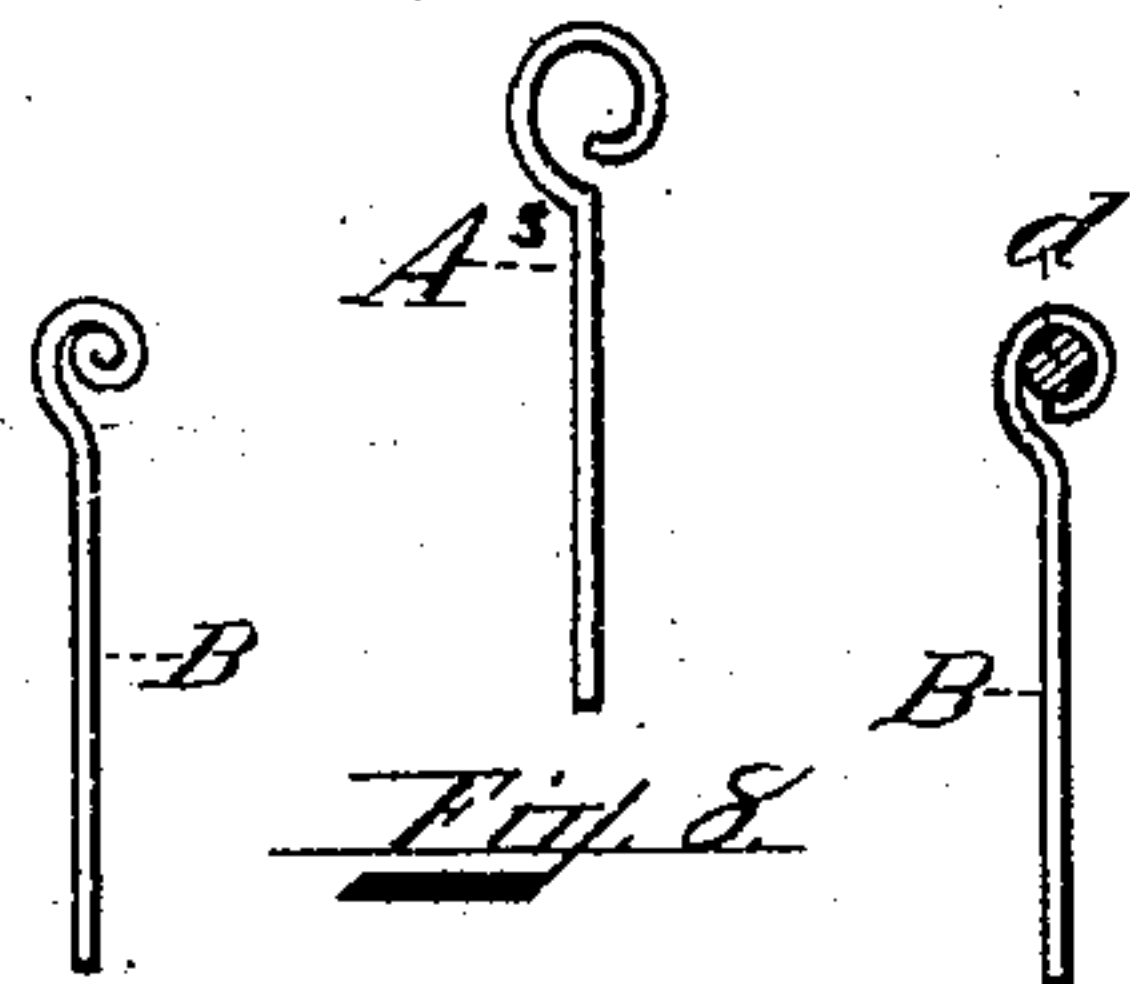
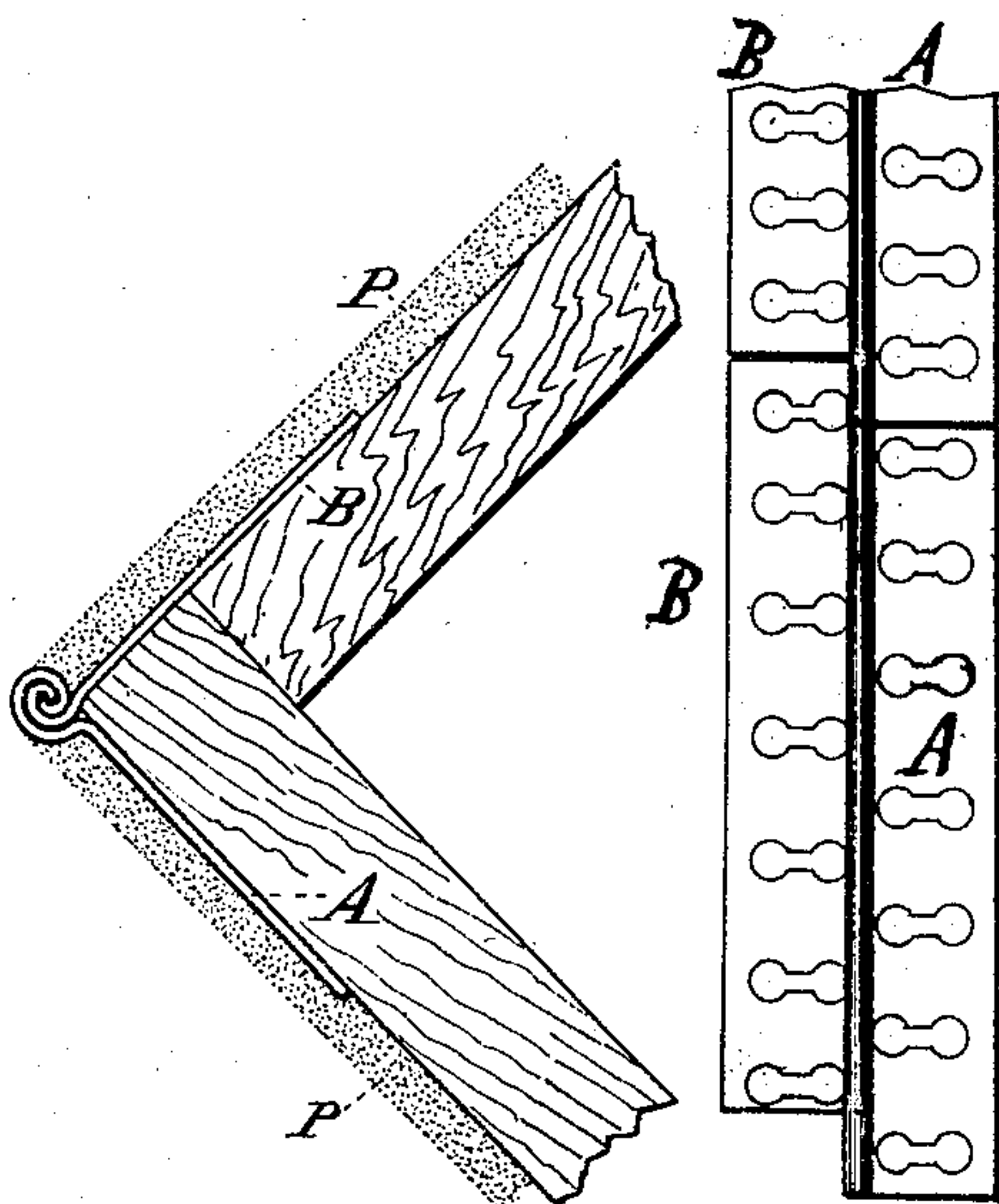
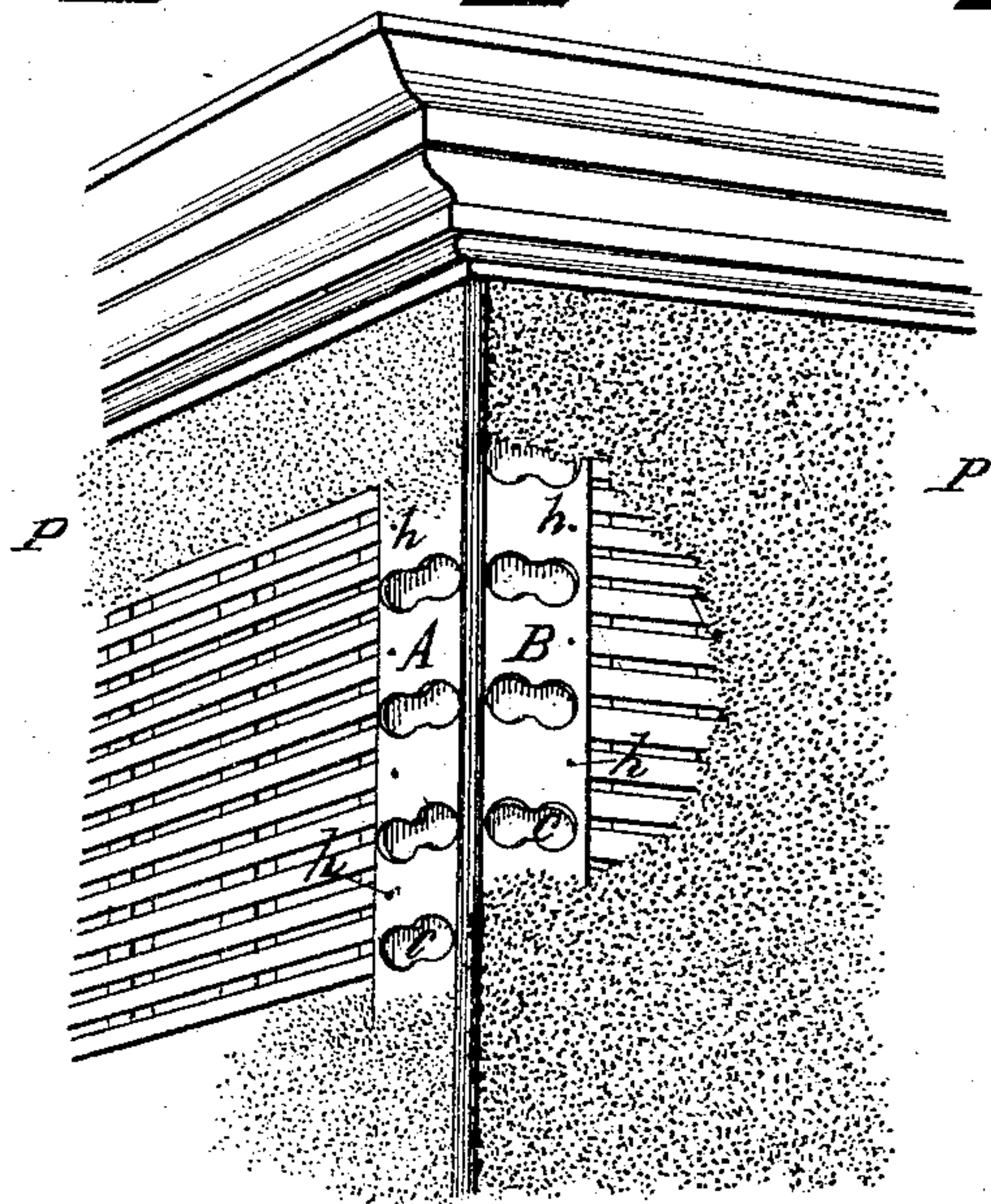
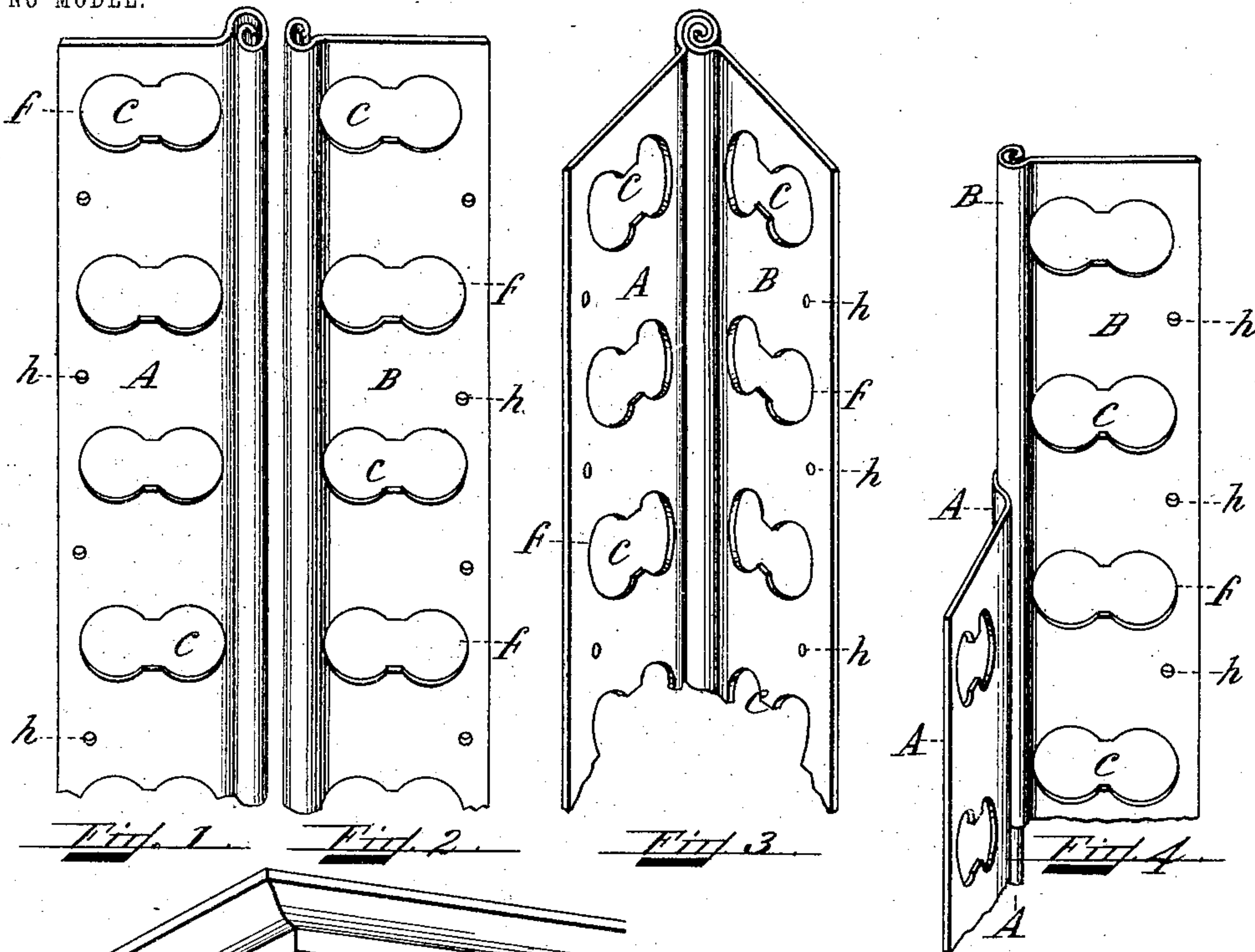


No. 771,577.

PATENTED OCT. 4, 1904.

F. A. SAWYER.  
METAL CORNER BEAD.  
APPLICATION FILED OCT. 19, 1903.

NO MODEL.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

FREDERICK A. SAWYER, OF EVERETT, MASSACHUSETTS, ASSIGNOR OF  
ONE-HALF TO JAMES W. MAGUIRE, OF MALDEN, MASSACHUSETTS.

## METAL CORNER-BEAD.

SPECIFICATION forming part of Letters Patent No. 771,577, dated October 4, 1904.

Application filed October 19, 1903. Serial No. 177,554. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK A. SAWYER, a citizen of the United States, residing at Everett, in the county of Middlesex and State of Massachusetts, have invented a new and useful Metal Corner-Bead, of which the following is a specification.

My invention relates to improvements in devices for holding or supporting the plaster at the corners in buildings and for making a finished edge that will be neat and enduring for a long time; and the objects of my invention are, first, to provide an unbroken edge between the necessary breaks in the plaster-line; second, to produce a corner-bead which may easily be adapted to any thickness of plaster used in building; third, to produce a bead which may easily be bent to fit any desired curve in the plaster-line; fourth, to provide a corner-bead which shall be of low cost as well as of efficient construction and attractive appearance. I attain these objects by the devices illustrated in the accompanying drawings, in which—

Figure 1 represents one side or part, and Fig. 2 represents the other side or part, of my invention. Fig. 3 represents the two parts of my invention united with their ends together, while Fig. 4 represents the two parts united, but extended so as to cover a space somewhat longer than the length of either part. Fig. 5 represents a portion of a corner-wall in a plastered building, shown in perspective, with the bead in place extending from the basement to the cornice. Fig. 6 shows a transverse section of the same corner. Fig. 7 and Fig. 8 are plans or sections of the two parts of the invention. It will be noticed that the curved edges of both parts are rolled in the same direction, as that is the preferred construction. Fig. 9 shows a modification in which a wire is inserted in the rolled edge of one of the parts of the device. Fig. 10 shows two lengths of my device connected. The parts of both lengths are extended and united by inserting the male part of one length into the female part of the other length.

Similar letters refer to like parts in all the several views.

Where plaster is used in the construction

of buildings, it has been found very desirable to support the exterior corners in the plaster and to use a support that will give a neat edge and one which will not be easily bent or broken. In the more elaborate buildings where curved lines are used it is very difficult and expensive without metallic beads to produce edges that will be neat in appearance and such as will remain uninjured when subjected to ordinary wear.

I know that many devices have been used to support the corners of plaster-work; but I do not know of any that is constructed like that of my invention or any that will operate as mine will to do the required work efficiently and cheaply.

To make my apparatus, I prefer to use sheets of metal which have been rolled to the desired thickness, usually of about twenty or twenty-two gage. I prefer this thickness for buildings which have high stories and thick plaster; but in some buildings of lighter construction and lower ceilings the metal used may be thinner. These sheets usually come in lengths of ten feet or less. Any length of sheets may be used for my devices; but I prefer to use sheets of ten feet in length, merely, however, as a matter of convenience and lower cost. I cut the sheets longitudinally into strips of about two inches in width. It is not necessary that both sides or parts of my device should be exactly of the same width; but I prefer to have them very nearly two inches in width. These strips are punched, as shown in Figs. 1, 2, 3, 4, and 5, and marked *c c c*. The shape of these holes *c c c* is not necessarily the only shape that can be used. This is the shape which I consider the best. I prefer to make these holes of such a length that they will come within about one-quarter of an inch of the straight edge and very close to the curved side of the strip. They should be about half an inch in their greatest width, and a space of about three-quarters of an inch should be between them. While the strips are in this condition I prefer to have them galvanized or otherwise coated as a protection against rusting.

One edge of each part of my invention is rolled, as shown in the drawings. They all



have the same right-hand turn, but are rolled somewhat differently, as shown in Figs. 6, 7, 8, and 9. The strips marked B are rolled more than those marked A, so that A will slide over B.

As a modification of my device I sometimes insert a wire *d* in the rolled edge of strip B, as shown in Fig. 9. This modified form is used where it is necessary to bend the device in a sharp curve or where great holding strength is needed.

In a great many cases in the putting up of corner-beads the length of the strip is a few inches less than the distance between the grounds. To cut off a short piece from another strip, so as to fill the gap, takes time, labor, and material. With my device this gap can be filled by pushing part B beyond part A, as shown in Fig. 4, making a great saving.

The strips are secured to the building usually by means of the holes *h h* (shown in Figs. 1, 2, and 4) and sometimes through the holes C C.

One of the chief merits of my invention is that my device can be adjusted transversely, so that it may be used with any of the usual grounds. By spreading the two parts to an obtuse angle the bead may be adapted to a thin coat of plaster, or by making an acute angle it may be used with a thicker coat of plaster. This transverse adaptability of my device is a matter of great convenience, utility, and economy.

It has been found necessary to make corner-beads sufficiently stiff and solid to withstand the weight of the wet plastering, the corroding effects of the dampness to which they are exposed, the rough blows coming from the plasterers' tools, and other hard usage. To meet this requirement and to protect against these probable dangers, I have made my corner-bead with at least two, and preferably three, thicknesses of metal at the exposed corner. If a wire is not used, I prefer to have the edge of the interior part B rolled sufficiently to have two thicknesses of metal in the part which is within the rolled edge of A.

Another of the chief merits of my invention is that I can make the necessary joining of two pieces of corner-beads so that the point of contact will hardly be seen, and yet the point of junction will be nearly as strong as any other. To accomplish this purpose, I slide both parts A, one away from and other over the point of contact, so that the part A of one piece shall overlap the part B of the other piece. In Fig. 10 this is shown. This makes the point of junction much stronger and neater than it would be if the two lengths were merely butted together.

As the plaster-work of most buildings ought to be so put up as to remain for many years, the corner-beads should be of such a character and be put up so as to support the plaster during

many years. I have found that rolling the metal will not crack the galvanizing so as to expose the metal to rust as a sharp bend would. Even if rust should find one point of attack in my bead the many thicknesses at the junction of the parts would maintain the integrity of the bead so that it would hold up the plastering for many years. I do not wish to limit my invention to the use of the process of galvanizing, although that is the best that I know. Any process that will coat the material of my device so as to protect it from rust and other corroding influences would answer the purposes.

When the corner-beads are to be put up around the edges of arches the outer rims of A and B should be cut from the holes C C C, as at *f f f*. This cutting will enable my device to be bent to conform to the edge of any arch. When any corner-bead is used on low interior arches, great strength in the bead and careful fastening are needed, as most of the great weight of the wet plastering must be upheld by the bead. The great strength of my bead, especially when the wire is used, is one of the merits of the invention.

As a matter of detail I wish to call attention to the desirability of making a sharp reverse curve in the rolling of the part A at *s*. (Specially shown in Fig. 8.) This sharp curve gives a good line for the edge of the plaster and helps to hold it in place.

I know that metal corner-beads adapted to be fastened to both sides of a corner have been made, used, and patented. I do not, therefore, claim a metal corner-bead broadly enough to include such corner-beads.

What I do claim, and desire to secure by Letters Patent, is—

1. A corner-bead for plasterers' use made of two strips of thin metal, each strip having a rolled edge; both strips being so rolled that the rolled edge of one may be slid within the rolled edge of the other and the two parts be adjustable, longitudinally and transversely while being set in permanent position, substantially as shown or described.

2. A corner-bead for plasterers' use having two parts, each with a rolled edge, and a wire inserted within the rolled edge of part B; the part A being so constructed that its rolled edge may slide over the rolled edge of B, substantially as shown or described.

3. A metal corner-bead for plasterers' use, made in two parts one edge of each part being rolled in the same direction; the rolled edge of one part being small enough to slide within the more open rolled edge of the other, so that the two parts shall be adjustable, longitudinally and transversely, substantially as shown or described.

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