No. 745,446. PATENTED DEC. 1, 1903.

H. L. KUBBERNUSS.

MEANS FOR STIFFENING WIRE PLASTER.

APPLICATION FILED MAY 27, 1903.

NO MODEL.

Fig. 1.

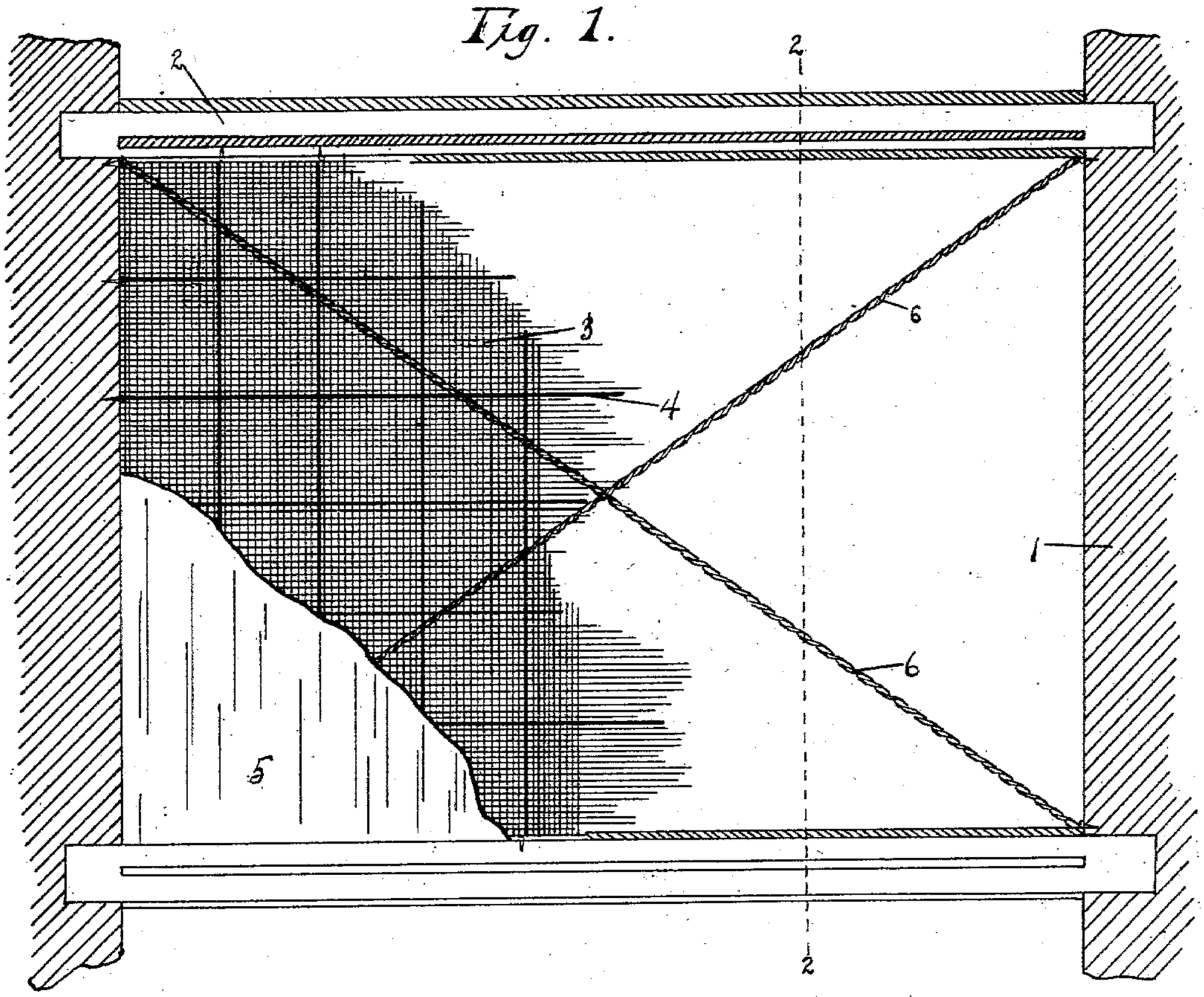


Fig. 2.

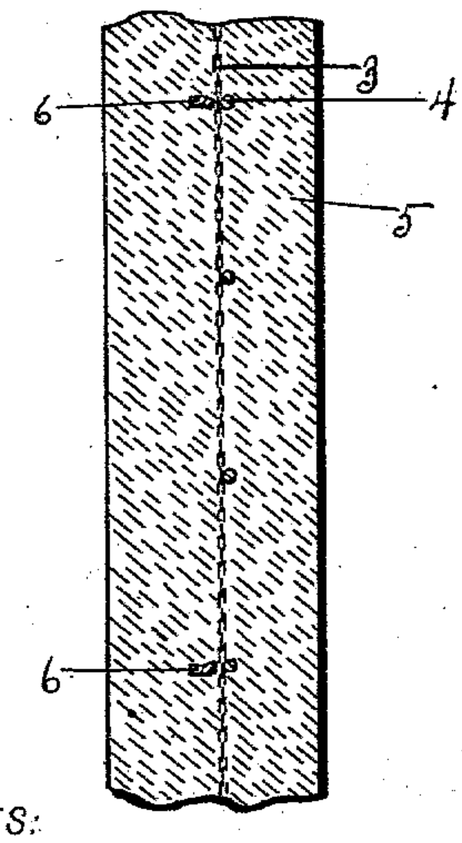
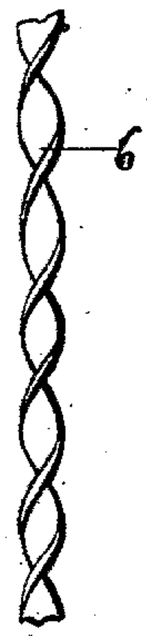


Fig. 3.



WITNESSES:

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No. 745,446. Patented December 1, 1903.

UNITED STATES PATENT OFFICE.

HERMANN L. KUBBERNUSS, OF ST. LOUIS, MISSOURI.

MEANS FOR STIFFENING WIRE-PLASTER.

SPECIFICATION forming part of Letters Patent No. 745,446, dated December 1, 1903.

Application filed May 27, 1903. Serial No. 158,977. (No model.)

To all whom it may concern:

Be it known that I, HERMANN L. KUBBERNUSS, a subject of the Emperor of Germany, residing at the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Means for Stiffening Wire-Plaster, of which the following is a specification.

This invention relates to means for increasing the stability of wire-plaster or similar material, in which wire-netting constitutes a framework or stiffening for sections of plastering.

In the drawings, in which like numbers of reference denote like parts wherever they occur, Figure 1 is a view of a section of plastering in which the joists and laths adjacent to same are shown partly in section and in which the portion of the slab above the stiffening-framework embedded within the slab is mostly broken away. Fig. 2 is a sectional view on the line 2 2, Fig. 1; and Fig. 3 is a detail of the particular means for increasing the inflexibility of the wire-netting hereinafter to be described.

Wire-nettings and other frames of reticulated material have heretofore been used in forming plaster slabs, same being formed either by spreading a plastic composition composed partly of plaster-of-paris on one side of said netting and then similarly plastering the opposite side of said netting or by pouring the plastic mass into a suitable mold over the wire-netting, so as to cause it to adhere to and solidify around the meshes of said netting. It is obvious that while small plaster blocks so formed will possess sufficient strength and rigidity, yet that when the dimensions of the slabs are increased mere wire-netting will prove too pliable and the walls formed therewith will bulge on either side, or sometimes both, because the slabs so formed do not possess the requisite strength and stability. If in the endeavor to overcome this difficulty netting formed of heavier wires is used the weight of the blocks or slabs is so greatly increased as to render it objectionable, and, moreover, it has been found difficult to plaster the composition over such thicker wires. Iron cross-bars adjacent to the netting and running through the slabs have also been used to overcome this difficulty; but it has been found that ceilings and walls constructed in this way are not very durable and soon begin to crack, because of the fact that the iron bars are not pliable enough.

The present invention obviates the difficulties connected with too great pliability and excessive rigidity and surmounts all the difficulties hereinbefore mentioned and prevents the wire-plaster from tearing away from the laths and produces the most satisfactory stiffening.

Referring to the drawings, in which my invention is depicted as in use to strengthen sections of plastering applied to the wooden framework of buildings in which the plastering is done in the usual manner, 1 indicates the upright supports, and 2 the laths or cross-supports, the wire-netting 3 being attached to both the upright supports, as well as to the lateral ones. Rectangular sections of wire-netting 3, reinforced by transverse rods 4, are thus formed preparatory to the plaster 5 being spread on both sides of the said wire-netting and rods. The stiffening-ribs 6, which form the subject-matter of this application for patent, are fastened to one side of said wire-netting 3, and there is preferably a plurality of them, and they may be and preferably are, as shown in Fig. 1, so disposed as to cross said rectangular section diagonally and also to cross each other about the center of said section. Said stiffening-ribs 6 are composed of a resilient material, and preferably this resilient material consists of hoop-iron bent into a spiral form. These stiffening-ribs 6 may be held in position while the plaster is being spread over them and upon the contiguous surface of the wire-netting in any desired manner; but in the drawings I have indicated nails or screws for holding same inserted in the uprights 1.

The best results have been found to result from the employment of a material having the degree of resiliency indicated, it being neither too rigid nor too pliable, and walls and ceilings of large dimensions in which it has been used for stiffening purposes have been found to be as perfect as smaller ones.

The diagonal spirals are shown in the drawings as both located on the same side of the wire-netting; but they may be arranged so

that one is upon each side of the wire-netting.

Having thus described my said invention, what I claim, and desire to secure by Letters Patent, is—

1. A wire-netting used as a plaster-frame stiffened by elastic iron spirals, substantially as described.

2. A section of plastering composed of a solidified plastic mass, strengthened by a wire-netting stiffened by resilient spirals, substantially as described.

3. A section of plastering composed of a solidified plastic mass, having a wire-netting stiffened by resilient iron spirals, substantially as described.

4. A section of plastering composed of a solidified plastic mass having wire-netting and diagonal resilient spirals embedded therein, substantially as described.

5. A section of plastering composed of a solidified plastic mass having wire-netting and transverse resilient spirals embedded therein, substantially as described.

In testimony whereof I have affixed my signature, in presence of two witnesses, this 20th day of May, 1903.

HERMANN L. KUBBERNUSS.

Witnesses:
MAUD E. LETCHER,
TERESA MURPHY.