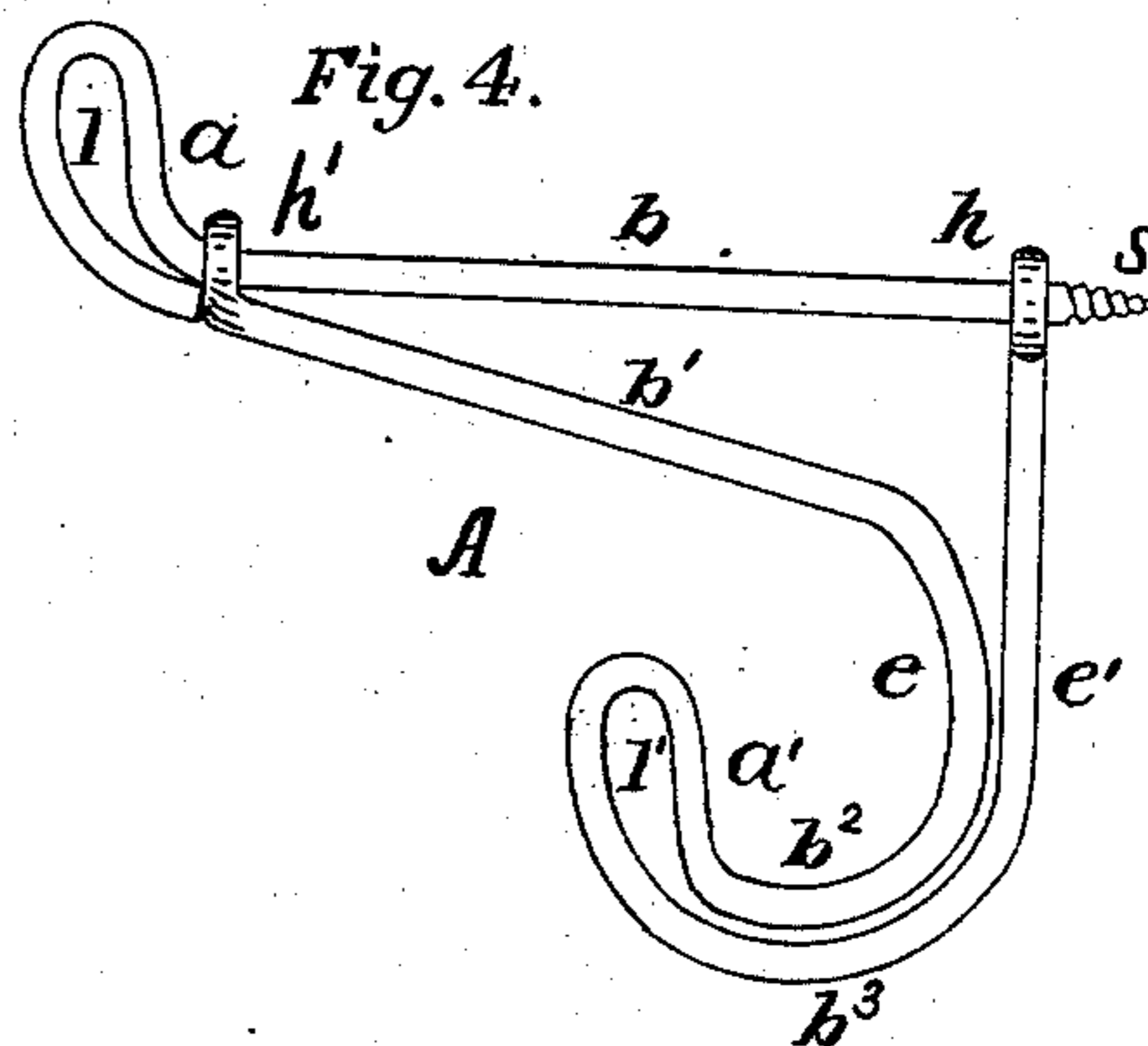
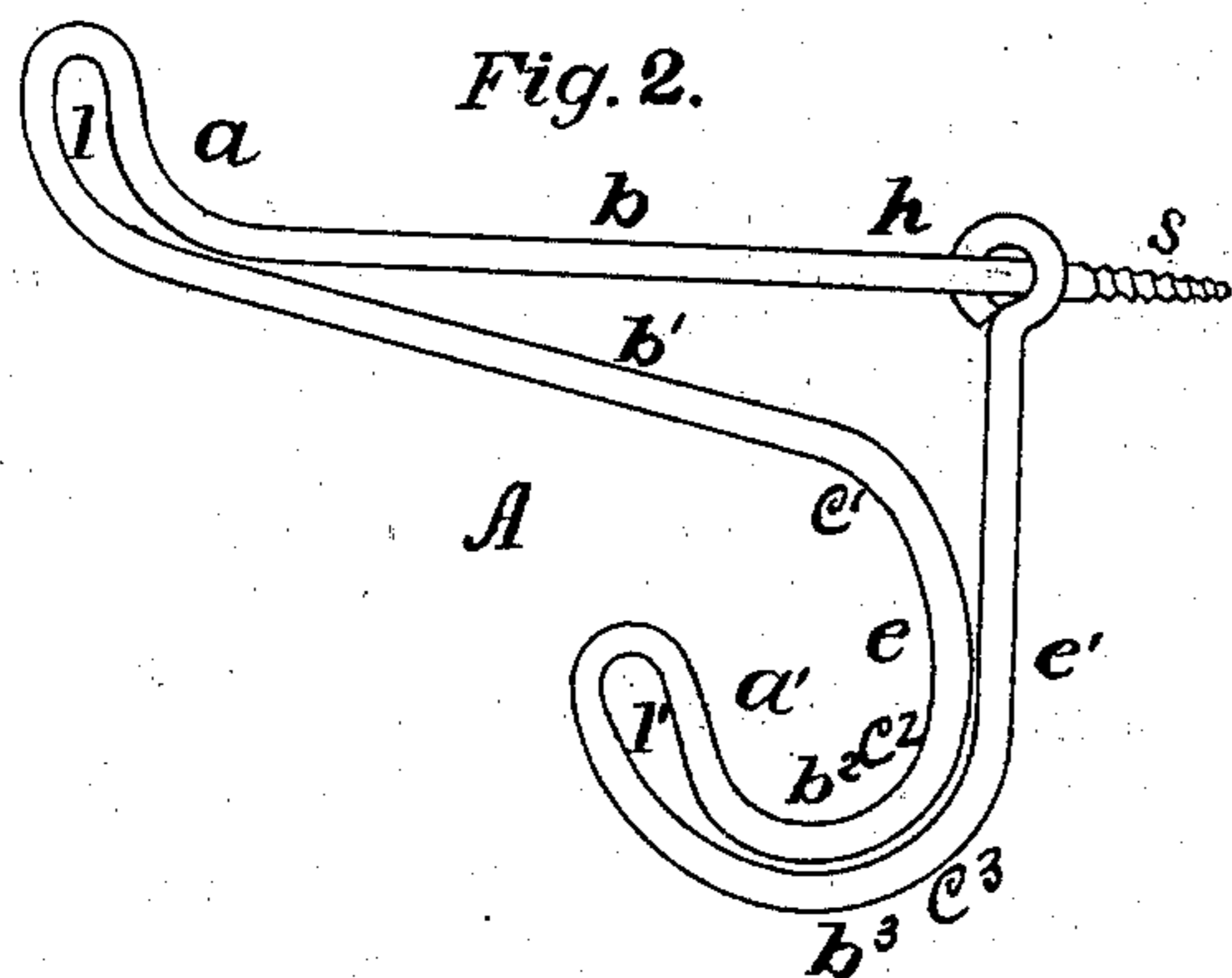
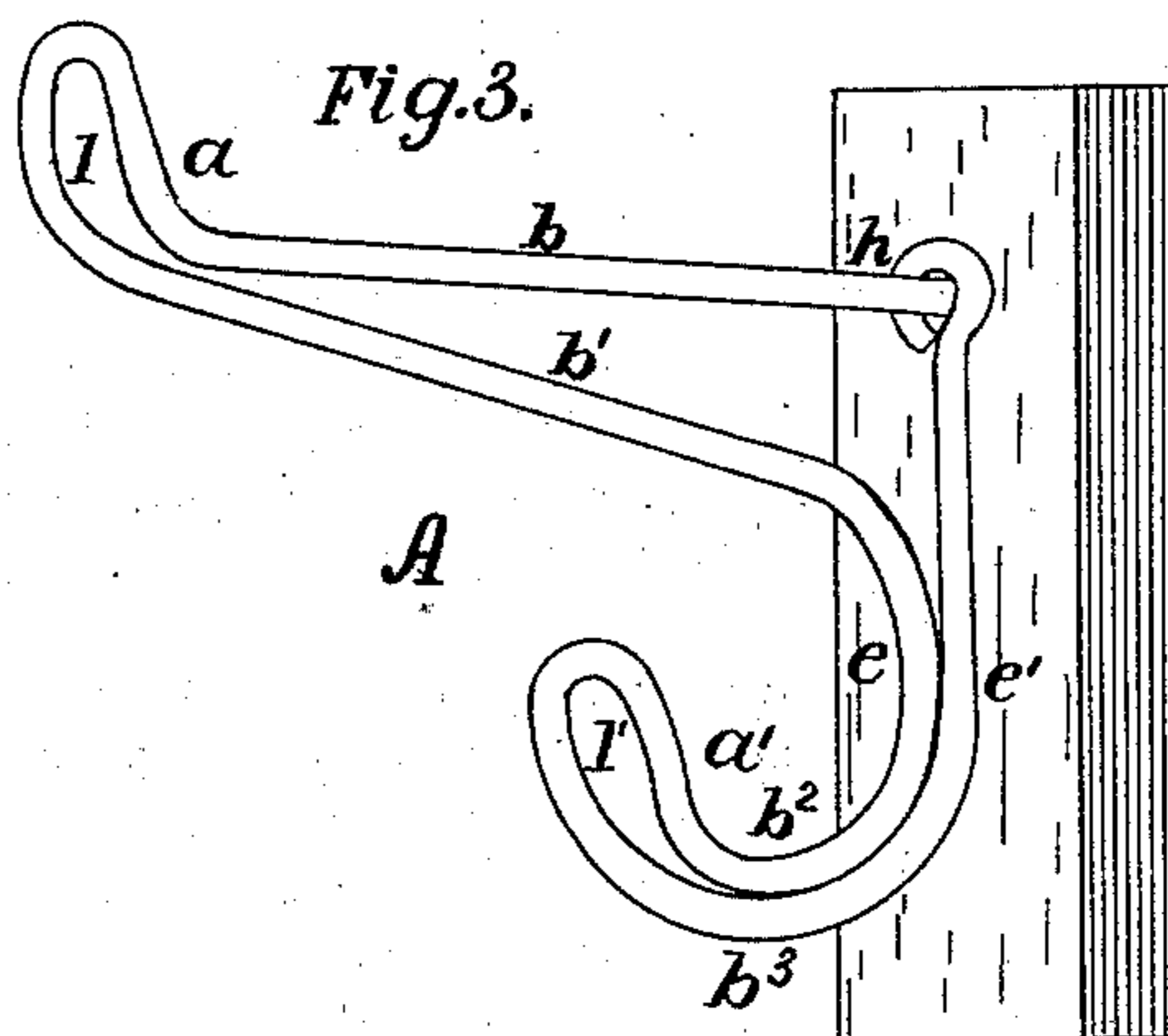
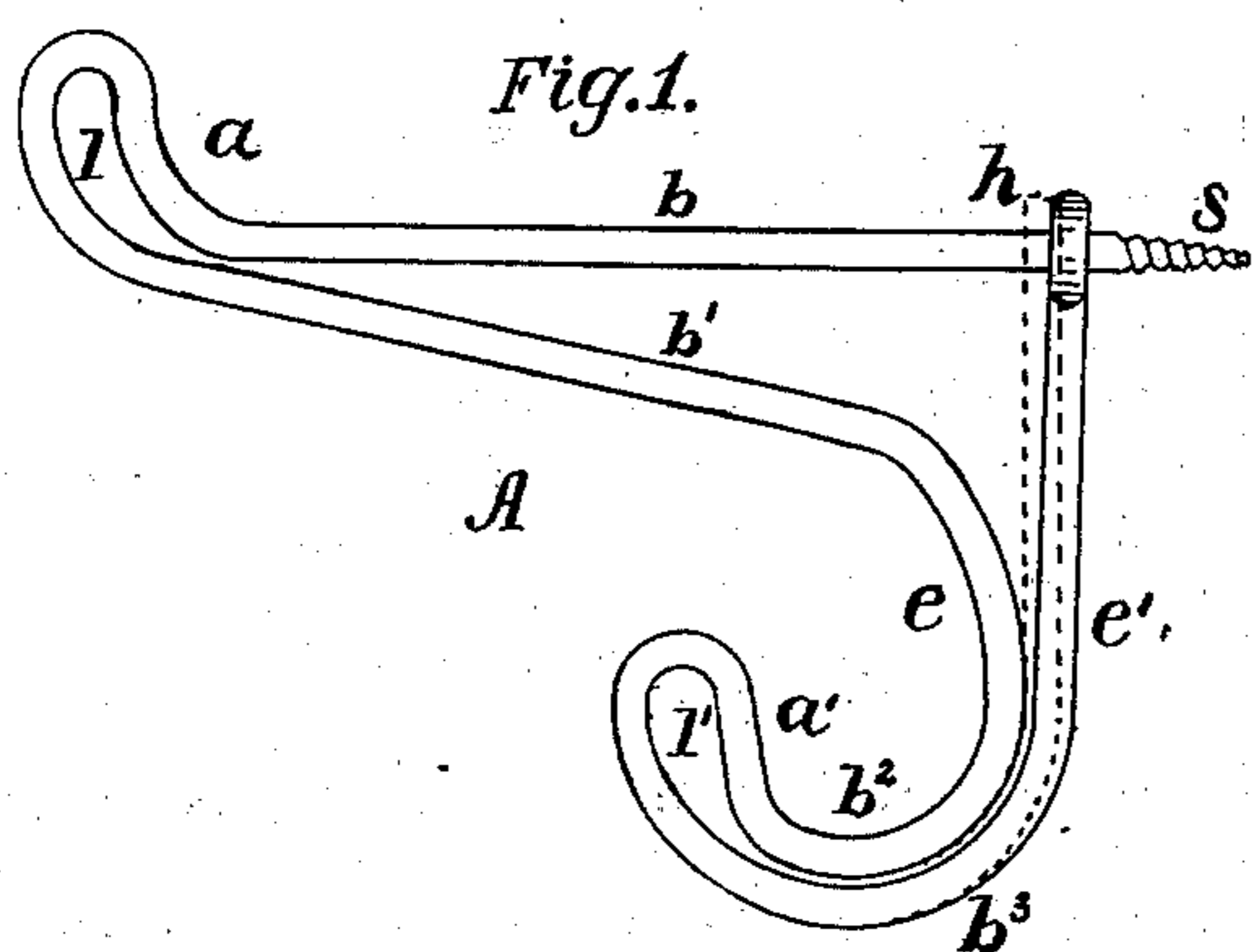


(Model.)

P. MILES.
CLOTHES HOOK.

No. 280,062.

Patented June 26, 1883.



Witnesses:
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Inventor:
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att'y-

UNITED STATES PATENT OFFICE.

PURCHES MILES, OF BROOKLYN, NEW YORK.

CLOTHES-HOOK.

SPECIFICATION forming part of Letters Patent No. 280,062, dated June 26, 1883.

Application filed December 12, 1881. (Model.)

To all whom it may concern:

Be it known that I, PURCHES MILES, a citizen of the United States, residing at No. 202 Skillman Street, Brooklyn, New York, have invented a new and useful Double Hook or Supporting Device, (for which I have obtained no foreign patent,) of which the following is a specification.

My invention relates to improvements upon the invention shown in the Letters Patent of the United States No. 225,942, granted to me March 30, 1880, and also upon the invention shown in another application filed on the same day herewith; and the objects of my present invention are, first, to do away with the bracket-plate; second, to supply cheaper and better substitutes to perform the functions of the bracket-plate and the screws, whereby the screw may be made continuous with or an integral part of the hook, and still the hook may be screwed down to a proper bearing, with the hook standing in the proper vertical plane; third, to cheapen the cost of manufacture; and, fourth, to provide a portable hook.

As hooks have hitherto been made, whether made of cast metal or otherwise, in which the screw is made an integral part of the hook, so as to permit the putting up of the same without the use of loose or independent screws, it has been found difficult, if not impossible, to bring the base, shoulder, or bearing part of the hook down solid upon the wall or strip, with the arm or arms of the hook in the proper vertical plane. In such hooks repeated attempts will almost invariably fail to bring the base down with the solidity required to aid or relieve the screw in supporting its burden, with the body of the hook in the proper plane, and without stripping the thread formed in the wood. Such hooks meet with little favor in the trade, although cheaply made and sold. I avoid these objections by placing a spring-bearing in such relations to the hook, the screw, and the wall or strip that the screw may be turned, either in soft or in hard wood, after the spring-bearing strikes, far enough to bring the body of the hook into the vertical plane and obtain proper supporting-bearing to aid or relieve the cross-strain upon the screw, and without stripping the thread in the wood. In some instances more than one turn may be necessary, in others less, according to

circumstances. I attain these objects by the mechanism illustrated in the accompanying drawings, in which similar letters refer to similar parts, and Figure 1 is a side view of the hook; Fig. 2, a front view; Fig. 3, a side view of the hook in place; Fig. 4, a modification.

The part marked A in the drawings represents the entire hook, and is composed of one continuous piece of wire, preferably steel, bent substantially in the form shown, and having the following elements, viz: first, a long arm or hook, *a*; second, a short arm or hook, *a'*; third, the connecting extension *e* between the long and the short arm; fourth, the return extension *e'*, and fifth, the eye *h* and the screw-point *s*. The long arm *a* is composed of the two branches *b* and the brace *b'*, formed by looping the wire or bending it back on itself at the loop *l*. The short arm *a'* is composed of the two branches *b²* and the brace *b³*, formed by looping or bending the wire back on itself at the loop *l*. The brace *b³*, instead of being turned outward at the outer end to form an eye, is turned inward and under the extension *e*, forming a return extension, *e'*, upon the end of which the eye *h* is formed around the straight end of the branch *b*, which branch terminates in the screw-point *s*. In turning back the extension *b'*, I take pains to prevent contact between *e* and *e'*, and also more or less between the branches *b²* and the brace *b³*, thereby obtaining a spring action from the loop *l'* along the brace *b³* and the extension *e'* to the eye *h*. The purpose of this is to give a spring-bearing for the hook upon the extension *e'* when the screw is properly forced into the wood, as shown in Fig. 3. The extension *e*, as well as the extension *e'*, is yielding and not rigid. This yielding quality comes into play both in attaching the hooks and in their use as hooks. The eye *h* of course is large enough to have free motion upon the branch *b* for this purpose. The screw may be put upon the end of the extension *e'*, turned down for that purpose, and the eye *h* may be put on the end of the branch *b*, thereby reversing or exchanging the positions of these parts; but this might sacrifice the spring action and would make an inferior hook. The function of the eye *h* is to give a bearing for the hook when the screw *s* is forced into the wood. Being made yielding, and not firm, like a solid shoulder on the

branch *b*, it will give and allow the screw to be forced home, with the short hook directly under the longer one, without difficulty and without wearing the surface of the wood, the eye *h* giving a trifle for that purpose, as shown in dotted lines in Fig. 1. The eye *h* is, in fact, a yielding collar around the branch *b*, and assists the short or lower hook in supporting its burden, since it grasps the branch *b* close up to the wood, where it is least liable to bend it; and the roughened rear side of the yielding bearing, as shown in the drawings, also assists in supporting the burden, especially where the wood is soft, and where the roughened surface or its projecting parts are driven into the wood by a blow after the hook is in place. The same feature aids in resisting any tendency of the hook to turn because of its having only one point or screw attachment. In the absence of the eye *h* the yielding extension *e'* will perform the same office, and whether the eye *h* be present or absent, the extension *e'* gives the elastic bearing for the hook, both in putting the hook up and in practical use of the same.

Instead of wire, strips of sheet metal may be used, and formed substantially in the same manner. In this invention, as compared with that shown in a simultaneous application, the first bend of the branch *b* is omitted and the last bend of the brace *b³* is reversed, the brace being extended under the extension *e*. This hook, provided with a gimlet-pointed screw, may be readily put up without the use of other tools, and as readily taken down, when desired—as in moving, &c.—and it is adapted for use as a clothes or wardrobe hook, or as a bird-cage hook, or as a harness-hook, &c., by making suitable changes in the dimensions of the parts.

I do not desire to confine myself to continuous wire or strips of sheet metal or bars, since it is evident that when two or more pieces

may be used in substantially the same formation they may be secured together so as to act in substantially the same way.

When it is desired for any reason—as where there is not room to turn the whole hook—I modify the construction, as shown in Fig. 4, by cutting the branch *b* at its forward part, forming its end so made into an eye, *h'*, turned around the branch *b* and acting as a collar, in which that branch rests, and may be turned by means of the loop *l* as a thumb-piece to operate the screw without turning the rest of the hook. A sharp point may be substituted for the screw *s*; but I prefer the screw.

A portion of the subject-matter of the original application herein having been withdrawn and embraced in a subsequent application, Serial No. 69,421, filed August 15, 1882, I hereby disclaim the same as to this application to the extent set forth in the new application, and any Letters Patent to be granted therein.

I claim as my invention—

1. A double hook composed of the following elements: the arm *a*, consisting of the branch *b* and brace *b'*, the arm *a'*, consisting of the branch *b²* and brace *b³*, the yielding extensions *e* and *e'*, the eye *h*, and the screw *s*.
2. A double hook composed of the following elements: the arm *a*, consisting of the branch *b* and brace *b'*, the arm *a'*, consisting of the branch *b²* and brace *b³*, the yielding extensions *e* and *e'*, the eye *h*, and the screw *s*, the wire having the bends *e'* *e²* and the bend *e³* reversed, and the loops *l* and *l'*, or their equivalents, as shown and described.

3. A suspending device, *A*, consisting of the upper and lower hooks, *a* and *a'*, as shown, provided with attaching devices consisting of the screw *s* and yielding bearing *e'*.

PURCHES MILES.

Witnesses:

JAMES A. SKILTON,
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