

No. 897,982.

PATENTED SEPT. 8, 1908.

F. C. KEIGHLEY.
COMPOSITE BEAM.
APPLICATION FILED APR. 4, 1908.

Fig. 1.

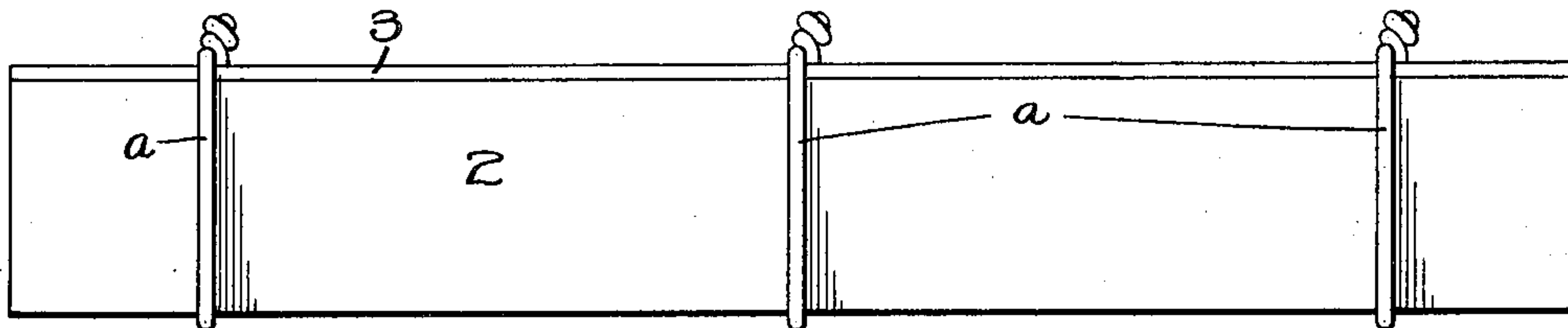


Fig. 3.

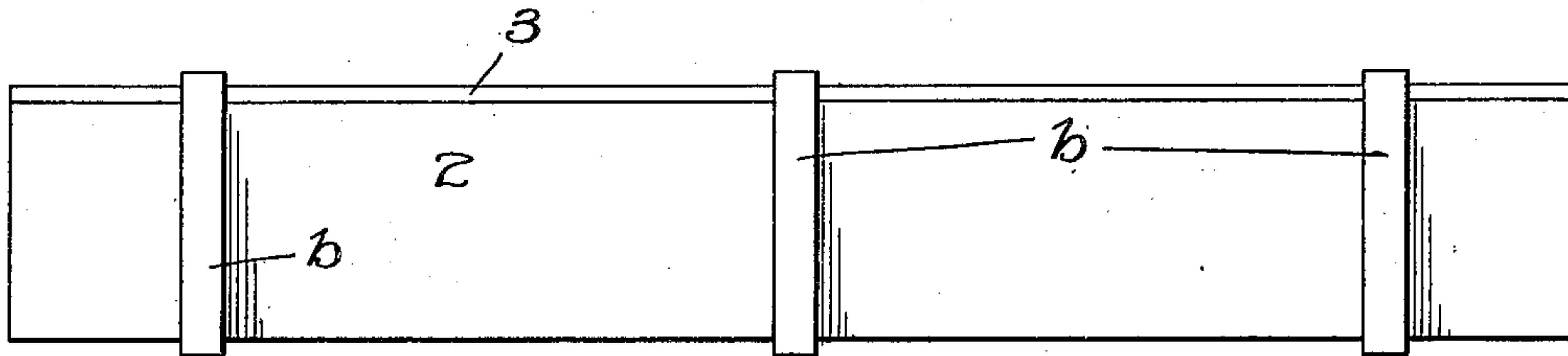


Fig. 2.

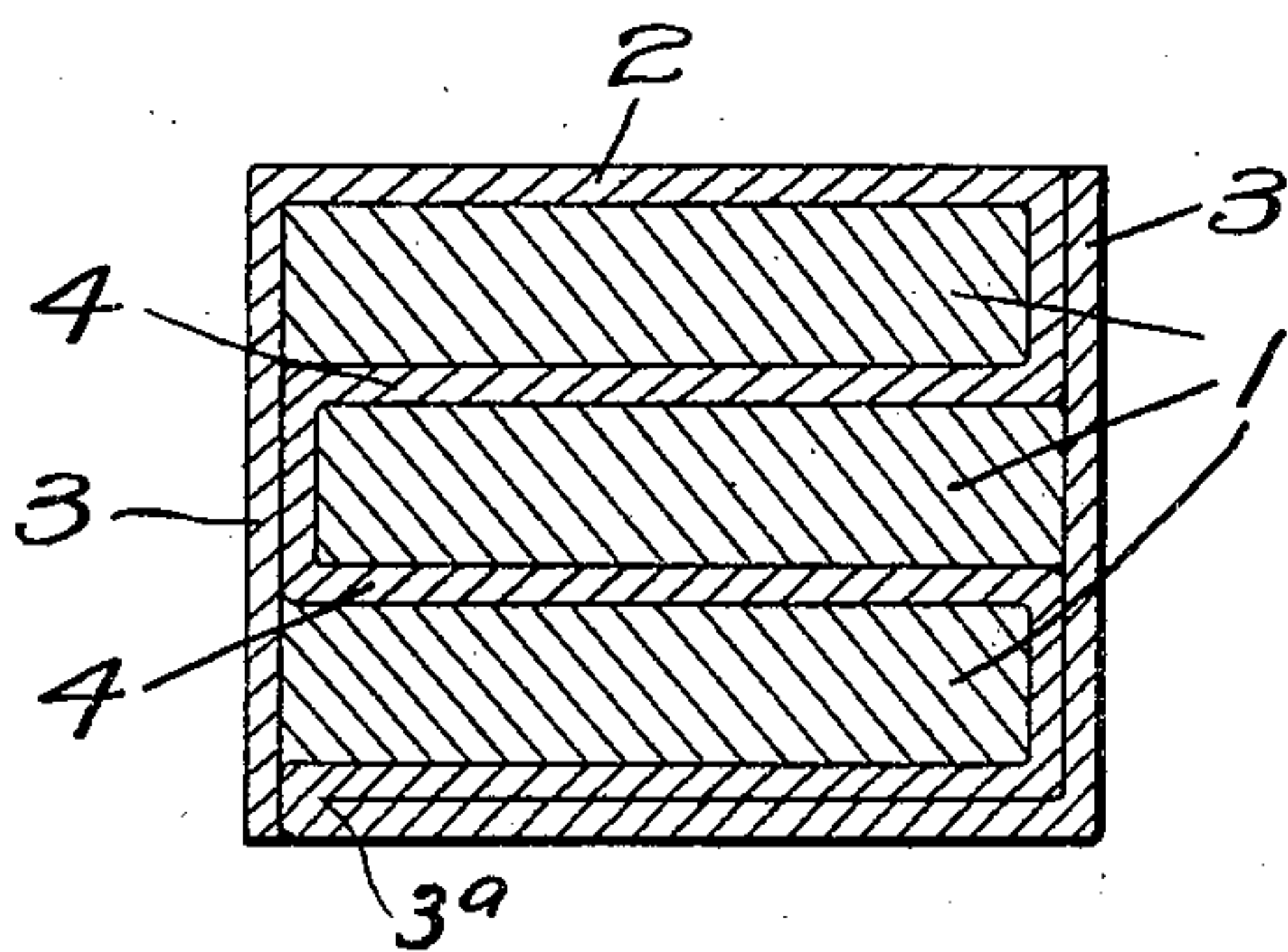
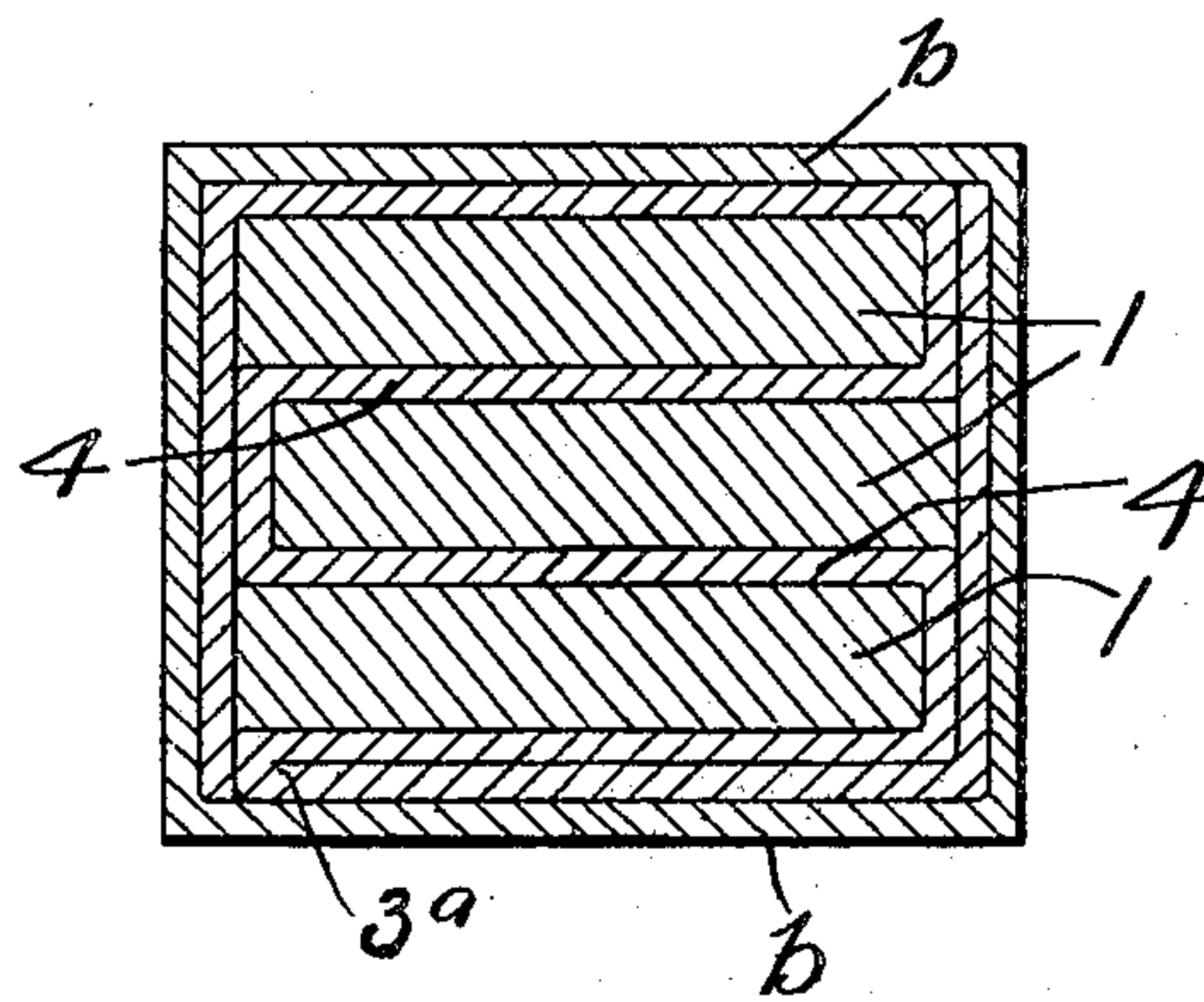


Fig. 4.



Witnesses

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COMPOSITE BEAM.

No. 897,982.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed April 4, 1908. Serial No. 425,106.

To all whom it may concern:

Be it known that I, FREDERICK C. KEIGHLEY, a citizen of the United States, residing at Uniontown, in the county of Fayette and State of Pennsylvania, have invented a new and useful Composite Beam; and I do hereby 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 appertains to make and use the same.

The invention relates to improvement in beams, and has for its object to improve the construction of beams such as are used in buildings, ships and the like.

Another object of the invention is to provide a device of this character consisting of rectangular members of wood cased in sheet metal, and held together by suitable clamps.

In the drawings, Figure 1 is a plan view of a beam constructed in accordance with this invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a plan view of the same beam, showing a modified view of a clamp. Fig. 4 is a transverse sectional view similar to Fig. 2, taken through one of the clamps *b*.

Referring to the drawings, 1 designates a plurality of wooden strips or members which are preferably 3 in number, incased on all sides by a piece of sheet metal 2, which is a continuous piece bent upon itself, as at 3^a, and provided with several other bends as clearly shown in the drawings, the extremities 3 of which are extended as shown and serve to shield and protect the bends and the wooden members or fillers. Between each strip or wooden member is a fold 4 of the sheet metal.

In ordinary use the metallic clamps *a* are

employed which are the quickest and cheapest, but when it is desired to more firmly clamp the elements together the clamp *b* may be used which consists of a rectangular metallic band.

I desire it to be understood that my composite beam may have one or more wooden strips or fillers as desired, and that the size or thickness of either the wood or metal composition may be varied according to the strength required.

Having thus described the invention, what is claimed is:

1. A composite beam comprising a single piece of sheet metal bent upon itself at 3^a, and provided with a plurality of rectangular folds forming a plurality of rectangular spaces, a plurality of rectangular wooden fillers held in said spaces, the said sheet metal having its extremities so disposed as to close said spaces, and a binder for holding the parts of said beam, in a compact form.

2. A composite beam comprising a single piece of sheet metal folded to form upper and lower rectangular spaces and an intermediate rectangular space which is disposed to one side of the first named spaces, a plurality of rectangular wooden fillers held in said spaces, the said sheet metal having its extremities so disposed as to close said spaces, and a wire binder twisted about said beam, so as to hold the parts in a compact form.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK C. KEIGHLEY.

Witnesses:

JNO. BOYLE,
J. G. CARROLL.