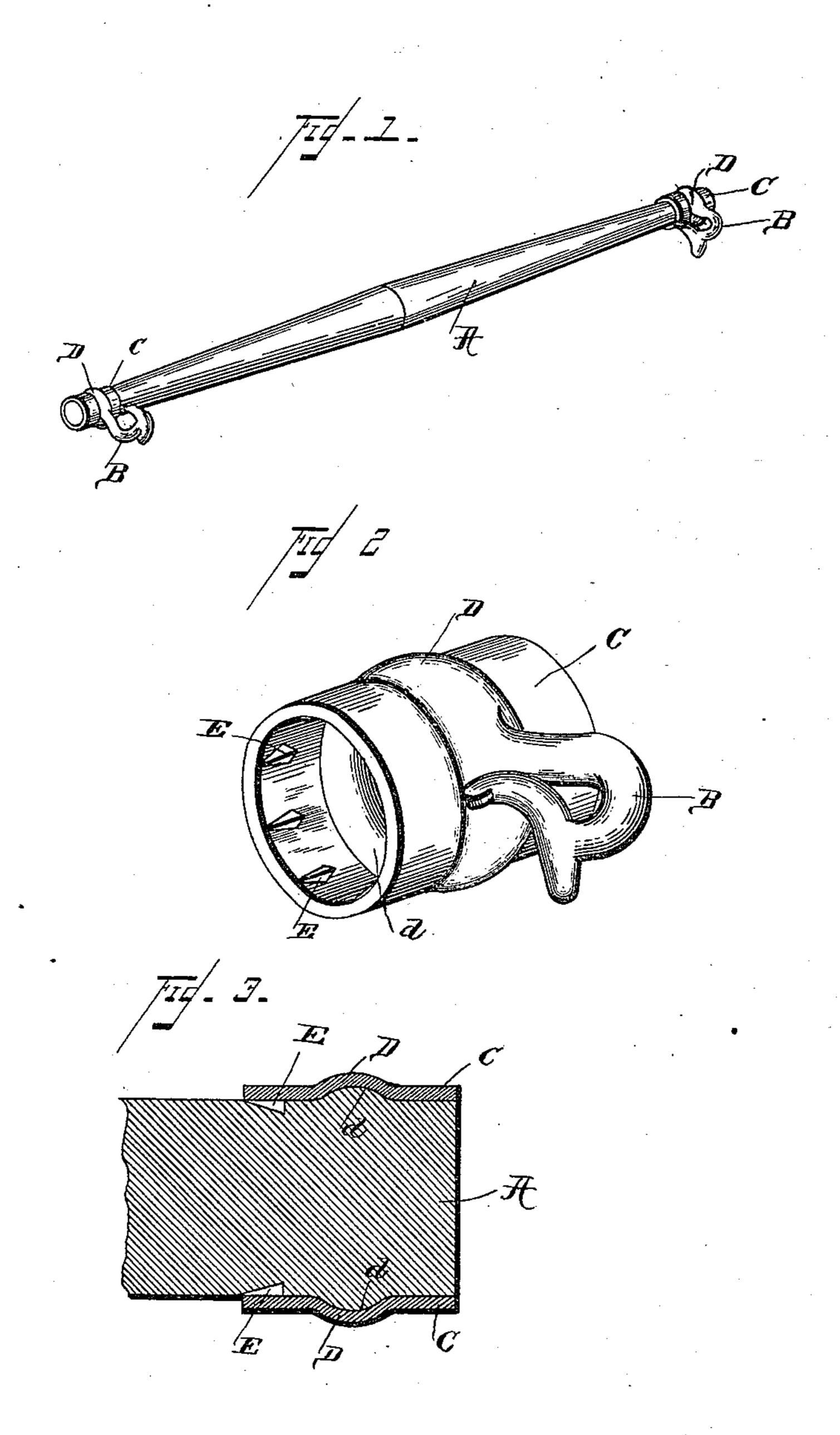
(No Model.)

T. G. MANDT.
WHIFFLETREE HOOK.

No. 428,504.

Patented May 20, 1890.



Wetnesses: J.L. Ourand. Dennette Jones.

Jangel, Mandt, Havis Ingger for Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

TARGE G. MANDT, OF STOUGHTON, WISCONSIN.

## WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 428,504, dated May 20, 1890.

Application filed October 29, 1889. Serial No. 328,525. (No model.)

To all whom it may concern:

Be it known that I, TARGE G. MANDT, a citizen of the United States, and a resident of Stoughton, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Whiffletrees; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved whiffletree. Fig. 2 is a perspective view, on an enlarged scale, of the hook and collar removed from the whiffletree; and Fig. 3 is a longitudinal sectional view through one end of the whiffletree, showing the manner of fastening the hook collar or socket upon the same.

Like letters of reference denote correspond-

ing parts in all the figures.

This invention relates to an improved construction of whiffletrees, having for its object to fasten the trace-hooks in an absolutely safe and substantial manner; and with this object in view my improvement consists in the construction of the collar or socket, which forms the means of fastening for the trace-hook upon the whiffletree, substantially as will be hereinafter more fully described and claimed.

Reference being had to the accompanying drawings, the letter A designates the whiffletree, B B the hooks for fastening the traces, and C C the collars or sockets cast integral with the hooks, whereby the latter are permanently and rigidly fastened to opposite ends of the whiffletree. These collars are provided with a central annular swell or bulge D, forming a corresponding inside annular chamber or enlargement d, and are further provided on the inside and on one side of the annular chamber with one or more circular rows or series of triangular wedge-shaped teeth or serrations E, the abrupt ends or shoulders of which point toward the chamber d, as

will appear more clearly by reference to Fig. 3 of the drawings. The object of this construction is to prevent the collar and hook 50 from slipping off of the end of the whiffletree, and form a means of fastening either auxiliary to or independent of the usual screwfastening. It will be seen that as the collar or socket is driven over the end of the whiffle- 55 tree the triangular wedge-shaped teeth E will be forced into the wood and thus expand the same, the enlargement D d back of the teeth affording room for such expansion. As however the collar is driven home upon its ap- 60 propriate end of the whiffletree, the expanded end of the wood will be again compressed or forced together by entering the normal or constricted part of the collar back of the enlargement, thereby closing over and upon the 65 teeth E, which are thus firmly embedded in the wood, so that it becomes impossible to work or pull the hook collar or socket off of the end of the whiffletree. In this manner I provide in a simple and inexpensive manner 7° for the absolute security of the trace-hooks as regards their attachment to the whiffletree, so as to construct the latter in a solid and substantial manner without danger of its hooks becoming loose and detached by con- 75 stant strain however heavy.

Having thus described my invention, I claim and desire to secure by Letters Patent of the

United States—

The combination, with a whiffletree, of a 80 hook collar or socket having an annular swell or bulge forming an inside annular chamber, and provided on one side of said chamber or enlargement with one or more series of wedgeshaped teeth, substantially as and for the 85 purpose herein shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature

in presence of two witnesses.

TARGE G. MANDT.

Witnesses:

AUGUST PETERSON, BENNETT S. JONES.