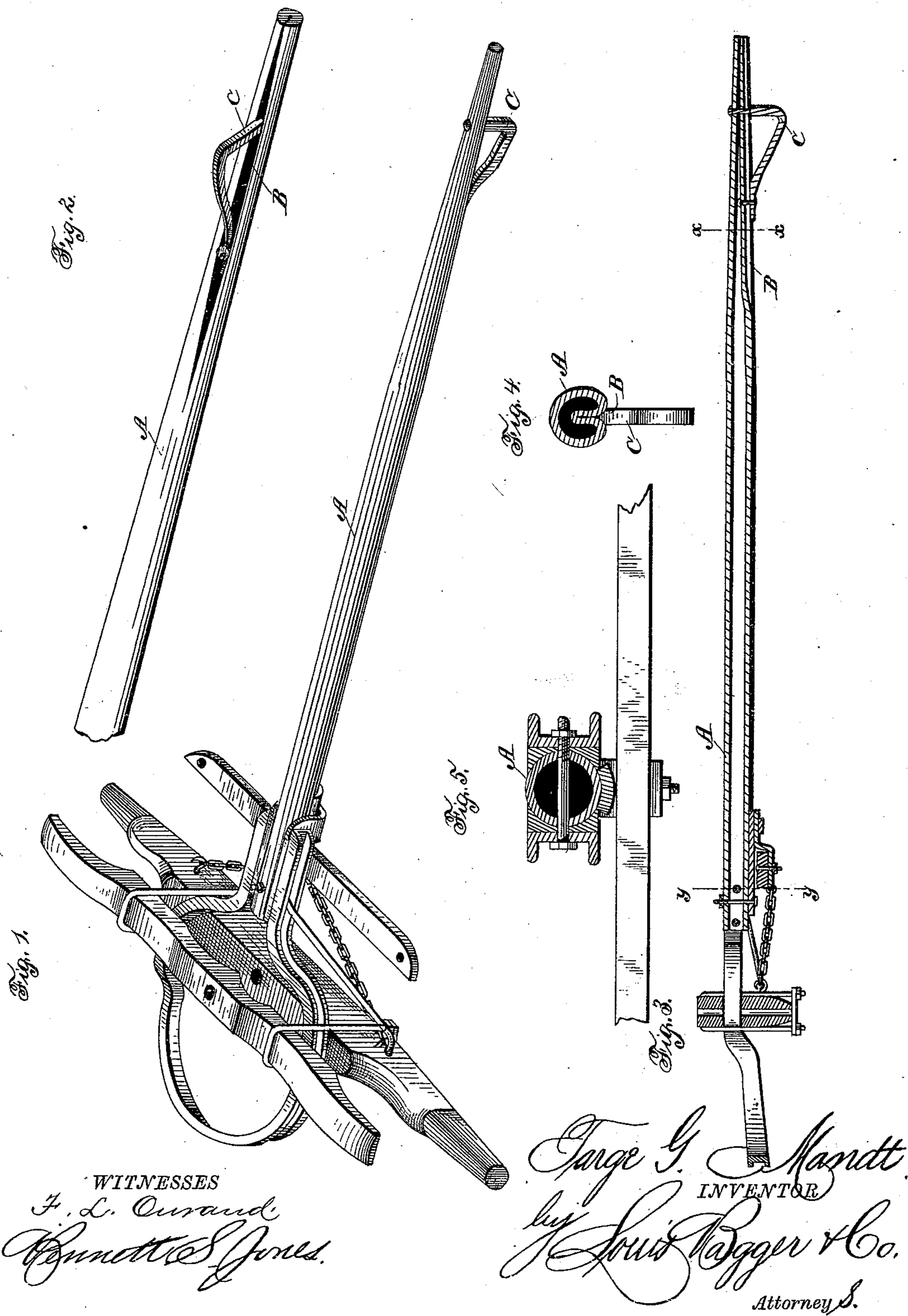


(No Model.)

T. G. MANDT.
VEHICLE TONGUE.

No. 355,541.

Patented Jan. 4, 1887.



UNITED STATES PATENT OFFICE.

TARGE G. MANDT, OF STOUGHTON, WISCONSIN.

VEHICLE-TONGUE.

SPECIFICATION forming part of Letters Patent No. 355,541, dated January 4, 1887.

Application filed September 20, 1886. Serial No. 214,019. (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 Vehicle-Tongues; 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 appertains 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 the forward portion of the running-gear, of a vehicle, showing my improved tongue. Fig. 2 is a similar view of the outer portion of the tongue seen from below. Fig. 3 is a longitudinal sectional view of the same. Fig. 4 is a cross-section on line *xx*, Fig. 3; and Fig. 5 is a similar view on line *yy*, Fig. 3.

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

My invention has relation to tubular poles or thills for vehicles; and it consists in the improved construction of parts of such a pole or thill and in the improved method of forming it, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the body of the tubular pole, which is made from a tube of wrought iron or steel, the original tube being of the same diameter at all points. This tube is formed with an inwardly-projecting crease, B, at the outer portion of the pole, the crease increasing in depth toward the end of the pole, causing that end of the pole to be tapering toward the end.

The stop C for the neck-yoke is preferably secured with its ends in the groove formed by the crease in the under side of the tongue by means of suitable bolts.

The taper in the pole may be formed by more than one crease, the taper being caused by forcing the metal toward the axis of the pole or tube and by bringing the faces of the creases together.

The crease or creases may be formed when the tube is heated by means of suitable dies or rollers, or it may be formed by simply hammering the crease in the heated metal and afterward rounding the tapered portion. It follows that the pole or rod may be used as a vehicle-tongue, as a thill, as a tongue for agricultural machines, or for any purpose where a tubular pole or rod is to be used with a tapering end, this method of tapering a tube being simple and cheap and requiring very little machinery to be accomplished.

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

1. A tubular pole having its tapering end formed with a longitudinal inward crease or creases of increasing depth toward the end, as and for the purpose shown and set forth.

2. A tubular pole having its tapering end formed with a longitudinal inward crease, increasing in depth toward the end of the pole, and formed with a holdback or stop secured in the groove formed by the crease, as and for the purpose shown and set forth.

3. The improved method of tapering tubular poles, consisting in forming a longitudinal crease in the portion to be tapered, increasing in depth toward the end, as and for the purpose 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:

WM. SECHER,
AUGUST PETERSON.