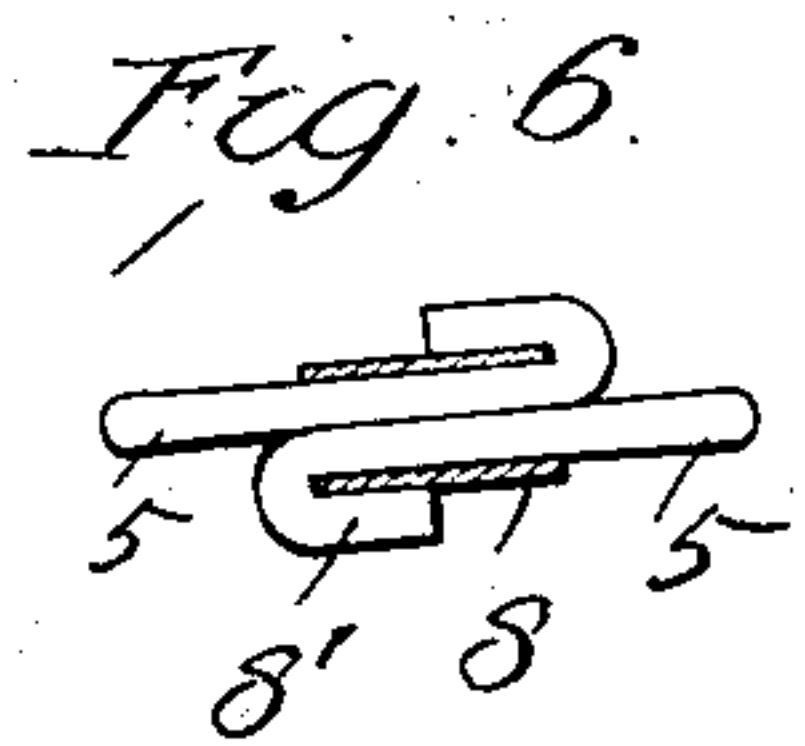
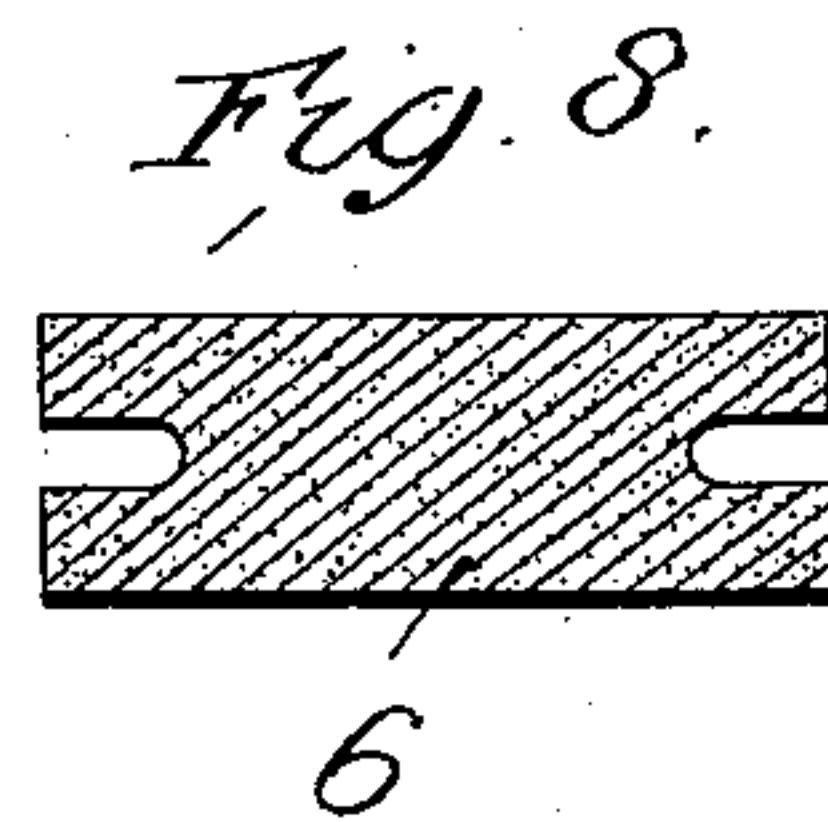
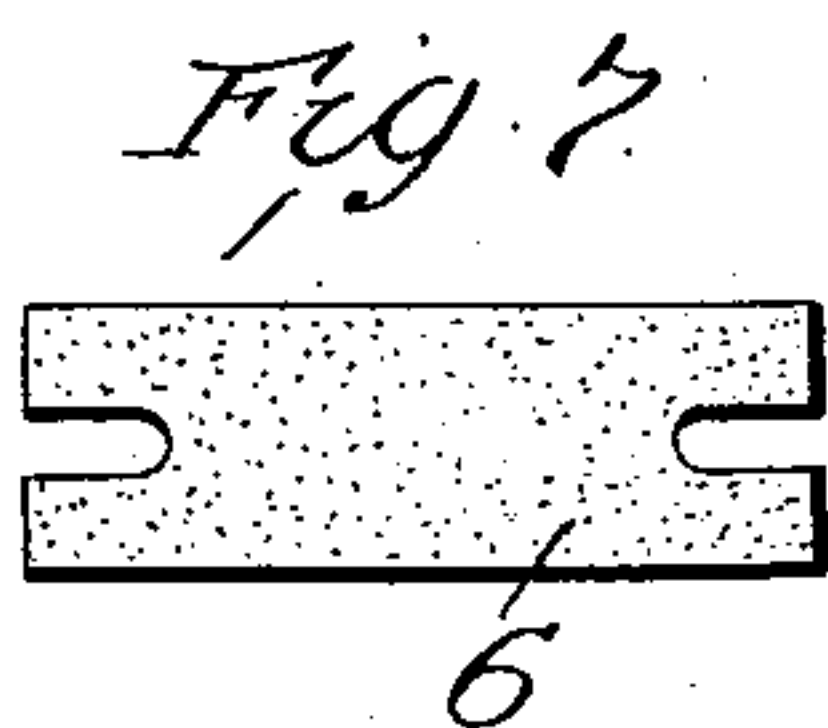
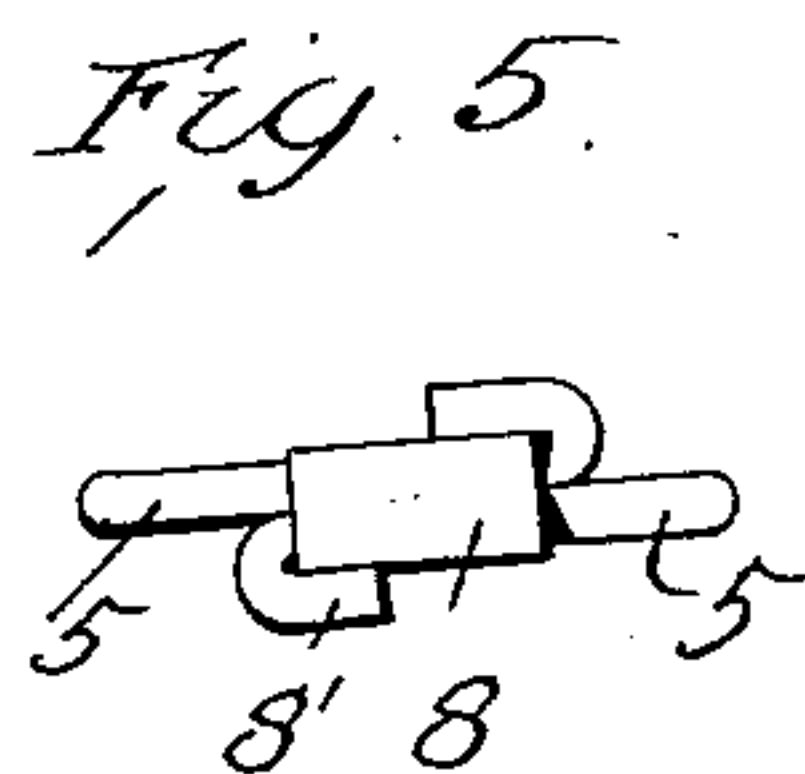
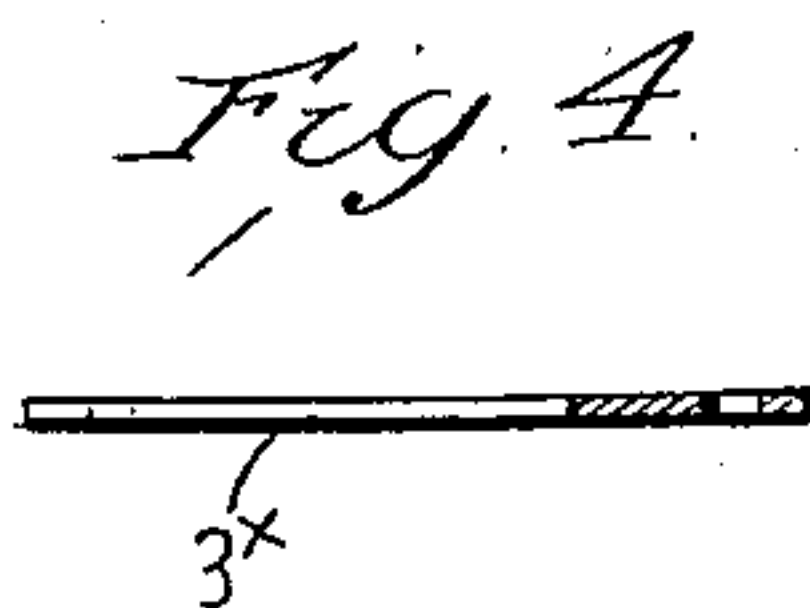
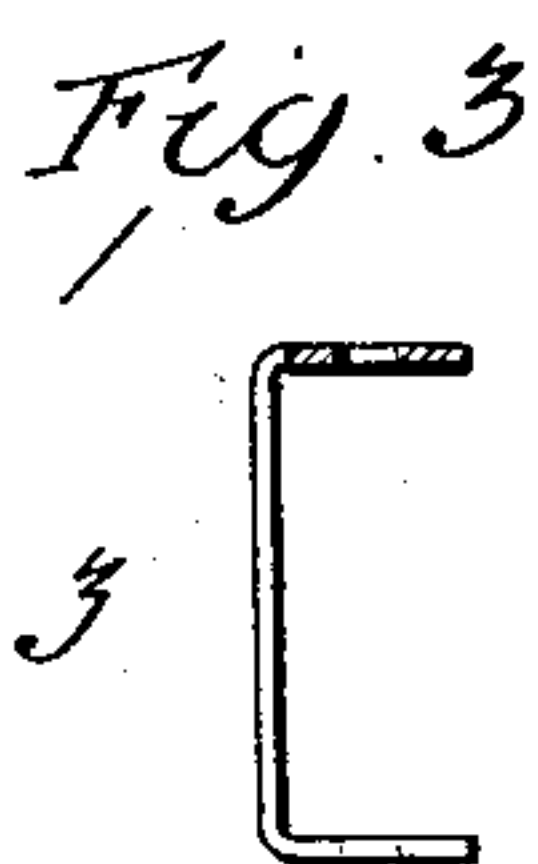
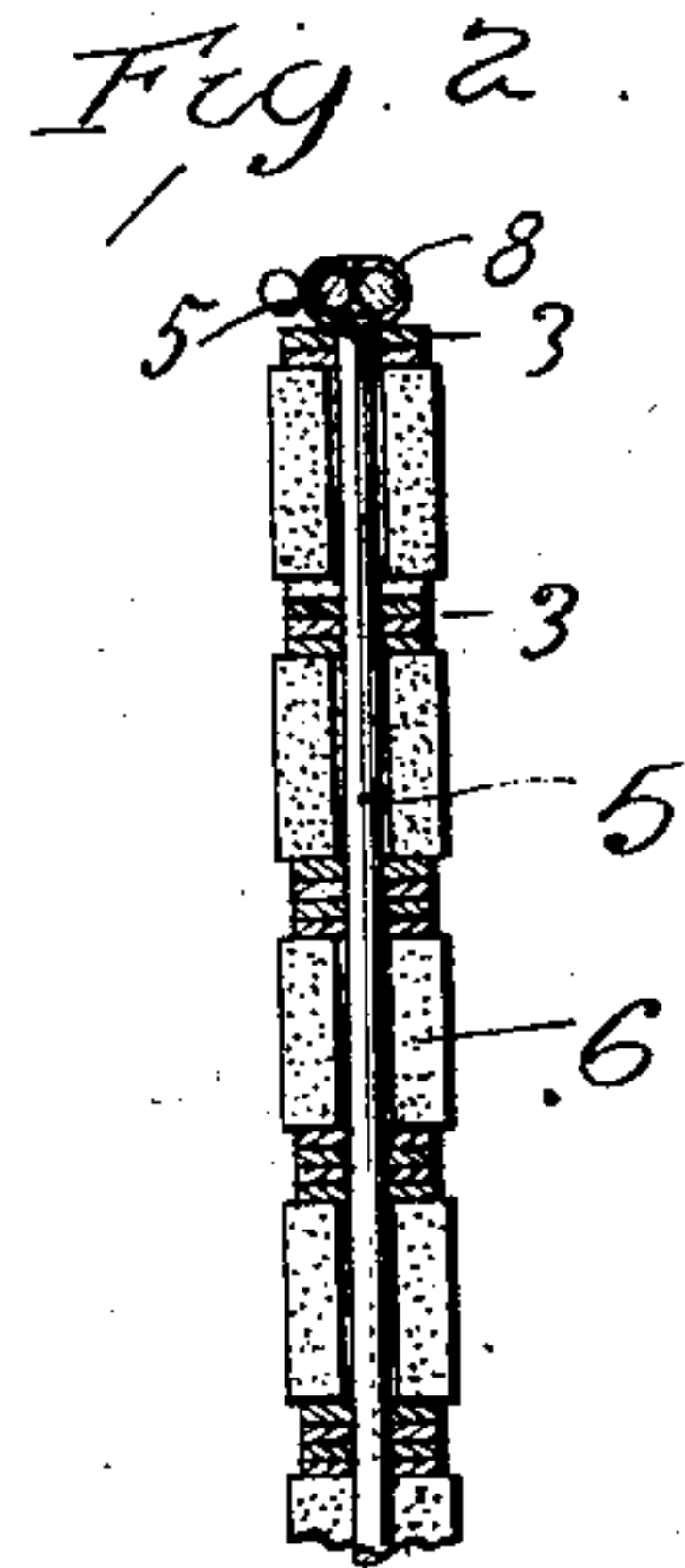
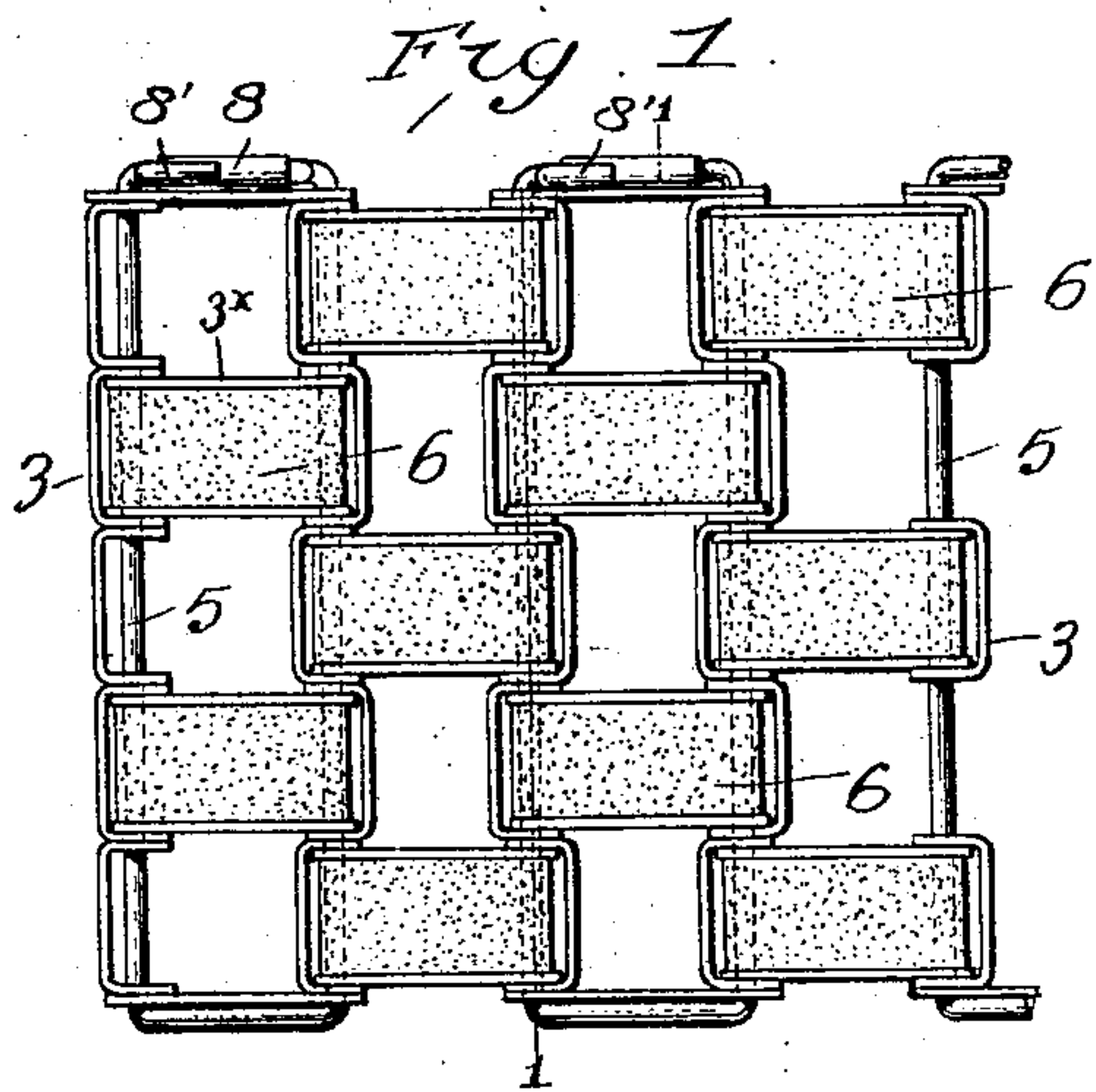


C. E. BEDIENT.
METALLIC FABRIC.
APPLICATION FILED MAY 2, 1906.

900,697.

Patented Oct. 13, 1908.



Attest:
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UNITED STATES PATENT OFFICE.

CLARENCE E. BEDIENT, OF CHICAGO, ILLINOIS.

METALLIC FABRIC.

No. 900,697.

Specification of Letters Patent.

Patented Oct. 13, 1908.

Application filed May 2, 1906. Serial No. 314,880.

To all whom it may concern:

Be it known that I, CLARENCE E. BEDIENT, citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Metallic Fabrics, of which the following is a specification.

My invention herein described relates to metallic fabrics for mats and other purposes. It is of that class in which the fabric is composed of units made of thin flat bars or strips of metal connected by wires or rods uniting the units and forming hinges therefor, whereby the fabric is made flexible.

My invention relates to the construction of these units; to a yielding filling therefor; and to means for connecting the wires or rods by means of which the units are held together.

My said invention is illustrated in the accompanying drawings in which,
Figure 1 shows a plan view of a portion of such fabric sufficient for illustration. Fig. 2 is a section on line 1—1 of Fig. 1. Fig. 3 shows in edge view one part of a unit partly broken away, and Fig. 4 is a like view of the other part of such unit partly broken away. Fig. 5 is a plan view enlarged, of the coupling, and Fig. 6 a section thereof longitudinally through wires and coupling. Fig. 7 is a side, and Fig. 8 a cross section of a form of the filling block.

The units are composed of two simple forms of parts. Of these, one indicated at 3, is a piece of thin metal strip with the ends bent in the same direction at right angles and perforated in the same line. This same form is used for the two ends of the unit. The sides of the unit are composed of the same kind of strip as the ends but consists of a plain strip 3^x with the ends perforated so that the perforations therein register with the perforations in the end strips when the side strips are lapped upon the ends as shown in Fig. 1. The parts are united to form the units and the units are united to form a group or mat by means of wires or rods 5, which pass through the holes.

This construction is such that the same wires unite the parts of the unit and the units of the group and these wires are located in every instance across and near the ends of the units. This forms a simple and substantial construction and one which is easy to make and assemble, since for the main body of the fabric there are only two kinds of

parts, the bent end strips and the flat side strips.

It will be observed that the units form rectangular pockets with an opening at top and bottom and having bars across the ends. I combine with this construction a suitable filling block, shown at 6. It may be made of wood, felt, rubber or rubber compound, or of a fibrous composition. Preferably, I form the blocks of a material known as rubberoid roofing in sheet form cut as shown in Fig. 7, with end notches, so that when assembled and set on edge they form blocks with transverse grooves across their ends adapted to engage with the transverse rods so that they may be set into place and be held by the engagement of the rods with the grooves. I do not, however, limit myself to the material, nor to these notches in the blocks as they may be held in the units in other ways. Preferably I make the blocks of a greater depth than that of the metal fabric so that the surface of the blocks may rise above that of the metal parts.

It will be observed that the rods or wires project to the outside of the units and have their ends bent towards each other so as to overlap. I have devised a new mode of connecting these ends in which heretofore some difficulty has been found. It is necessary to connect these ends securely and it is desirable to have a neat finish in the connection and that the connection may be readily and certainly made. To this end I form the coupling by means of a short piece of tube 8, preferably flattened and fitted to be slipped over the lapped ends of the wires, which, when the sleeve is thus in place should extend at the opposite ends beyond the sleeve. These ends, as indicated at 8', are then bent in opposite directions, back upon the sleeve. This is easily done, and makes a perfectly secure connection, neat and convenient. This connection of the wires or rods may be applied at any point in the fabric.

In connection with the filling blocks, I do not limit myself to the particular shape of the cavities or open spaces inclosed by the metallic strips, as these may be varied and still inclose the blocks or filling.

When the blocks are in place they are bound and held in the units by the metal strips which closely contain and protect them, and this is of special importance when

the blocks are composed of the rubberoid sheets aggregated and contained in the units. The rubberoid is a cheap material and has a special advantage in the clinging effect it has upon the sole of the shoe.

I claim:

1. A metallic fabric composed of transverse rows of units, each unit comprising two U-shaped members arranged with their open side facing each other and the two plain side pieces the units of one row alternating with the spaces between the unit of the adjacent row and the adjacent U-shaped members of adjacent rows facing in opposite directions and the rods passing through the oppositely facing U-shaped members, substantially as described.

2. In a metallic fabric the combination of units composed of metal strips, rods or wires connecting said units, said rods or wires being spaced apart, and blocks having forked opposite ends engaging the said rods or wires and being removable therefrom, and replace-

able into connection therewith without removing the said rods, substantially as described.

3. In a metallic fabric composed of metal strips forming units and connected by rods or wires, a coupling consisting of a sleeve with the ends of the rods overlapping therein and extended beyond the ends of the sleeve and bent back thereon.

4. A fabric composed of units, each consisting of two rectangular pieces and two plain pieces extending between the rectangular pieces with rods passing through said rectangular and plain pieces and blocks fitting within the said units and having notched ends engaging the rods, substantially as described.

In testimony whereof, I affix my signature in presence of two witnesses.

CLARENCE E. BEDIANT.

Witnesses:

EDWARD N. SARTON,
HENRY E. COOPER.