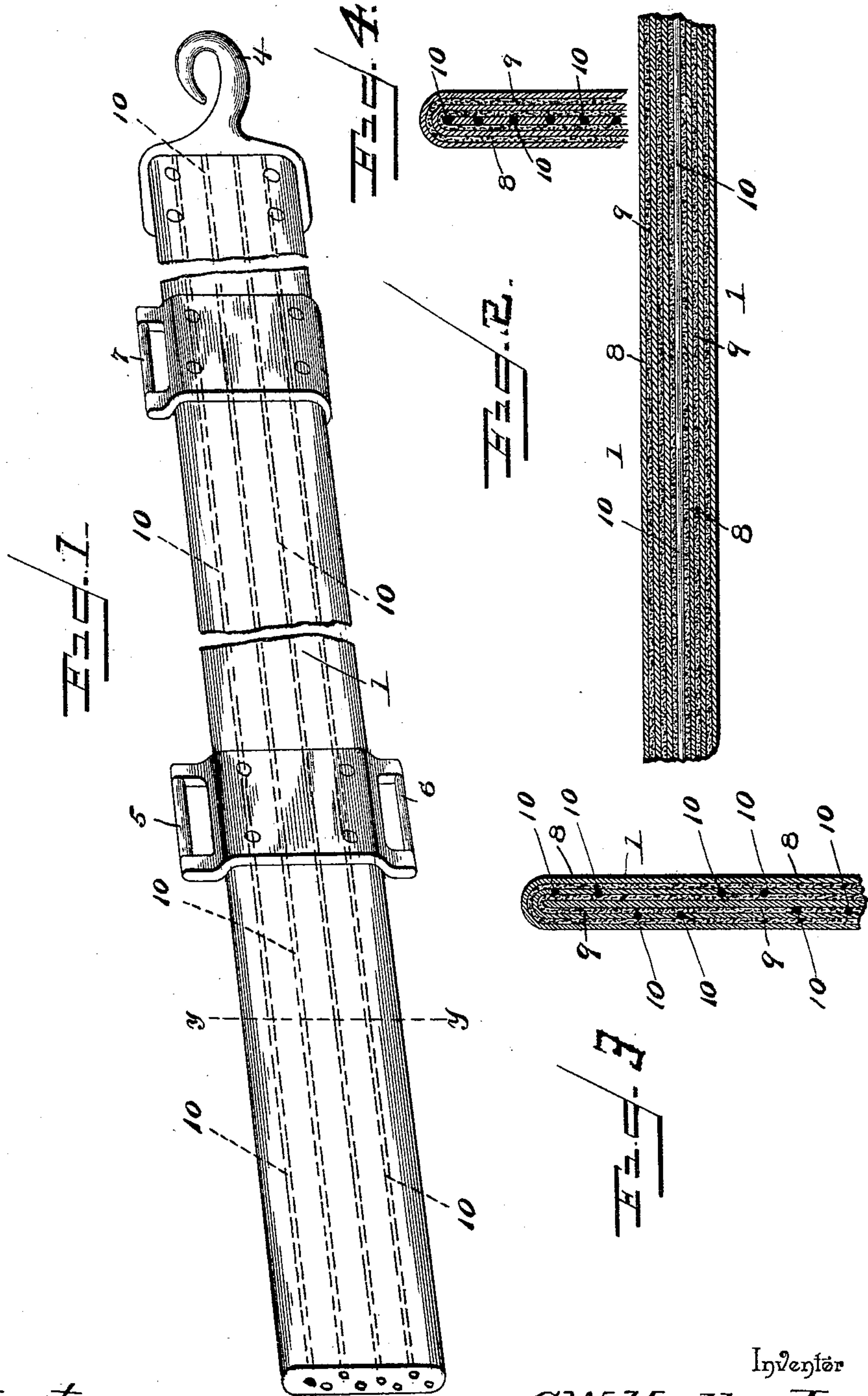


(No Model.)

G. W. HUNTLEY, Jr.  
HARNESS TUG.

No. 500,131.

Patented June 27, 1893.



Witnesses

*E. H. Stewart.*

*Chas. S. Hoyer.*

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# UNITED STATES PATENT OFFICE

GEORGE WILLIAM HUNTLEY, JR., OF DRIFTWOOD, PENNSYLVANIA.

## HARNESS-TUG.

SPECIFICATION forming part of Letters Patent No. 500,131, dated June 27, 1893.

Application filed December 21, 1892. Serial No. 455,898. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE WILLIAM HUNTLEY, Jr., a citizen of the United States, residing at Driftwood, in the county of Cameron and State of Pennsylvania, have invented a new and useful Harness-Tug, of which the following is a specification.

This invention relates to harness-tugs or traces, and has for its object to provide a device of the character set forth that is constructed of rubber belting or other analogous material with steel wires running lengthwise or longitudinally thereof between the plies of the belting and dispense with the use of leather or metal traces; and with this object in view, the invention consists of the construction and arrangement of parts as will be more fully hereinafter described and claimed.

In the drawings: Figure 1 is a similar view of a tug or trace that is adapted for heavy work. Fig. 2 is a longitudinal vertical section on the line  $x-x$ , Fig. 1, on an enlarged scale. Fig. 3 is a transverse vertical section on the line  $y-y$ , Fig. 1, on an enlarged scale and partially broken away. Fig. 4 is a view similar to Fig. 3, showing the wires arranged in straight alignment.

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

Referring to the drawings, the numeral 1 designates the improved tug or trace, which may be supplied with a suitable cockeye 2 at one end, and attaching means at the opposite end, or, with a hook 4 at one end, a back-strap loop 5, and girth-loop 6 in the body thereof, and a hip or carrying-strap loop 7 adjacent to the hook 4, all of which are suitably fastened to the tug or trace and in proper position. The tug or trace is constructed of rubber belting, or other analogous material, comprising a series of alternately-arranged plies of rubber and textile fabric, as at 8 and 9, that are pressed together, and between which at about the middle portion are located a series of longitudinally-disposed steel wires 10 that extend from end to end of the tug or trace and provide a rigidity of structure therein that obviates stretching of the tug or trace and brings the tension and draft on the said steel wires. These steel wires may be arranged parallel with each other in the same

horizontal plane, as shown in the section, Fig. 2, or be arranged in corrugated form or in compound curved alignment, as shown by Fig. 3. The outer surface of the tug or trace presents a smooth unbroken appearance and has rounded edges that are preferably parallel with each other, and the construction entire as set forth is intended to replace the use of leather or metal for a similar purpose and at the same time preserve the necessary rigidity and strength required in such devices. The manner of inserting the wires in position may be varied at will.

It will be seen that the primary feature of importance is the arrangement of the wires to have them extend from end to end of the tug or trace to thereby bring the tension or strain directly thereon and relieve the covering of said wires free from strain or tension. This composite form of trace or tug considerably cheapens the manufacture of such a device, and can be quickly and readily produced from stock that already exists in the market; but it will be preferable that the belting employed have the wires inserted therein at the time of the manufacture thereof.

Having described the invention, what is claimed as new is—

A tug or trace constructed of rubber belting and having a series of steel wires embedded therein and extending longitudinally thereof from end to end of the trace, said wires being located at equal distances apart the entire width of the trace, the said tug or trace being provided with a back-strap loop that embodies a plate which is passed over the outer side thereof and having a lower girth loop all integrally formed and permanently attached to the trace, and a hip or carrying strap loop in rear of the aforesaid loop embodying a plate extending across and secured to the trace, and a rear attaching hook, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE WILLIAM HUNTLEY, JR.

Witnesses:

GEO. EDWD. MILLS,  
CONRAD HAMBLETON.