

No. 682,008.

Patented Sept. 3, 1901.

F. A. WEGNER.  
CATTLE GUARD.

(Application filed Aug. 25, 1900.)

(No Model.)

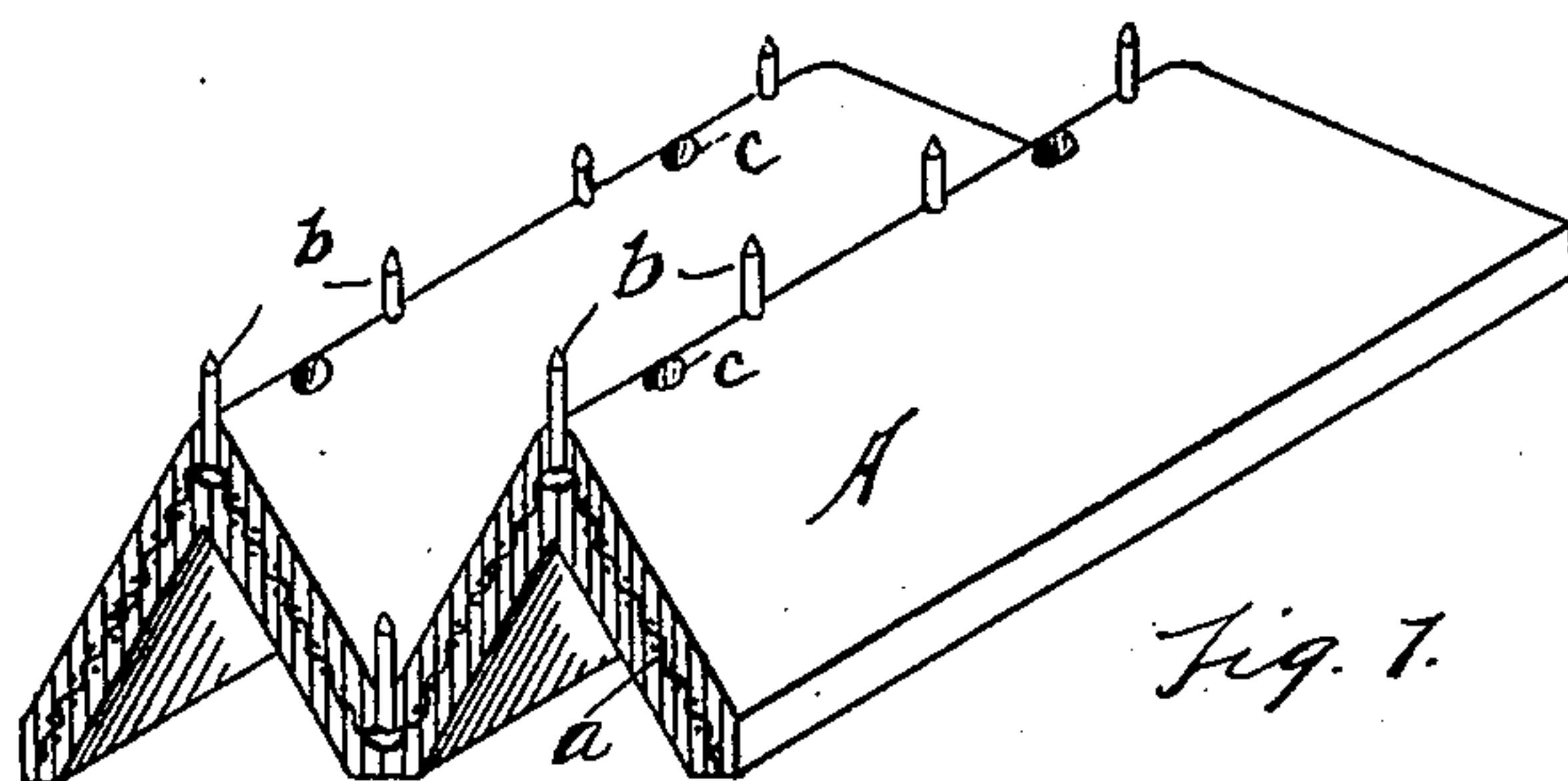


Fig. 1.

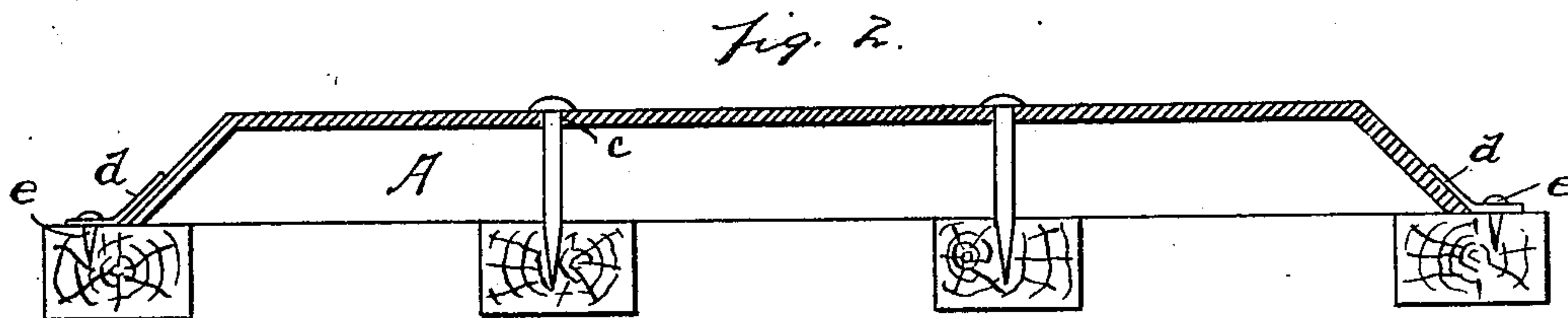


Fig. 2.

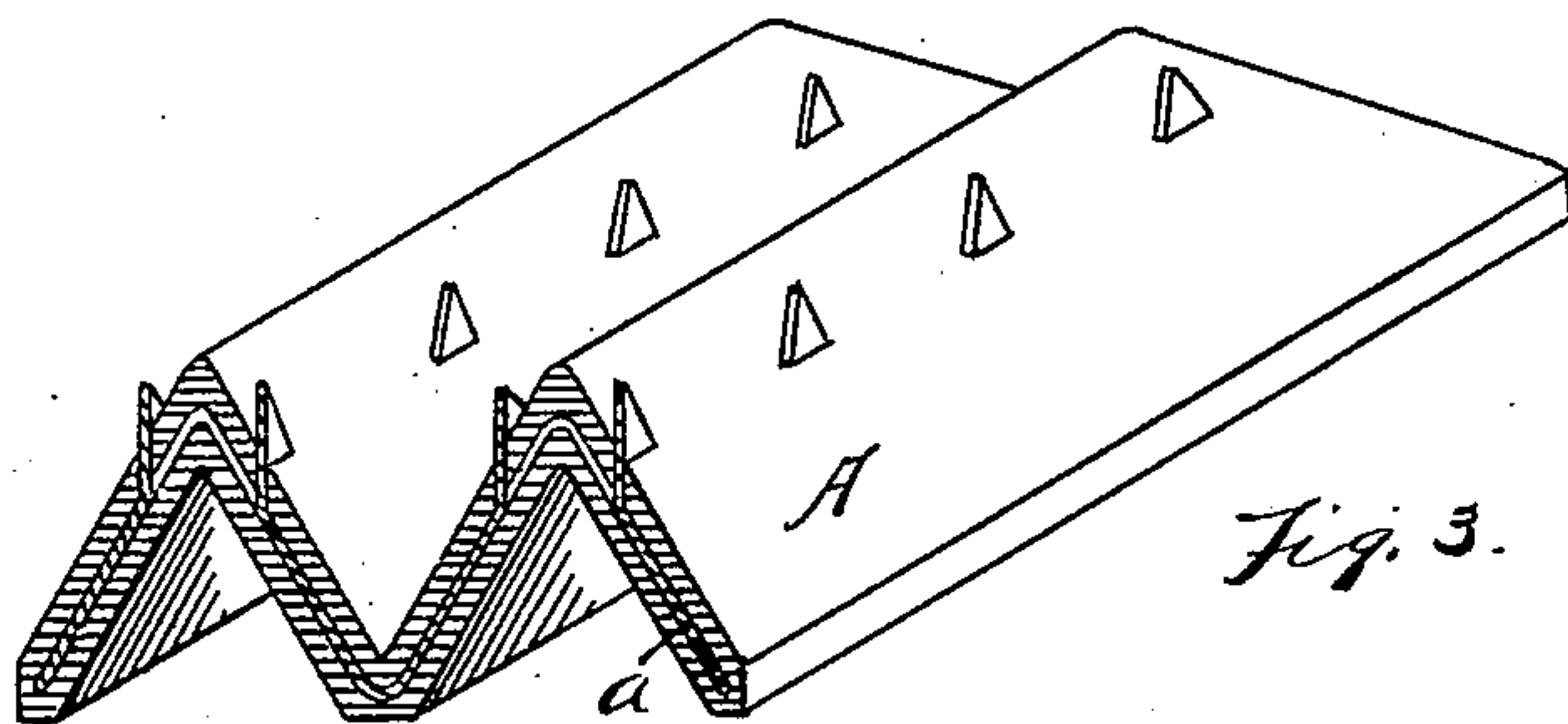


Fig. 3.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

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## CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 682,008, dated September 3, 1901.

Application filed August 25, 1900. Serial No. 28,041. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK A. WEGNER, a citizen of the United States, residing at Detroit, in the county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Cattle-Guards; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to cattle-guards for railways, and has for its object an improved cattle-guard made from a combination of cement or concrete and metal. The metal serves as a foundation to prevent the concrete from being broken or destroyed and also as a holder for the points or sharp projections that are used to prevent animals from walking over or along the guard.

In the drawings, Figure 1 is a perspective showing a portion of the cattle-guard. Fig. 2 is a longitudinal section of one rib of the cattle-guard. Fig. 3 is a perspective showing a different style of point or top projections from that shown in Fig. 1.

In the drawings similar letters refer to similar parts.

The guard is composed of cement or artificial stone structure A on the foundation a of wire fabric or perforated iron in which the perforations are of the character to allow the cement to pass through and form a homogeneous structure, with the fabric or perforated iron embedded therein.

b b indicate sharp points or prongs secured to the fabric and extending upward through the cement or artificial stone.

The guard is made in ridges and troughs with sharp upward-extending angles and with

sharp downward-extending valleys and with sharp angles on the outer and under side. At the upper angles or near the upper angles are the projections b b, which serve to prevent animals from entering on the guard, and there are also provided holes c, through which spikes may be driven to secure the guard to the ties. Generally, however, it will be preferable to secure the structure to ties by means of bar-plates d and spikes e, driven through the bar-plates rather than through the substance of the guard itself.

Fig. 3 shows a form in which the upward-projecting points are below the summit of the extreme upper angles of the guard in a position where they are efficient to prevent animals from walking along the guard, but also in position where they are not liable to be struck by hanging bars from passing trains, and consequently not liable to be bent down and rendered useless.

What I claim is—

1. In a cattle-guard, the combination of a fabric foundation, a cement or artificial stone coating on both the under and upper sides of said fabric, the structure being formed in ridges with intervening troughs, and corresponding hollows under the ridges, substantially as described.

2. The combination of a fabric foundation, a coating of cement or artificial stone on each side thereof, and projecting points secured to the foundation reaching through and projecting above the cement coating on the upper side thereof, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

FREDERICK A. WEGNER.

Witnesses:

JAMES B. MORAN,  
JOHN N. GOODRICH.