

(No Model.)

W. M. GILLIAM.
Harness.

No. 242,921.

Patented June 14, 1881.

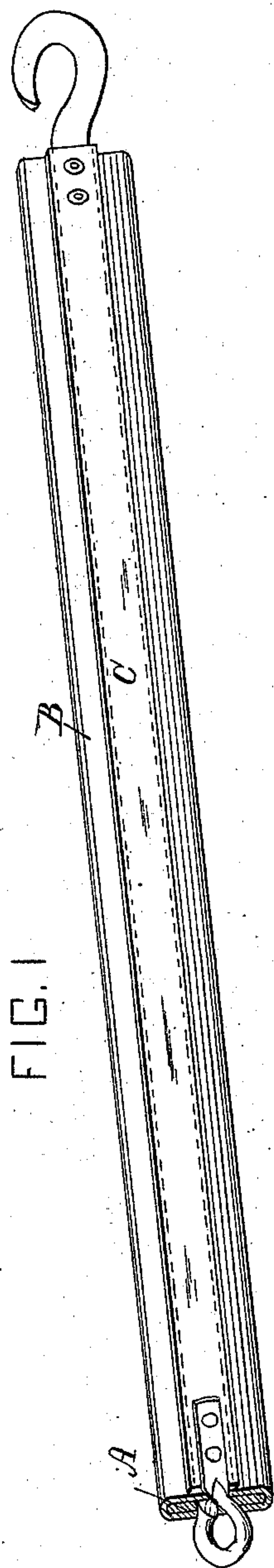


FIG. 1

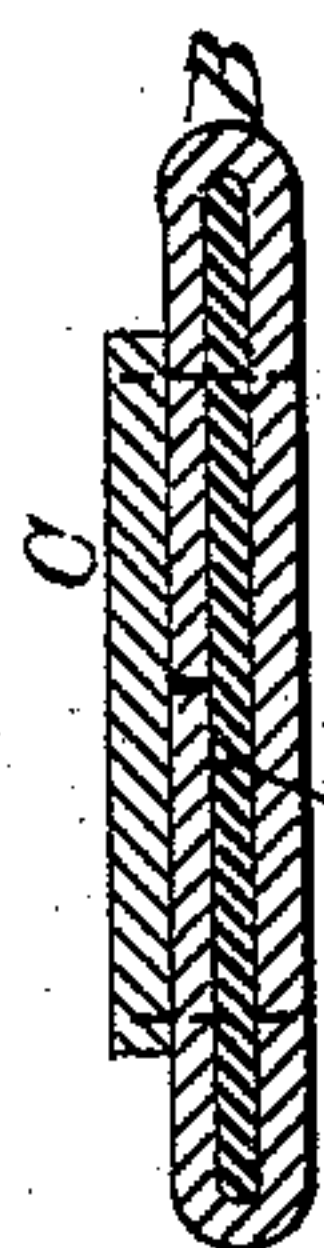


FIG. 3

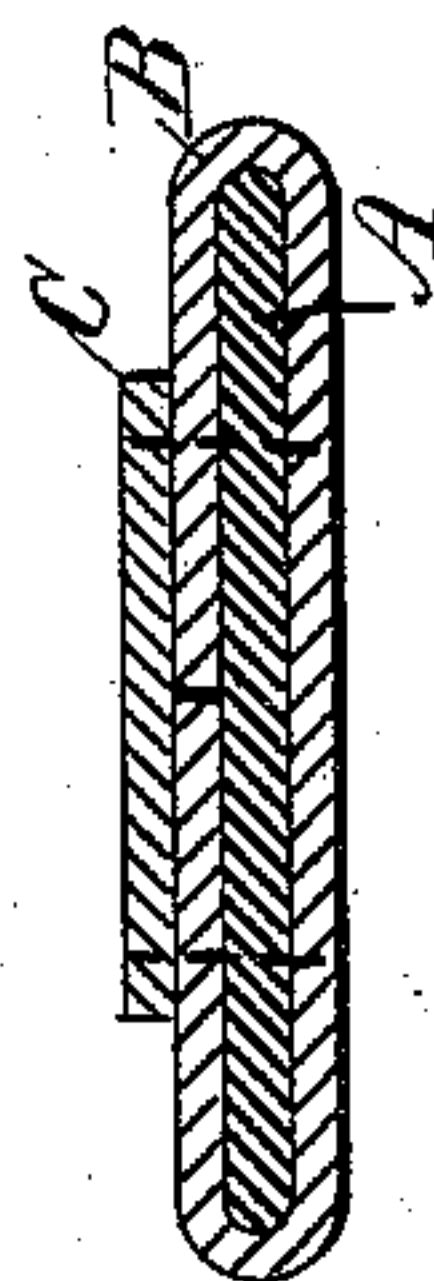


FIG. 2

WITNESSES:
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WILLIAM M. GILLIAM, OF DANVILLE, VIRGINIA.

HARNESS.

SPECIFICATION forming part of Letters Patent No. 242,921, dated June 14, 1881.

Application filed April 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. GILLIAM, a citizen of the United States, residing at Danville, in the county of Pittsylvania and State of Virginia, have invented certain new and useful Improvements in Harness; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to harness; and it consists in a peculiarity in the construction of the traces of harness for drays, omnibuses, and other heavy vehicles where great strength and durability are required; and for the purpose of securing these requisites I construct my traces of a single piece or strip of leather, or other suitable material, of sufficient longitude to form the entire length of the trace, and overlap and enfold the same by a sheath or covering of leather, the edges of the inclosing-sheath meeting in the center of the outside of the trace, whereby the tendency to rub the sides of the draft-animal is prevented, as there are no seams or ragged or rough edges to come in contact with the horse or other draft-animal, and by their friction wear away the hair and abrade the skin of the draft-animal.

Another feature of my invention consists in covering the seam or juncture on the outside of the trace with a strip of leather extending longitudinally the whole length of the seam, and thereby preventing the entry of wet or moisture into the interior of the trace, and also adding materially to its strength.

In the accompanying sheet of drawings, wherein like parts are indicated by similar letters of reference, Figure 1 is a perspective view, giving an outside representation of my improved trace and showing the external covering-strip. Fig. 2 is a sectional view, showing the method of construction, and Fig. 3 is a similar sectional view of a trace made with a metallic strip or ribbon.

A is the draft-band or inner strip of leather or other material, running longitudinally the entire length of the trace from the hames-hook to the whiffletree, to the former of which

it is connected by a hook in the customary manner. This draft-band is usually a leather strip, but may be made of rubber, webbing, metal, or other suitable material. When the draft-band A is made of any material other than metal the sheath or covering B is a means both of protection and of additional strength. In cases where the draft-band A is composed of metal, as a chain or a metallic strip or ribbon, then B will serve more particularly as a covering or protection to prevent friction or rubbing against the sides of the draft-animal.

C is the external leather strip extending longitudinally along the entire length of the outside of the trace and covering the seam or juncture of the sheath B, so that no moisture can penetrate to the interior of the trace. When the trace is constructed entirely of leather the strip C, besides excluding all moisture, gives additional strength to the trace.

By the present method of constructing harness where great strength is required a very large amount of leather stock is necessary, making the trace in common use for heavy vehicles bulky and ungraceful in appearance and expensive in construction, and when chain-traces are used the sides of the draft-animals are almost always chafed by the friction, and frequently the animals are permanently disabled by the sores produced by the chains rubbing against their sides.

By my improved method of construction when metallic strips or chains are used they are entirely concealed, and the sides of the animals are protected against friction and abrasion, and the trace has the external appearance of a trace composed entirely of leather.

In the present method of making traces whenever they are washed the water penetrates the leather and causes decay, and the leather, becoming hard, cracks open and renders the trace worthless in a very short time.

By my improvement no moisture can get inside the trace, and the amount of wear in a harness is more than doubled.

Having thus described my improvement in traces, what I claim as my invention, and desire to secure by Letters Patent, is—

1. A folded layer-trace composed of a longitudinal band of leather or other material, extending from the hames to the whiffletree,

inclosed in a leather sheath, having its edges
joined by a seam or juncture extending longi-
tudinally along the entire outside length of
the trace, or the side farthest from the draft-
5 animal, the said seam or juncture in the sheath
being covered by a strip of leather running
along its entire length, and serving to exclude
moisture and to give additional strength to the
trace, as described.
10 2. In a harness-trace, the combination of the

draft-band A, enfolding-sheath B, and exter-
nal strip, C, all arranged and operating sub-
stantially as described, and for the purposes
specified.

In testimony whereof I affix my signature in 15
presence of two witnesses.

WILLIAM MORGAN GILLIAM.

Witnesses:

S. M. EMBREY,

J. T. WILLIS.