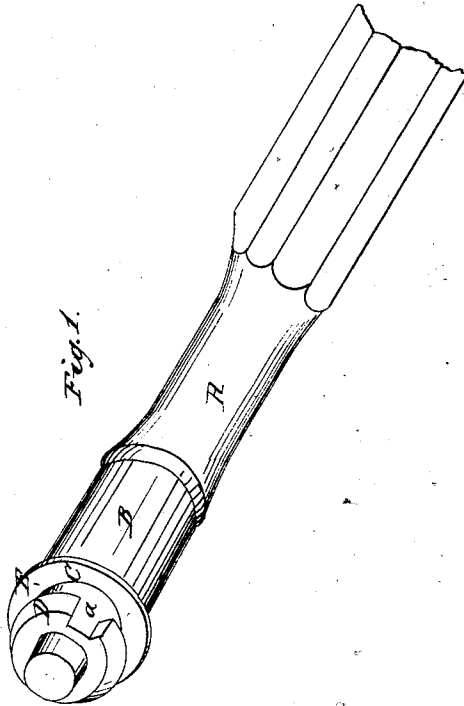


Fig. 2.

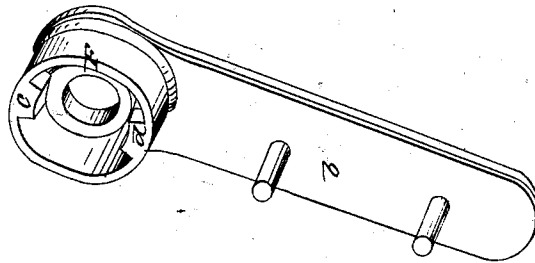
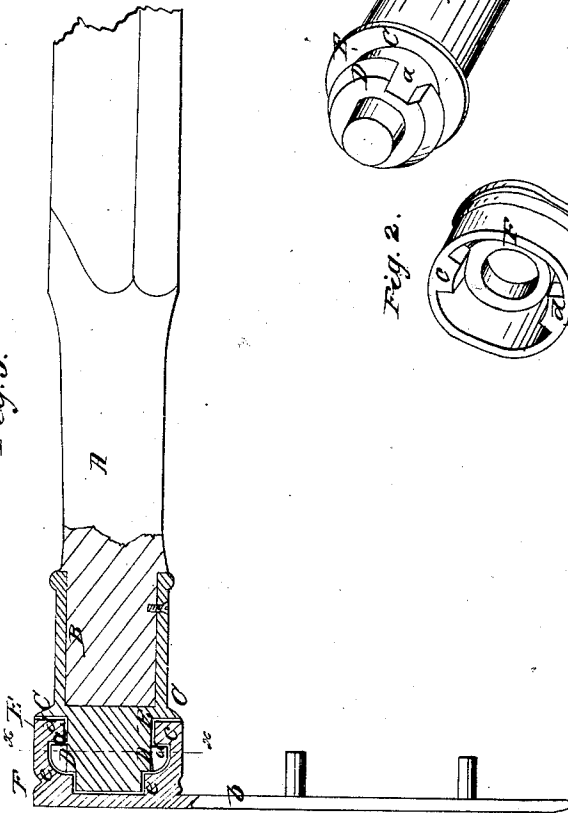


Fig. 3.



2 Sheets. Sheet 2.

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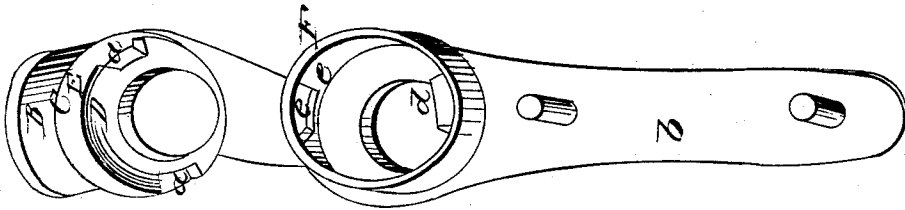


Fig. 6

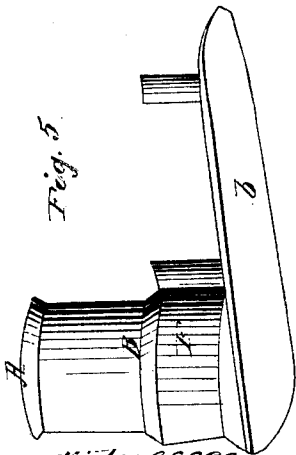


Fig. 5

Witnesses

A. M. Leigh
A. W. Bruch

Inventor

A. Zink

UNITED STATES PATENT OFFICE.

ANTHONY ZINK, OF LANCASTER, OHIO.

TRACE-FASTENING.

Specification of Letters Patent No. 23,523, dated April 5, 1859.

To all whom it may concern:

Be it known that I, ANTHONY ZINK, of Lancaster, in the county of Fairfield and State of Ohio, have invented a new and useful Improvement in Trace-Fastenings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of a whiffle-tree to which my improved fastening is applicable. Fig. 2, is a perspective view of the cap. Fig. 3, is a horizontal longitudinal section of the fastening, applied to the whiffle-tree. Fig. 4, a vertical section of the same in the line *x, x*. Fig. 5, is a perspective view of the cap and whiffle-tree connected. Fig. 6, is a perspective view of the same, disconnected.

Similar letters of reference in each of the several figures indicate corresponding parts.

The nature of my invention consists in a new article of manufacture, to wit: a trace fastening consisting of a metal ferrule, provided with a circular groove running in the path of a vertical circle, and two slots running at right angles to the groove, and a metal cap having two lugs on its inner circumference with a space existing between said lugs and its head, and a plate extending from the circumference of the head, some distance onto the side of the trace.

By my invention, a very simple, convenient and effective trace-fastening is provided, and at the same time, a very beautiful finish can be given to the end of the trace and the whiffle-tree, as will be presently described.

To enable others, skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

A, represents an ordinary whiffle-tree. B, is a metal ferrule fastened on to the end of the same.

C, D, are two shoulders cast on the end of the ferrule. These shoulders have a circular groove E, existing between them. In the outer shoulder D, two slots *a, a*, are formed, said slots being formed on opposite sides of the ferrule and running at right angles to the groove E, as shown. By thus forming slots in the shoulder D, provision is made for entering the groove from the

end of the ferrule, as said slots communicate with the groove.

F, is a cylindrical cap. It attaches to the trace by means of a plate *b*, which extends out from the circumference of the head of the cap, as shown. On the inner circumference, near the inner edge of the cap, two lugs *c, d*, are cast; these lugs correspond in size with the slots in the shoulder D, of the ferrule and also the width of the groove in the same. Between the head of the cap and these lugs, a space *e*, exists corresponding in width to the width of the shoulder D.

From the above description, it will be seen that by bringing the lugs of the cap in line with the slots of the ferrule, the cap can be slipped onto the ferrule until it bears snugly against the shoulder C, and then by turning the cap down to a position which will bring its lugs out of line with the slots of the ferrule, the trace will be securely fastened to the whiffle-tree.

The lugs of the cap and the slots of the ferrule are so disposed that the trace will be in its proper position for use when the lugs are out of line with the slots, and out of proper position for use when the lugs are in line with the slots, and therefore as the trace generally moves only the distance of a quarter of a circle when left slack as in backing or going down hill, while the distance between the slots is a half circle, there will be very little danger, if any, under ordinary circumstances of the trace disconnecting. The slots, however may if found necessary, be so placed that the upper one will occupy a place in front of the perpendicular axis of the ferrule, and the lower one, a place in rear of said axis of the ferrule and thus render it necessary for the trace to move downward far enough to pass beyond the vertical axis of the ferrule before a disconnection can possibly take place.

The advantage of my invention over anything before used for this purpose is this. It provides a good large bearing or axis for the trace to rest and turn freely upon. It avoids the use of a spring to keep the lugs in proper position and thus allows great freedom or motion to the trace on its axis or bearing, as it provides two shoulders C, D, for the lugs to come and play between. It renders the fastening very cheap and convenient. It enables the manufacturer to furnish a galvanized or plated article

which will give the end of the trace and whiffle-tree, a very beautiful and finished appearance. It will more effectually exclude the dust from the locking parts of the
5 fastenings.

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

A new article of manufacture, to wit:
10 a trace fastening consisting of the metal ferrule B, provided with a circular groove E, running in path of a vertical circle, and

two slots *a, a*, running at right-angles to the groove, and a metal cap F, having two lugs *c d* on its inner circumference, with a space existing between them and its head, 15 and a plate *b*, extending from the circumference of the head some distance into the side of the trace; all as herein set forth.

A. ZINK.

Witnesses:

A. W. EBRIGHT,
ALFRED McVEIGH.