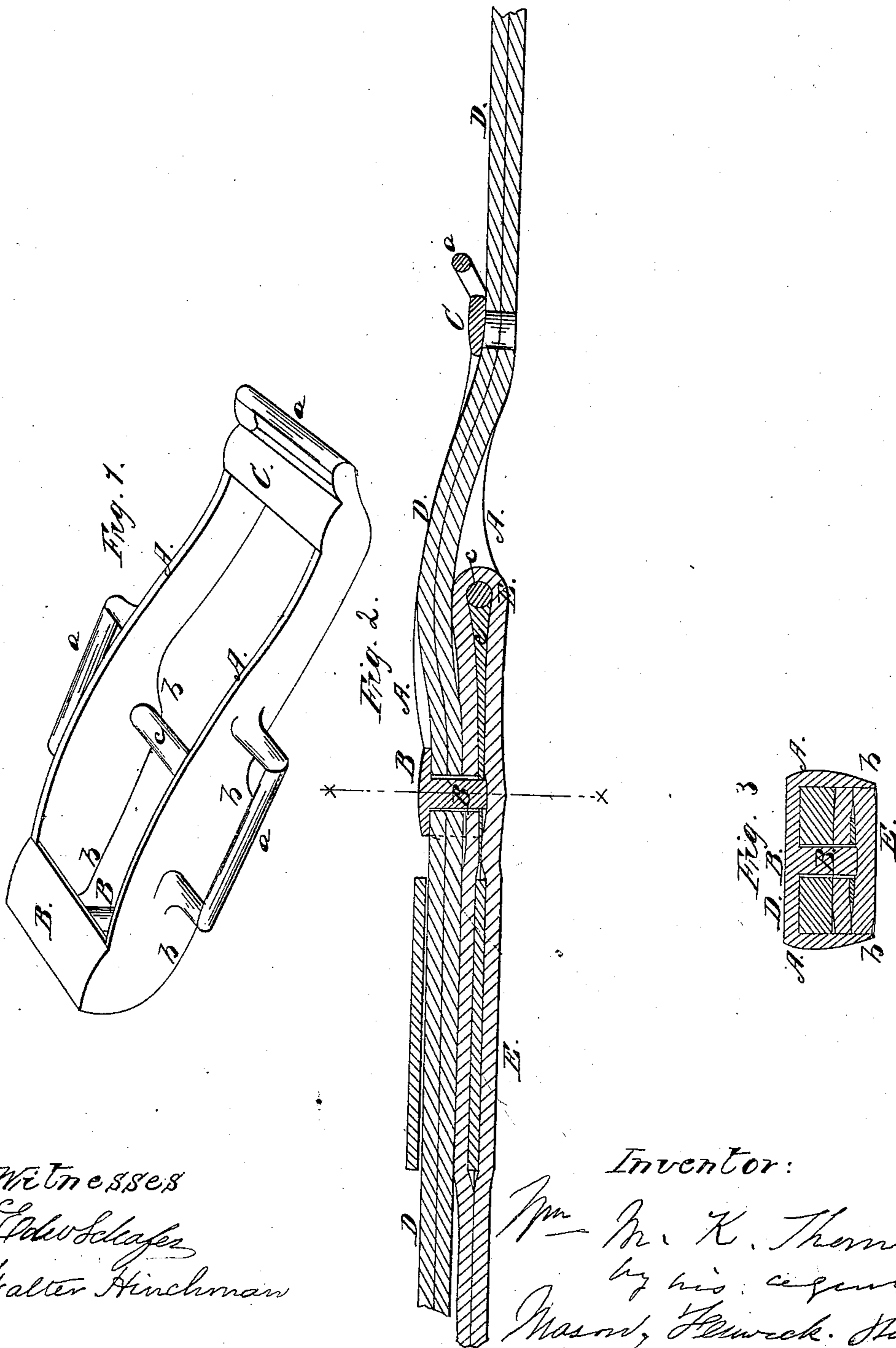


W. McK. Thornton,

Buckle.

N^o 68468.

Patented Sept. 3, 1867.



Witnesses
Edw. Schaefer
Walter Hinchman

Inventor:

Wm. McK. Thornton
by his agents-
Mason, Hewick, Lawrence

United States Patent Office.

WILLIAM McK. THORNTON, OF CLINTON, WISCONSIN.

Letters Patent No. 68,468, dated September 3, 1867.

IMPROVED BUCKLE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM McK. THORNTON, of Clinton, in the county of Rock, and State of Wisconsin, have invented an improved Trace-Buckle; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of my improved trace-buckle complete and ready for use.

Figure 2 is a longitudinal section through the buckle with straps attached.

Figure 3 is a transverse section through the buckle, taken at the point indicated by red line *x x*, in fig. 2.

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

This invention relates to an improvement on the construction of the trace-buckle for which Letters Patent of the United States were granted to me on the 24th day of July, 1866, in which a fixed or stationary tongue or stud entered the trace and assisted in holding it firmly against slipping.

The main object of this invention is to provide side supports for the trace and also the hame-tug, at their points of entrance between the side bars of the buckle, employing, also, the fixed stud or tongue for holding the trace when attached to the buckle, as will be seen by the following explanation.

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

The buckle consists of one piece of metal constructed in the following improved manner: *A A* are the two longitudinal side bars, which are made flat, and of suitable width at their narrowest part to afford the requisite degree of strength. The widest parts of these side bars are lettered *b b*, and they should be of such width at these points as will receive between them the trace and hame-tug, and afford lateral support therefor, as shown clearly in fig. 3, in which *D* represents the trace and *E* the hame-tug. The extremities of the side bars *A A* are connected together by means of transverse plates *B C*, and at an intermediate point between these plates a transverse cylindrical bar, *c*, is secured to or formed on the side bars, so as to form the means for attaching the hame-tug to the buckle, as shown in fig. 2. The side bars *A A* are curved, as shown in the sectional view, fig. 2, and the transverse bar *c* is so arranged with relation to the front and rear transverse plates *B C*, that when the trace *D* is passed through the buckle, and attached by the tongue or stud *B'* on the inner side of the plate *B*, this trace will deviate from a straight line between said plates, as shown in fig. 2, so that when it is under strong tension it will press inward against the pin *c* at one point, and outward against the plate *C* at another point. This arrangement will relieve much of the strain upon the strap or trace at the point through which the tongue *B'* passes, and prevent the holes through the trace from being enlarged or the trace tearing at these points. This arrangement of the bars *B, C*, and *c* also has a tendency to press the tongue *B'* into its proper hole through the trace when the end of the latter is passed through the box-loop of the hame-tug and drawn tight, and thereby prevent the trace from casually slipping from its tongue. Another protection against slipping the trace from its tongue is to have the latter enter a hole which is made in the hame-tug *E*, through its interposed metal plate *c*, as shown in fig. 2. This holds the parts compactly and strongly together, and allows the end of the hame-tug to come between the extensions *b b* of the side bars, as above described. The bars *a a a* at the sides and rear end of the buckle form loops or eyes for the attachment of straps in the usual well-known manner.

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

1. The construction of the front portions *b b* of the curved side bars *A A*, of such width as to receive between them and afford side supports for the hame-tugs, substantially as described.

2. A trace-buckle constructed and operating substantially in the manner described.

Witness my hand this ninth day of April, 1867, in the matter of application for a patent on my improvement in buckles.

WM. McK. THORNTON.

Witnesses:

WALTER HINCHMAN,
JOHN KINGDON.