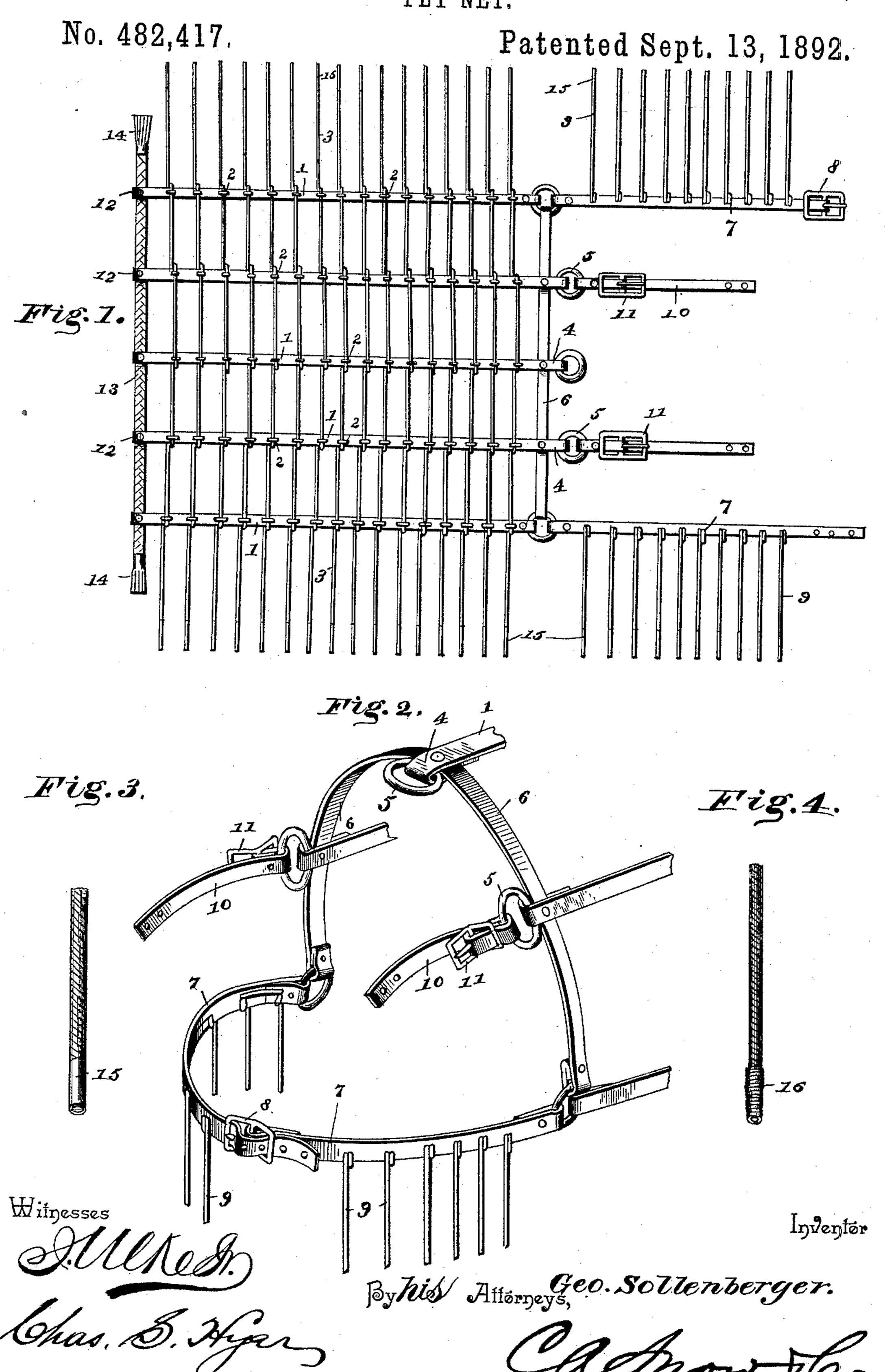
G. SOLLENBERGER. FLY NET.



United States Patent Office.

GEORGE SOLLENBERGER, OF MECHANICSBURG, PENNSYLVANIA.

FLY-NET.

SPECIFICATION forming part of Letters Patent No. 482,417, dated September 13, 1892.

Application filed May 17, 1892. Serial No. 433,344. (No model.)

To all whom it may concern:

Be it known that I, GEORGE SOLLENBERGER, a citizen of the United States, residing at Mechanicsburg, in the county of Cumberland 5 and State of Pennsylvania, have invented a new and useful Fly-Net, of which the following is a specification.

This invention relates to fly-nets, and especially to that class wherein the formation ro of meshes is avoided; and it consists of the construction and arrangement of parts, as will be more fully hereinafter described and claimed.

One object of this invention is to provide 15 what may be termed a "meshless net," which is so constructed and arranged as to avoid shrinking and lengthening and twisting and contorting of the same, which is a common result upon exposure of the ordinary class of 20 devices set forth to wet weather, wherein the lashes are formed of cotton or woolen textile material, while at the same time a much more durable structure is provided than in said devices which are fabricated entirely of cotton 25 or woolen thread or yarn.

In the drawings, Figure 1 is a plan view of a net embodying the invention. Fig. 2 is a detail perspective view of the front portion of the net. Fig. 3 is a detail perspective view 30 of one of the lash ends, showing the improved construction thereof. Fig. 4 is a view similar to Fig. 3, showing a modification.

Similar numerals of reference are used to indicate corresponding parts in the several

35 figures.

Referring to the drawings, the numeral 1 designates a series of leather bars, which in this instance are preferably five in number, one in the center and two on each side; but 40 said number may be increased or diminished, as found desirable. The said bars are arranged parallel and have slots or openings 2 formed therein at regular intervals, in which are secured lashes 3 by knotting, being composed 45 of textile fabric and extending entirely across said bars in parallel planes and beyond the outermost bars on each side. These lashes are connected to the bars in such manner that no meshes are formed, thereby avoiding 50 crinkling, twisting, or contorting of the lashes after exposure to moisture, and at the same time materially obviating shrinking or length-

ening. The front ends of the bars 1 are formed into loops 4, which have rings 5 connected to each, and to the said rings 5 on the outermost 55 bars are attached the ends of a cross-strap 6, extending through the loops 4 of the intermediate bars and riveted therein to sustain said bars in proper aligned adjustment paral-

lel with each other.

To the loops 4 on the outermost or edge bars 1 are secured breast-straps 7, one of which has a buckle 8 at the end thereof for connection therewith of the end of the opposite strap 7. The said breast-straps are provided with de- 65 pending lashes 9 to protect the front of the horse, and the rings 5, attached to the looped ends of the intermediate bars, are provided with straps 10, supplied with buckles 11, by means of which the upper front part of the net 70 may be attached to the neck-strap or other portion of the front of harness. The rear ends of the bars 1 or crupper portion are in like manner formed with loops 12, through which is passed and secured a textile plaited strap 13, 75 having leather tassels 14 on the opposite ends thereof for an obvious and well-known purpose.

As shown in Figs. 3 and 4, the ends of the lashes are protected and shielded by either a 80 metallic ferrule 15, as shown in Fig. 3, or a wrapping 16 of wire, as shown in Fig. 4, and by this means unraveling or untwisting as well as curling of the lash ends are prevented.

Heretofore it has been common to construct 85 lashes when formed of linen, cotton, or similar thread or yarn into meshes; but more difficulty and less durability have resulted in the use of such mesh-nets for horses than are desirable, and the device herein is intended 90 to obviate these and other existing defects. Where meshes are formed, they affect each other in lengthening and shortening and form an impracticable and unsightly device. The advantages and utility of the form of net 95 herein set forth are readily apparent to those skilled in the art and need not be further enlarged upon herein.

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

In a fly-net, the combination of a central bar and a pair of parallel bars on each side of and parallel with said central bar, said bars being constructed of leather and having secured in the front loop of each of the bars, lashes of textile fabric connected to said bars and having metal end coverings, breast-straps supporting lashes and secured to the rings of the outermost bars farthest from the central bar, said breast-straps being united at the center when joined, and straps 10, secured to the rings connected to the front ends of the bars next to the central bar and adapted to loops in the opposite ends of the same, rings

be secured to the neck-strap or adjacent upper part of harness, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 15 the presence of two witnesses.

GEORGE SOLLENBERGER.

Witnesses:

AGNES Q. BOBB, FREDERICK RUSSELL.