

No. 635,176.

Patented Oct. 17, 1899.

T. K. MUIR.

ELASTIC FILLING FOR WOOD PAVEMENTS.

(Application filed Aug. 5, 1897.)

(No Model.)

Fig. 1.

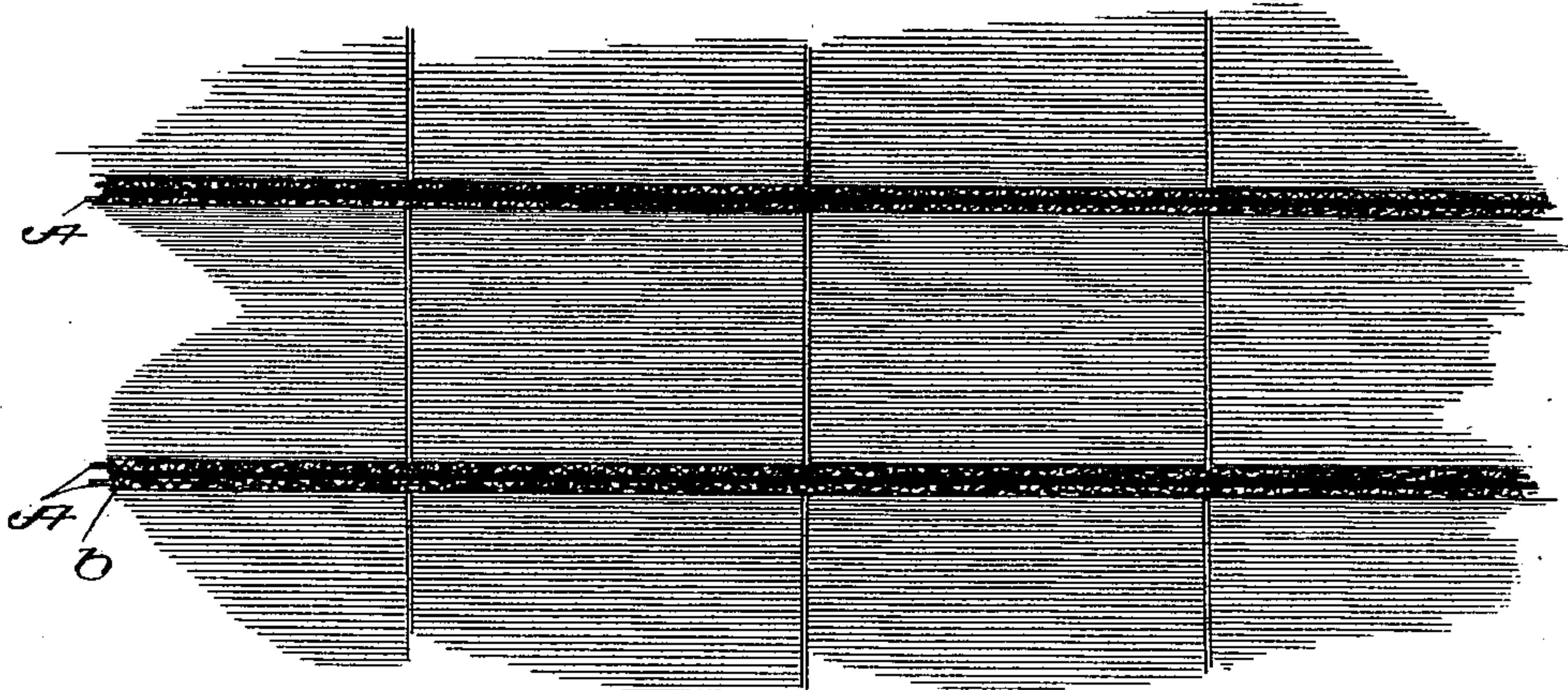


Fig. 2.

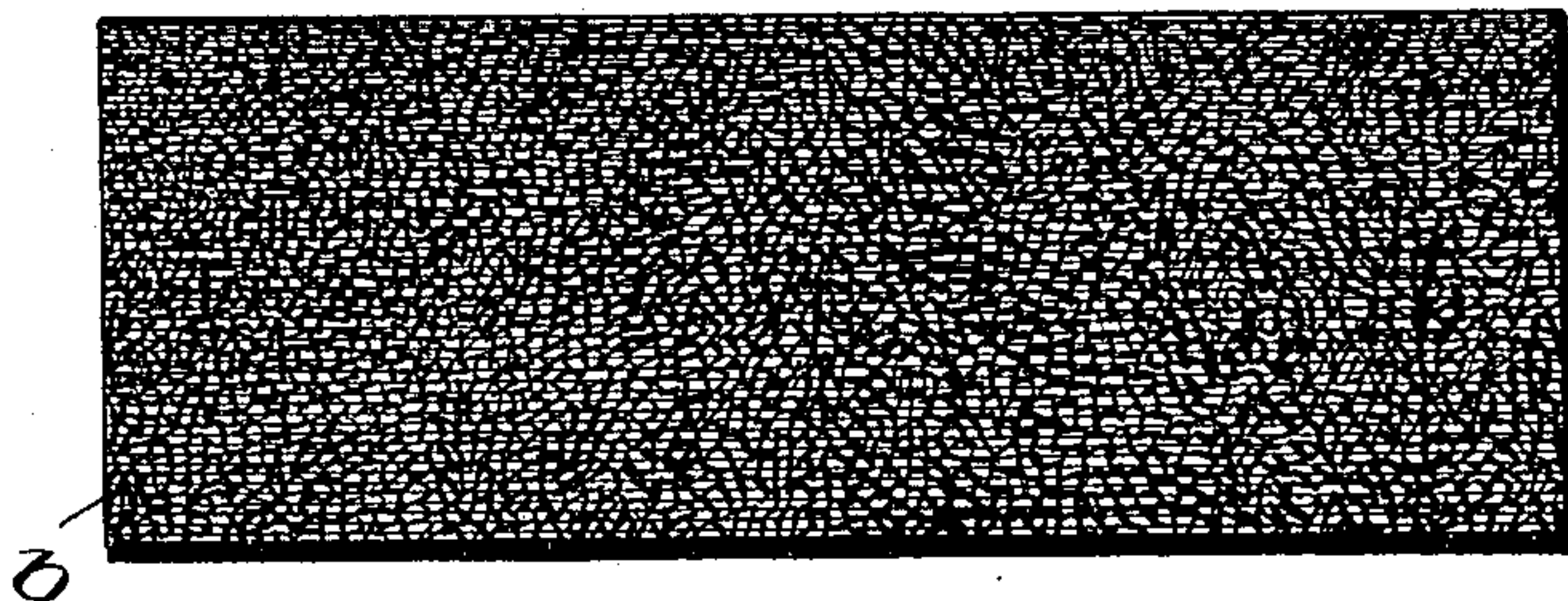
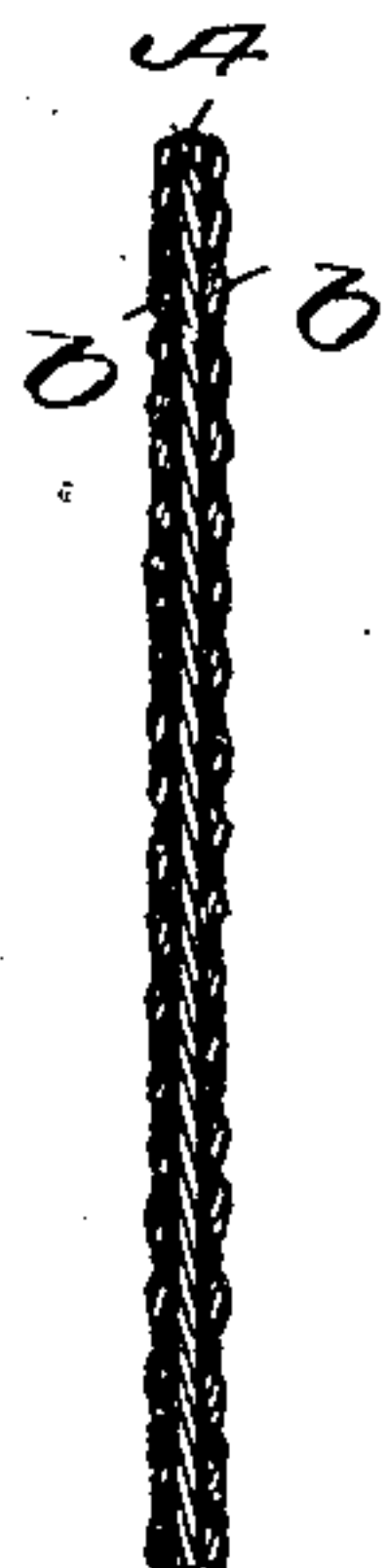


Fig. 3.



Witnesses

Johnnie
R. W. Bishop

Inventor

Thomas K. Muir

by *J. J. Geisler*
his Attorney

UNITED STATES PATENT OFFICE.

THOMAS K. MUIR, OF PORTLAND, OREGON.

ELASTIC FILLING FOR WOOD PAVEMENTS.

SPECIFICATION forming part of Letters Patent No. 635,176, dated October 17, 1899.

Application filed August 5, 1897. Serial No. 647,242. (No specimens.)

To all whom it may concern:

Be it known that I, THOMAS K. MUIR, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Elastic Joint for Wood Pavements, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The object is to present a non-absorbent elastic filling for the transverse interstices existing between the opposing sides of the blocks when *in situ*, the filling to be of such character that while firmly uniting the blocks it will permit expansion and contraction due to atmospheric conditions—as, for example, excessive heat, cold, or moisture—without material detriment to the structure so formed; furthermore, to present a filling which shall afford a uniform bearing for the blocks, from top to bottom thereof when laid, and which shall be sympathetic in its thermal relations to the asphaltum or like waterproof surface coating applied in liquid state to the tops of the blocks, not chilling such coating, but taking up heat and allowing the coating to penetrate to a sufficient depth, and, finally, to present a filling the uniformity of which will be conducive in effecting great evenness in the laying of the pavement.

In the accompanying drawings, forming a part of the specification, and in which like letters of reference indicate corresponding parts, Figure 1 is a view in plan displaying a series of wooden blocks arranged as in paving, the opposing sides of the blocks being united by my improved filling or joint. Fig. 2 is a view in elevation displaying a strip of the filling or joint. Fig. 3 is a view in vertical section through one of the strips.

The filling comprises as a base a strip A, of any suitable warped and woofed flexible absorbent material—such as canvas, burlap, &c.—of the width of the blocks and of convenient length. Both sides of this strip are coated or faced with a composition b, consisting of granular particles of some elastic substance—as cork, sawdust, and the like—which to render it properly adhesive to become firmly attached to the strip and at the same time impervious to moisture is immersed in and coated with asphaltum, tar, petroleum, varnish, or other suitable waterproofing ma-

terial. The granular material thus treated is applied in an even manner to the sides of the strip.

Instead of treating the granular material in the manner described I may, if preferred, first saturate the strip in any one of the waterproofing substances named and then apply the granular material to the strip. This latter procedure is much simpler than the first named and will answer in most cases. In either case the roughened cellular surface presented by the warp and woof of the fabric will operate firmly to hold the granular substance in position against displacement in use.

In employing my filling in the construction of wood pavements the foundation is laid as usual. The blocks are then laid transversely thereon with their ends in close contact, and between their sides the filling is inserted, and a surface coating of asphaltum or the like is then applied as usual and will penetrate a sufficient distance to make a waterproof covering for the filling. The filling being of uniform thickness, the blocks can be laid very evenly, and as the pressure or bearing of the blocks against each other is evenly distributed the weight which the pavement must sustain incident to the travel of vehicles and the like thereover will be easily borne and the liability of disrupting the pavement by such travel is reduced to a minimum.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

As a new article of manufacture, a filling for the interstices existing between the opposing sides of wooden paving-blocks, consisting of a strip of warped and woofed fabric having, on each side, granular particles of an elastic material held in place by a suitable waterproof substance, the cellular structure of the strip operating to present retaining-points for additionally holding the granular material in place, substantially as described.

In witness whereof I have hereunto affixed my signature, in the presence of two witnesses, this 11th day of June, 1897.

THOMAS K. MUIR.

Witnesses:

M. A. OXER,
T. J. GEISLER.