

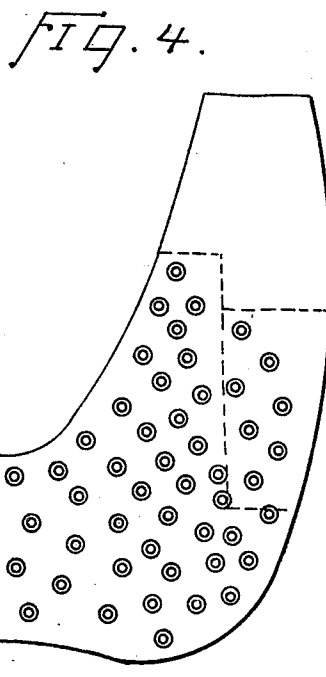
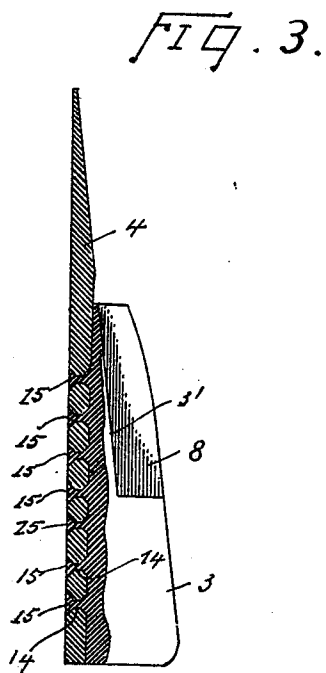
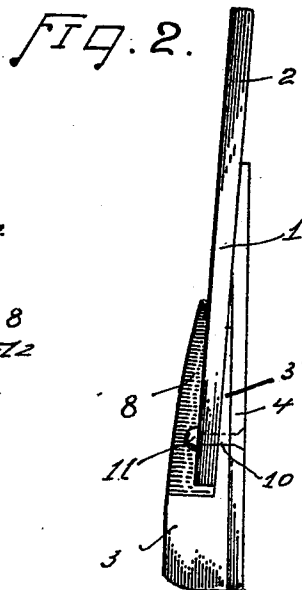
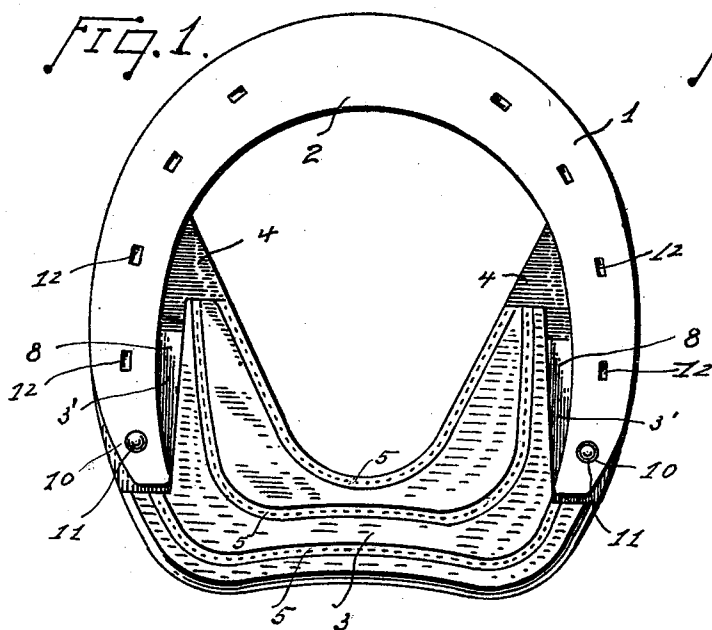
No. 622,296.

Patented Apr. 4. 1899.

C. B. TAYLOR.
HORSESHOE.

(Application filed Sept. 19, 1898.)

(No Model.)



Witnesses__

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UNITED STATES PATENT OFFICE.

CLEVELAND B. TAYLOR, OF TOLEDO, OHIO.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 622,296, dated April 4, 1899.

Application filed September 19, 1898. Serial No. 691,398. (No model.)

To all whom it may concern:

Be it known that I, CLEVELAND B. TAYLOR, of Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Horseshoes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 numerals of reference marked thereon, which form part of this specification.

My invention relates to a horseshoe and has particular relation to a soft-tread shoe, and has for its object to provide a shoe of this character having a rigid packing material or foundation interposed between the metallic toe-clip and the hoof and provide divers means for securing the soft or resilient tread portion of shoe to the rigid packing or foundation. It has been found that in employing a soft packing material or foundation the latter must extend the full area of the hoof, for the reason that should the central portion be removed the soft packing or foundation is forced inwardly, necessitating the removal of the shoe, and if extended the full area of the tread of the hoof no ventilation is provided for, and there is also prevented the access of moisture to the hoof, which is an absolute necessity to the welfare and health of the horse. This object I have accomplished by providing a rigid packing material or foundation possessing an inherent rigidity, so as to prevent an inward deflection under pressure should the central portion be removed, and by the removal of the central portion I have provided for the access of moisture and ventilation of the tread of the hoof, and consequent health and comfort of the horse.

A further object is to provide a material for packing or foundation having tenacity and density, whereby the packing may be secured directly to the hoof in the usual manner by means of nails without the employment of a metallic-shoe portion, and providing thereby a base upon which the resilient tread portion may be secured directly.

A further object is to taper the forward projecting wings of the rigid packing or foundation material in a semipacked horseshoe as to let the metallic-toe portion come in direct

contact with the hoof, whereby the metallic-toe portion can be more positively secured to the hoof by being partially nailed directly to the hoof, and a shoe constructed in this manner still possesses all the advantages and preferable qualities of a soft-tread shoe by allowing the compressible shoe portion to underlap the metallic shoe a portion of its length.

A further object is to perforate the rigid packing material and countersink the perforations upon both sides, whereby upon vulcanizing the rubber-tread portion the latter is secured to the rigid packing or foundation, metal or fiber, by flowing through the perforations in vulcanization and forming rivets to intimately combine both materials.

A further object is to provide a rigid base or foundation for the horse to tread upon and obviate disposition toward the ingrowing and contraction of the hoof, which will result eventually in the lameness of the horse and which malady is obviated by a rigid packing or foundation for the hoof to spread upon.

In the drawings, Figure 1 is a plan view of a horseshoe constructed in accordance with my invention. Fig. 2 is a side elevation thereof. Fig. 3 is a semisection and elevation through the rigid foundation and the compressible tread portion, showing the combining of the materials; and Fig. 4 is a diaphragmatic view of the rigid packing or foundation.

1 designates a horseshoe assembled as secured to the hoof and comprising a metallic toe or clip portion 2 and a soft-tread portion 3, which is mounted upon the rigid non-flexible base or foundation portion 4, for which I employ disintegrated fiber as comprising rigidity and being waterproof. The tenacity and density of the disintegrated fiber is such that the shoe constructed therefrom may be directly secured to the hoof in the usual manner by means of nails and without the employment of the metallic-toe portion, as is usually employed in securing a soft-tread shoe to the hoof. I am therefore enabled to provide a non-metallic shoe, if desired, that is adapted to be secured to the hoof through the base or foundation material and warranting a reasonable amount of wear.

In Figs. 1 and 2 there is shown a shoe having a semipacking base or foundation por-

tion to which the soft-tread portion 3 is secured by means of waterproof cement, and as a further provision to provide cohesion between the rigid base portion and the soft-tread portion I may form grooves 5 in the frog member of the compressible cushion 3 and sew the rigid packing or foundation to the cushion in the ordinary manner, the grooves being of such depth as to protect the seams by the spreading of the resilient cushion during compression under wear. The rigid packing is left open centrally to allow access of moisture to the frog of the hoof, thereby preventing undue dryness and providing for ventilation, both of the former being essential to the welfare of the horse. The rigid base or foundation material is tapered forward in the semicircular packed shoe, as shown in the figures, and a compressible cushion 3 is formed upon either side recesses 8 to receive the metallic-shoe portion and the rigid packing or foundation portion 4.

In securing the horseshoe to the hoof the metallic portion 2 and the rigid base or packing and the soft-rubber cushion are riveted together at 10 by means of rivets 11 passing through all portions.

The horseshoe is secured to the hoof in the ordinary manner by means of nails 12, which will pass through the rigid packing material and metallic shoe.

In the construction of my horseshoe I may preferably employ disintegrated fiber. However, I do not confine myself exclusively to the employment of the same material and

also may employ metal for foundation or base, in which instance I will perforate the rigid base or foundation portion and countersink the perforations upon both sides, as shown in Figs. 3 and 4, whereby upon vulcanizing the soft-tread portion to the metallic base or foundation the rubber comprising the tread portion is caused to flow through the perforations 14 and form rivets 15 during the process of vulcanization, which rivets will secure the metallic base or foundation to the compressible cushion. I may also employ this means for securing the soft-tread portion to the rigid base or foundation of the disintegrated fiber.

What I claim is—

1. In a horseshoe, a U-shaped rigid base or foundation, a series of perforations formed transversely in the area of the rigid base and countersunk upon both sides, a soft-tread portion vulcanized to the rigid base and forming a series of rivets adapted to secure the materials in close assemblage, and a metallic toe or clip portion.

2. In a horseshoe, comprising a metallic toe or clip portion, a rigid packing material of disintegrated fiber, a series of perforations formed in the area of the rigid packing and countersunk upon both sides, a soft tread vulcanized to the rigid packing and forming a series of rivets adapted to secure the materials in close assemblage.

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Witnesses:

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