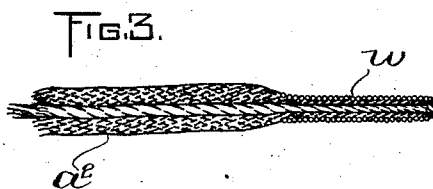
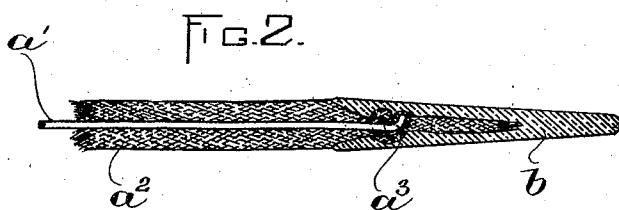
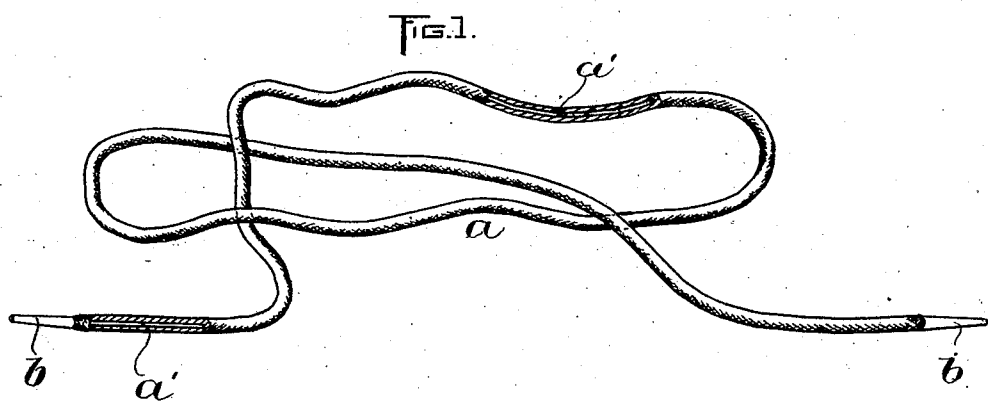


(No Model.)

E. KEMPSHALL.
LACING.

No. 576,056.

Patented Jan. 26, 1897.



WITNESSES:

A. S. Hanson.

P. W. Perzutti.

INVENTOR.

Clayton Kempshall
By *G. Wright Brown*
Att'y.

UNITED STATES PATENT OFFICE.

ELEAZER KEMPSHALL, OF NEWTON, MASSACHUSETTS.

LACING.

SPECIFICATION forming part of Letters Patent No. 576,056, dated January 26, 1897.

Application filed November 21, 1896. Serial No. 612,978. (No specimens.)

To all whom it may concern:

Be it known that I, ELEAZER KEMPSHALL, of Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Lacings, of which the following is a specification.

This invention has for its object the production of a new lacing; and it consists in the novel features of construction and relative arrangement of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claims.

Reference is to be had to the accompanying sheet of drawings, forming a part of this application, in which like characters indicate like parts wherever they occur.

Figure 1 represents a front elevation of a lacing constructed in accordance with my invention, a portion thereof being shown in section in order to illustrate the arrangement of the several parts. Fig. 2 represents a detail sectional view, on an enlarged scale, of the tip of the lacing. Fig. 3 represents a sectional view showing another form of tip.

Referring to the drawings, in the embodiment of my invention therein shown and selected by me for the purpose of illustrating the same a represents a lacing comprising a continuous core a' , which is preferably a cord of hemp or other tough fibrous material, and a tubular covering or sheath a^2 , of lacing fabric, woven in the usual way. Any desired mechanism may be employed for weaving the sheath a^2 about the core a' .

b b represent tips affixed to the ends of the core and sheath in any suitable way. The tips may be of plastic material molded about each end of the core and sheath and secured in place by the interlocking of the plastic material with the meshes of the fabric, or, as

shown in Fig. 2, by the engagement of said material with an enlargement a^3 , formed by making a knot in the end of the lacing.

The tips may be of any other suitable nature and may be composed of pieces of wire w , wound helically around the ends of the sheath, as shown in Fig. 3, the core being extended into or through the parts of the sheath enveloped by the tips, so that both the core and sheath are firmly secured to the tips, it being important in all cases to have a secure connection between the ends of the core and the tips.

The core not only increases the tensile strength of the lacing, but forms a cushion or backing for the portions of the sheath that bear on the lacing-hooks of a shoe and to a considerable extent protects said portions from the wear and abrasion that usually attend the bearing of a shoe-lacing on the edges of a lacing-hook.

I claim—

1. As an article of manufacture, a lacing comprising a tubular woven body or sheath, tips affixed to the ends thereof, and a continuous flexible core attached at its ends to the tips and extending through the tubular sheath.

2. As an article of manufacture, a lacing comprising a tubular woven body or sheath, a continuous non-metallic flexible core within the sheath, and tips interlocked with the ends of the core and sheath.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 19th day of November, A. D. 1896.

ELEAZER KEMPSHALL.

Witnesses:

C. F. BROWN,
A. D. HARRISON.