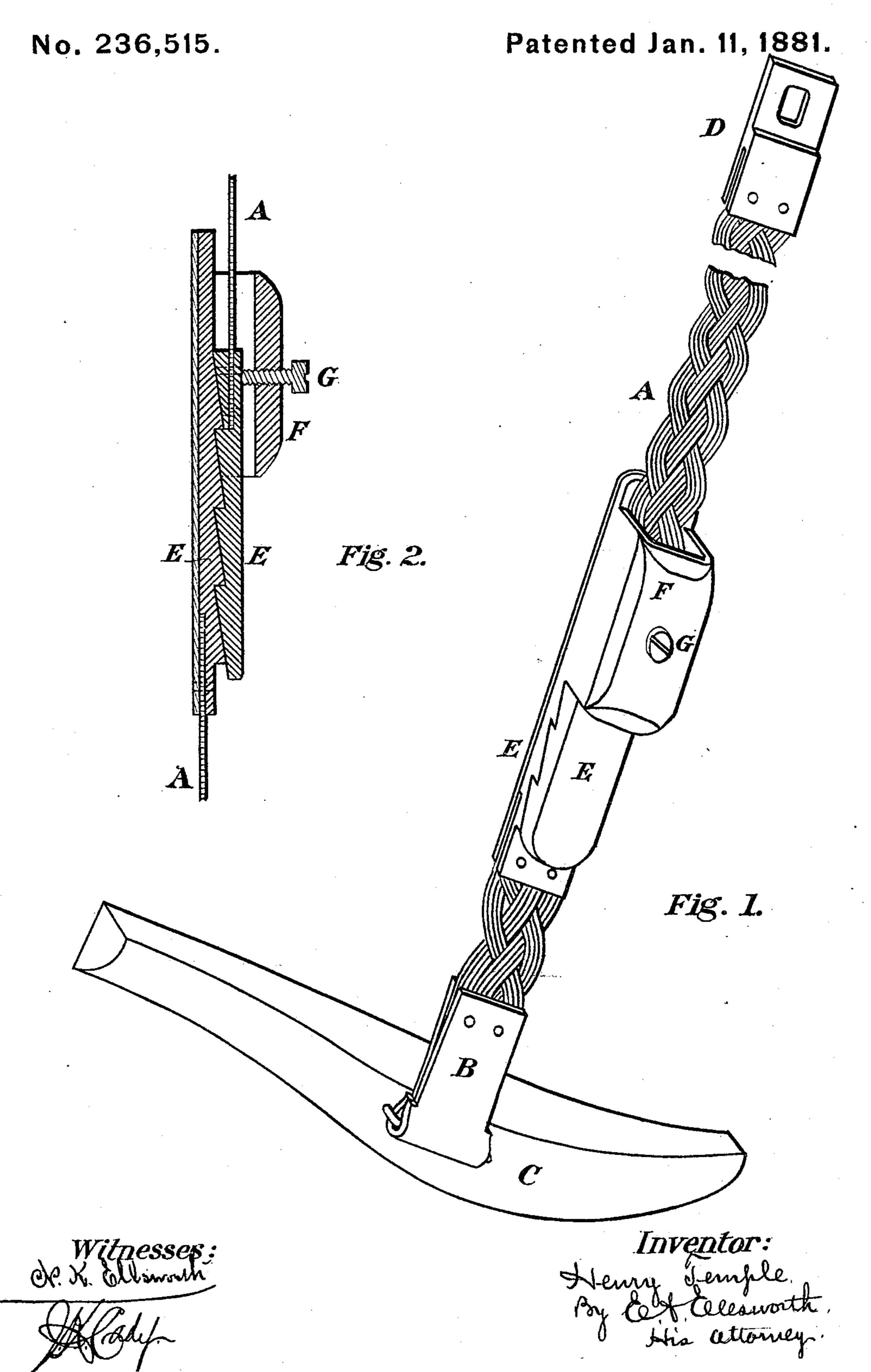
H. TEMPLE. Wire Harness Trace.



United States Patent Office.

HENRY TEMPLE, OF GRAND RAPIDS, MICHIGAN.

WIRE HARNESS-TRACE.

SPECIFICATION forming part of Letters Patent No. 236,515, dated January 11, 1881.

Application filed November 20, 1880. (Model.)

To all whom it may concern:

Be it known that I, HENRY TEMPLE, of Grand Rapids, in the county of Kent and State of Michigan, have invented a new and Improved Wire Harness-Trace; and I do hereby declare the following to be a full, clear, concise, and exact description of the same, sufficient to enable one skilled in the art to which my invention belongs to make and use it, reference being had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a perspective view of my improved trace, and Fig. 2 is a longitudinal sectional view of the adjustable catch by which the parts of the trace are fastened together.

Similar letters of reference in the accompanying drawings denote the same parts.

My invention is designed to dispense with the use of leather harness-traces by providing traces of metal which shall be stronger, cheaper, and more durable than the leather.

To this end the invention consists, first, in a harness-trace made from strands of wire woven or braided into the form of a thin flat web or strip, similar in form to the leather trace in common use, though smaller and lighter.

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I am aware that round wire rope has been employed for harness-traces; but this form is not only clumsy and without the requisite pliability, but unless carefully handled is liable to become so bent and knotted as to break the strands of wire under heavy strains, or to untwist the strands, and so materially weaken the rope. By constructing the trace as I propose, in the form of a flat woven or braided

of separating the wire strands is avoided.

It also consists in the construction of the adjustable fastening and its combination with the parts of the trace, as I will presently de-

web, it cannot become knotted, and all danger

In the accompanying drawings, A represents the trace, composed of strands of wire braided or woven together, so as to form a thin flat web, as shown. Any strong and flexible wire may be used for the purpose, al-

50 though I prefer galvanized or copper wire, as being less liable to corrode.

The trace may be made in one piece, with a

suitable metal clip, B, at one end, to connect with the hame C, and a metal clip or eye, D, at the opposite end, for attachment to 55 a whiffletree. These clips are riveted or otherwise secured to the ends of the trace; but before being applied the ends of the wire strands in the web should be brazed together, to prevent them from separating and to adapt 60 them for the reception of different kinds of clips or eyes.

When the trace is made in two parts their proximate ends are provided with metal ratchet-plates E E, the teeth of which are reversed 65 on the plates, so as to interlock with each other—that is to say, the teeth of one plate engage those of the other plate, and thus form a lock. A loop, F, is attached to one of the ratchet-plates, so that the other plate may 70 pass freely through it, and the two plates are locked together within the loop at any desired point, to lengthen or shorten the trace, by a set-screw, G, inserted through the side of the loop, to bear against the back of the outer 75 plate, as shown.

The ratchet-plates may be fastened to the trace by brazing, riveting, or other suitable means, and the loop may be secured in a similar manner to one of the plates. I prefer to 80 make that part of the trace attached to the hame considerably shorter than the other part, although this is only a matter of choice, as the rear part may be the shortest, or both parts of the same length.

Having thus described my invention, what I claim is—

1. A metal harness-trace composed of wire braided or woven into a thin flat web, and provided with a metal clip or eye at each end, 90 substantially as described, for the purpose specified.

2. The combination, with the two parts of the woven or braided wire harness-trace, of the ratchet-plates E E and their fastening de- 95 vice, substantially as described, for the purpose specified.

In testimony of which invention I hereunto set my hand this 4th day of December, A. D. 1879.

HENRY TEMPLE.

Witnesses:

PETER O. VOORHEIS, FRED. C. TEMPLE.