G. F. OCKRASSA.

SHOE.

APPLICATION FILED AUG. 29, 1918.

1,291,092. Patented Jan. 14, 1919.

Fig. I.

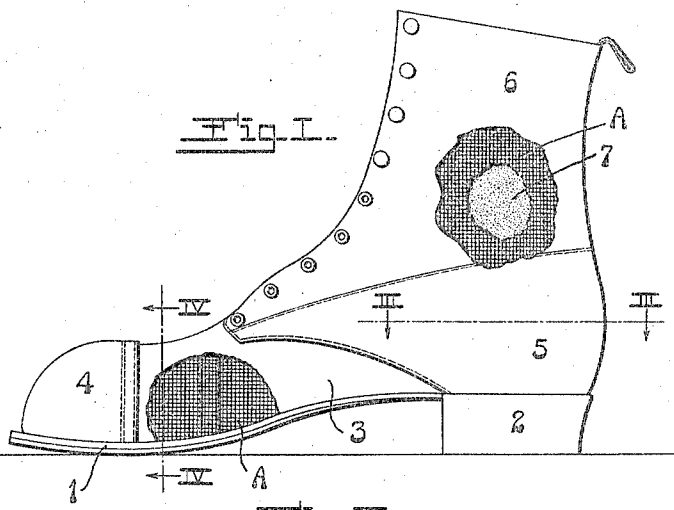


Fig. II.

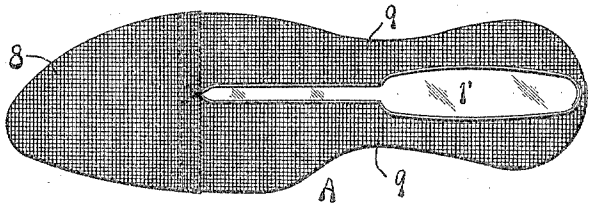


Fig. III.

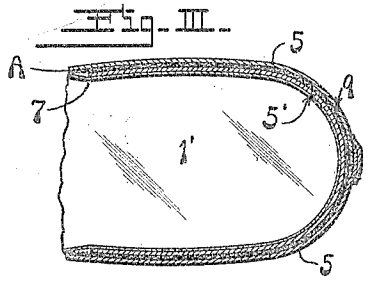
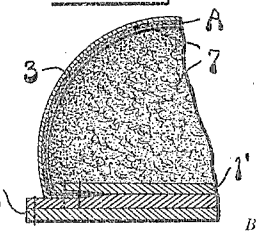


Fig. IV.



WITNESS.

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SHOE.

1,291,092. Specification of Letters Patent. Patented Jan. 14, 1919.

Application filed August 29, 1918. Serial No. 251,968.

To all whom it may concern:

Be it known that I, GUSTAV F. OCKRASSA, a citizen of the United States of America, a resident of Pine Lawn, in the county of St. Louis, State of Missouri, have invented certain new and useful Improvements in Shoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in articles of foot wear, such as shoes, slippers, boots and the like, the main object being to produce such articles at a relatively low cost and to utilize materials which are more plentiful than ordinary shoe leather. Owing to the scarcity of shoe leather and to the fact that the substitutes of which I am aware do not possess the required strength and do not satisfactorily retain the shape in which they are formed, I employ a metallic reinforcing element which very materially strengthens the upper portion of the shoe, and at the same time retains the inexpensive leather, or leather substitute, in the desired shape.

By using a strong flexible metal stiffener, as herein disclosed, the upper portion of the shoe will retain its shape for a long period of time, even though made of relatively inexpensive thin leather, such, for example, as sheepskin. The flexible stiffener and reinforcement also provides for the use of cloth and special compositions of material as substitutes for leather shoe uppers.

The article of footwear herein shown is a shoe having any suitable sole, upper and lining, and the flexible metallic stiffener consists of wire cloth interposed between the upper and lining. The invention also comprises certain details of construction and a particular combination and arrangement of the several elements, as will be hereinafter described.

Figure I is a side elevation of a shoe embodying the features of the present invention, portions of the shoe being broken away to show the flexible metal, and a portion of the metal being broken away to show the lining.

Fig. II is a plan view illustrating the metallic reinforcement and stiffener.

Fig. III is a horizontal section through the rear portion of the shoe, taken approximately on the line III—III, Fig. I.

Fig. IV is a fragmentary vertical section taken approximately on the line IV—IV, Fig. I.

The shoe herein shown comprises a suitable outer sole 1, a heel 2, and an upper comprising a vamp 3 and toe cap 4, counter 5 and quarters 6. The elements of the upper just referred to may be made of thin leather such as sheepskin, or they may be made of cloth, or of any suitable substitute for leather. 7 designates a lining for the several elements of the upper. This lining is preferably heavy fleeced cloth, as suggested by Fig. IV.

The combined stiffener and reinforcement A consists of reticulated metal, preferably wire cloth, interposed between the lining and the upper of the shoe. This metallic reinforcement is co-extensive with the lining and the upper. The lower margins of the lining, the upper, and the interposed reinforcement are all turned inwardly, as shown in Fig. IV, and secured between the outer sole 1 and the inner sole 1′. The large flexible metallic reinforcing and stiffening web is thus securely attached to the sole of the shoe, and the raw edges at the lower margins of the metal are confined between the elements of the shoe sole. The heavy protective lining forms a pad or cushion between the foot and the metallic reinforcement. It is also important to observe that the heel of the foot is protected by an inside counter 5′ (Fig. III) interposed between the lining 7 and the metal.

The wire cloth constituting the flexible metal reinforcement and stiffener may be made of any suitable metal, such as iron, or aluminum. It will be readily understood that wire cloth of this kind can be readily shaped on a last to provide a reinforcement of the desired form, and when the lower margins of the wire cloth are secured as shown in Fig. IV, the wire elements cannot be readily displaced from the relative positions in which they were arranged on the last.

The metal reinforcing web is preferably, but not essentially, made of a number of sections comprising a toe section 8 and side sections 9 extending from the toe section to the heel portion of the shoe. The front and rear ends of the side sections 9 may be lapped, as shown in Fig. II, and the toe sec-

tion 8 preferably overlaps the front margins of the side sections.

This invention eliminates the "toe boxes" or stiffeners ordinarily used in shoe toes, the wire itself being stiff enough to provide the desired strength and rigidity at the toe. If the wire cloth should become indented at the toe, it can be easily pushed outwardly to its original shape.

I claim:

1. An article of footwear comprising a sole, an upper and a lining therefor secured to the sole, a combined stiffener and reinforcement comprising a web of reticulated metal interposed between said lining and upper, and an inside counter interposed between said lining and the reticulated metal at the heel portion of the metal.

2. A shoe having a sole, an upper secured to said sole, said upper comprising a vamp, counter and quarter, a protective lining for said vamp, counter and quarter, a combined stiffener and reinforcement comprising sheets of metallic wire cloth secured to the sole and interposed between the protective lining and said vamp, counter and quarter, and an inside counter member interposed between said protective lining and the heel-portion of the metallic wire cloth.

In testimony that I claim the foregoing I hereunto affix my signature.

GUSTAV F. OCKRASSA.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."