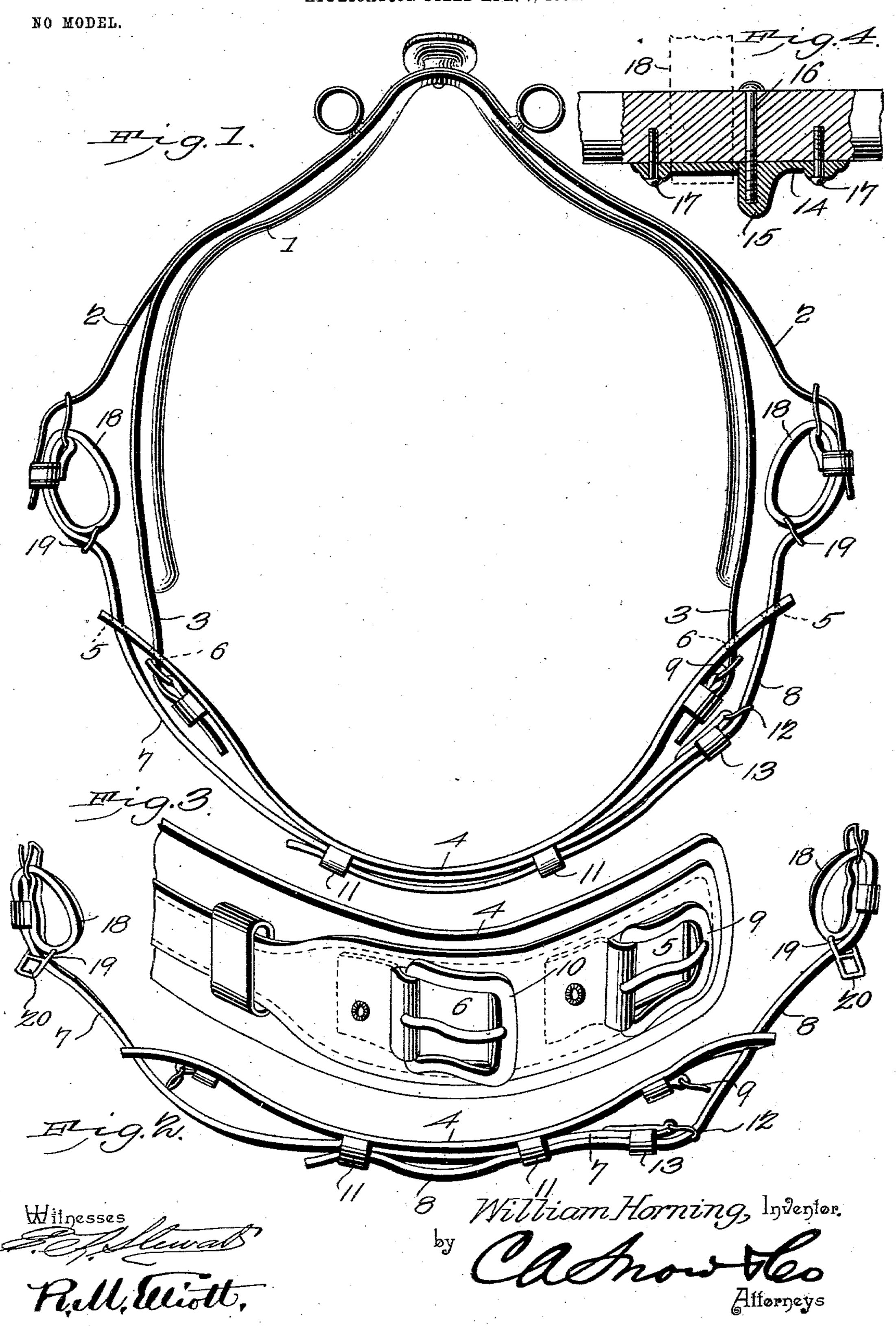
W. HORNING. HARNESS. APPLICATION FILED APR. 7, 1902.



United States Patent Office.

WILLIAM HORNING, OF JOHNSTOWN, NEW YORK.

HARNESS.

SPECIFICATION forming part of Letters Patent No. 745,440, dated December 1, 1903.

Application filed April 7, 1902. Serial No. 101,773. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HORNING, a citizen of the United States, residing at Johnstown, in the county of Fulton and State of 5 New York, have invented a new and useful Harness, of which the following is a specification.

This invention relates generally to harness, and particularly to that class wherein the 10 employment of a breeching-strap may be dispensed with without interfering with the

proper operation of the harness.

The object of the invention is to provide a novel form of belly-band of such construction 15 that when the saddle-billets and thill-tugs are associated therewith all the parts will be positively held against separation and from liability of becoming broken under strain resulting from an animal backing violently bedispensed with.

A further object is to cause the belly-band itself to receive the principal strain from the saddle-billets and thill-tugs, in lieu of the 25 buckles for holding these parts associated

with the belly-band as heretofore.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the 30 novel construction and combination of parts of a harness, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like 35 numerals of reference indicate corresponding parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited 40 may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit thereof.

In the drawings, Figure 1 is a view in elevation of a harness-saddle with the improved 45 belly-band associated therewith. Fig. 2 is a view in elevation of the belly-band detached from the harness. Fig. 3 is an enlarged detail view in perspective of one end of the belly-band. Fig. 4 is a view in elevation, 50 partly in section, of a portion of one of the thills, exhibiting a stop associated therewith to coact with the tugs, said stop being par-!

ticularly adapted for use in connection with a harness when a breeching is omitted.

Referring to the drawings, 1 designates the 55 saddle, which may be of the usual or any preferred construction, 2 the usual backingstraps carried thereby, and 3 the saddle or billet straps. As these parts may be of the usual or any preferred construction, further 60 description thereof is deemed unnecessary.

The present invention resides in the novel form of belly-band and in the manner in which the saddle-straps and tug-billets are associated therewith. The belly-band 4 may be 65 made in the usual manner—that is, of the desired number of plies or thicknesses of leather—and is provided adjacent to each terminal with two rectangular openings 5 and 6, the openings 5 being provided for the receptor tion of the tug-billets 7 and 8 and the openings 20 tween the thills when the breeching-strap is | 6 for the reception of the saddle-straps 3. As shown in Fig. 3, both of the openings 5 and 6 have buckles 9 and 10 secured adjacent thereto, while in the arrangement shown in Figs. 1 75 and 2 buckles are disposed adjacent only to the openings 6. The said openings are provided in order to secure the strongest possible connection between the belly-band and the saddle-straps and tug-billets, and at the same 80 time to obviate the employment of runners or retainer-loops, such as are commonly employed for this purpose, and also in a large measure to relieve the buckles 9 and 10 of a greater part of the lateral strain to which 85 they are subjected when an animal is backing. Under the construction shown in Figs. 1 and 2 the tug-billet 7 is passed through the opening 5 of the belly-band, thence through runners or keepers 11, and is provided at its 90 free end with a buckle 12 to be engaged by the tug-billet 8, which also extends through the opening 5 on that side of the belly-band and has its loose end likewise passed through the keepers 11 and through a keeper 13, car- 95 ried by the tug-billet adjacent to the buckle 12. Under this arrangement adjustment of one tug-billet effects adjustment of both, while where the buckles 9 are associated with the openings 5 one of the tug-billets may be 100 adjusted to the exclusion of the other, this being due to the fact that the tug-billets separately engage the buckles 9.

As stated in the first part of the specifica-

tion, an object of this invention is to obviate necessity of the employment of a breechingstrap, and this is effected by the manner of connecting the saddle-straps and tug-billets 5 with the belly-band in either of the manners described. The elimination of the breeching also dispenses with the holdback-straps, and in order to enable the animal to back a vehicle provision has to be made to hold the tugs to from rearward movement on the thills when it is desired to back the vehicle. The means herein employed is illustrated in Fig. 4, and comprises a plate 14, one for each thill, provided with a downward-extending projection 15, constituting a stop against which the tug will work, the stop-plate being secured on the thill by a screw 16, which passes through from the upper side of the thill and into the stop 15, the connection between the parts being 20 rendered more secure by the employment of two screws 17, passing through the terminals of the plate and upward into the thill. The coöperative relation between the stop and the tug 18 is shown in Fig. 4, wherein the tug is 25 indicated in dotted lines.

Where it is desired to use a breeching with the tugs, as usual, each tug is provided at its lower portion with a tongueless buckle 19, one loop of which is secured in any suitable 30 way to the tug and receives the tug-billet, and the other loop, 20, of which projects rearward from the tug to be engaged by the breeching. Under this arrangement the harness may readily be converted from a harness without out breeching to one with breeching without necessitating any change in any of the parts of the harness.

It will be seen from the foregoing description that although the improvements herein defined are of an exceedingly simple character they will be thoroughly efficient in per-

forming the functions designed and may be applied to an ordinary harness without objectionable expense.

Having thus fully described my invention, 45 what I claim as new, and desire to secure by

Letters Patent, is—

1. In a harness, the combination with the saddle, of a belly-band having its terminals provided with pairs of openings through the 50 material of the belly-band, tug-billets passing through the outer pair of openings and secured to the backing-straps of the harness, saddle-billets passing through the inner pair of openings, and means for holding the said billets 55 associated with the belly-band.

2. In a harness, the combination with a saddle, of a belly-band having its terminals provided with pairs of openings through the material of the belly-band and buckles disposed 60 adjacent thereto, tug-billets passing through the outer pair of openings and secured to the backing-straps of the saddle, and saddle-billets passing through the inner pair of openings.

3. In a harness, the combination with a saddle, of a belly-band having its terminals provided with pairs of openings through the material of the belly-band and buckles disposed adjacent thereto, tugs provided with means 70 for attachment to the terminals of a breeching-strap and having billets passing through the outer pair of openings, and saddle-billets

In testimony that I claim the foregoing as 75 my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM HORNING.

Witnesses:

ANDREW J. NELLIS, C. E. PROPER.