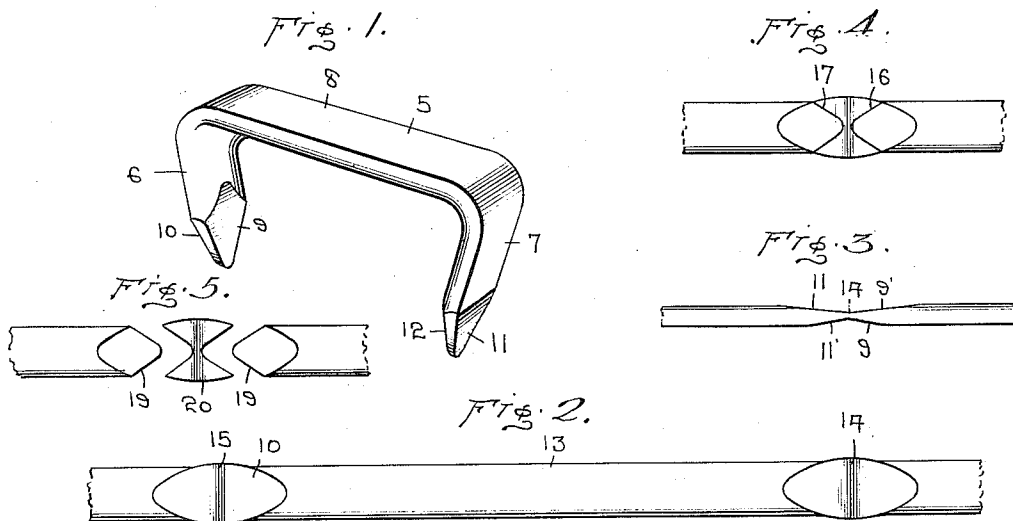


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PROCESS OF FORMING POINTED BLANKS FOR BELT HOOKS FROM A METALLIC STRAND.
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Patented May 4, 1915.



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DAVID T. GRAHAM, OF ST. LOUIS, MISSOURI.

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To all whom it may concern:

Be it known that I, DAVID T. GRAHAM, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Processes of Forming Pointed Blanks for Belt-Hooks from a Metallic Strand; 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.

My invention relates to the process of making pointed blanks for belt hooks, to conveniently, neatly and permanently hook the ends of belts.

One of the objects of my invention is the process of making a plurality of points from a single strand of metal.

Another object of my invention is to first swage the metal and then cut the swaged portion of the metal to form a plurality of independent points in such manner that a minimum amount of metal is wasted.

Still another object of my invention is to cut a plurality of points out of a single strand of metal by first swaging and then cutting the swaged metal in such manner that not only a minimum amount of metal is wasted, but, if desired, all four sides of the point formed by my process are sloped to an approximate point. And still another object of my invention is to cut a plurality of points from a single strand of metal, said metal being swaged at predetermined distances to form two sloping sides that are oppositely disposed by cutting said swaged metal so as to form sloping sides, oppositely disposed, that are at right angles to the first mentioned sloping sides.

These and other objects in view are to be developed as the specification proceeds wherein a preferred embodiment of the process is shown in the drawings as illustrating one means of accomplishing this process within the scope of the claims appended hereto.

I shall proceed to describe my process wherein similar characters of reference refer to similar results as can be seen in the drawings, in which,

Figure 1, is one of the independent hooks derived from my process as ejected from the machine that forms a construction of the same. Fig. 2, is a view of a metallic strand having swaged portions thereto, to form two

of the sloping sides that are oppositely disposed in the points that go to make up my point. Fig. 3, an edge view of a metallic strand looking at right angles to that shown in Fig. 2. Fig. 4, a diagrammatical view showing the cuts in said swaged portions that go to make up the sloping sides that are oppositely disposed and which set at right angles to the sloping sides formed by swaging. And Fig. 5, is a view showing the metallic strand having its point swaged and cut to form the independent points that go to make up, say for instance, independent hooks.

In Fig. 1 of the drawings, is shown one of my hooks 5 in its finished state as ejected from the machine that makes belt hooks by my process, said hook 5 containing the body portion 8 and the end portions 6 and 7, said end portions having 4 sloping sides thereto, each two of which being oppositely disposed and said oppositely disposed sides being at right angles to each other as at 9 and 10 and 11 and 12 of the Fig. 1. These independent hooks are made from a single strand of approximately flat metal 13, which at predetermined distances is swaged as at 14 and 15 of Fig. 2, these swages taking place on opposite sides of the metal so as to cut oppositely disposed sloping sides 11 and 11' and 9 and 9'. The very act of swaging this metallic strand 13 as above described pushes the metal outward thereby lengthening the metallic strand 13 and attenuating thinning out and stretching the metal so swaged. We next take and cut said swaged surfaces by two oppositely disposed and approximately right angular cuts 16 and 17, said cuts being diagrammatically set forth in Fig. 4 of the drawings, so that when said cuts are made, two sloping, and oppositely disposed sides 18 and 19 are had, these oppositely disposed sides being at right angles to the sides 9 and 11 as previously pointed out in the description illustrated by Fig. 1. By this arrangement a certain portion of a metallic strand such as number 20 shown in Fig. 5 of the drawings is wasted, but this waste portion is that part of the metallic strand 13 which receives the heaviest swaging, and owing to the fact that the metal has been thinned down at this point, it is readily obvious that only a minimum amount of metal is wasted, in this respect being a decided improvement in processes forming belt hooks of like character.

If desired only three sides of a metallic strand can be operated upon by my process to derive a point. This can be achieved by swaging a metallic strand, having three
5 rounded sides and one flat side, on the flat side and cutting two of the rounded sides which are oppositely disposed and at right angles to the flat swaged side. In this case the point will have three sloping sides and
10 one straight side.

I have now described my process and independent hook derived thereby, and what I claim as new and desire to secure by Letters Patent, is,
15 The process of forming pointed blanks for

belt hooks from a metallic strand, comprising transversely swaging the strand of metal on opposite sides thereof and at predetermined points to flatten and bevel the same, and then successively cutting out from said
20 uniformly thinned swaged portions, X-shaped pieces.

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

DAVID T. GRAHAM.

Witnesses:

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