D. SPAULDING.

Manufacture of Saw-Teeth Blanks.

No. 226,426. Patented April 13, 1880.

Fig. 1

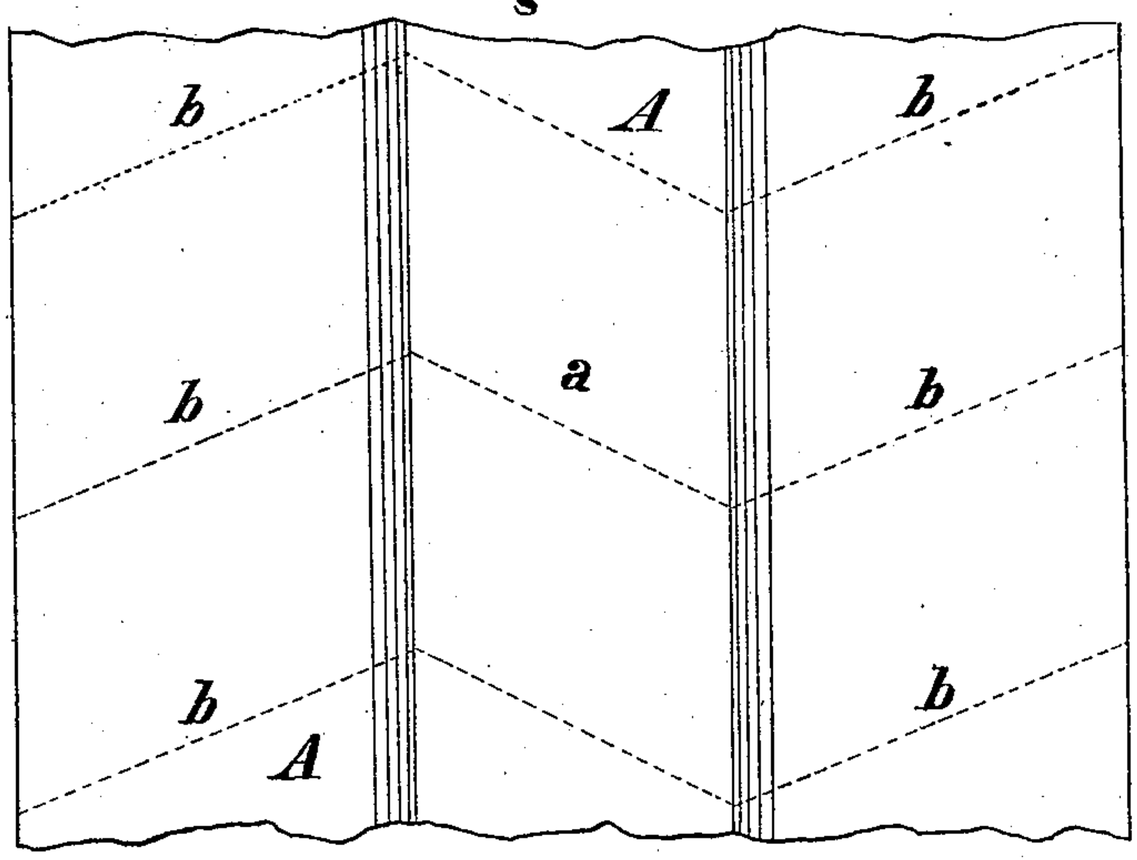


Fig. 2

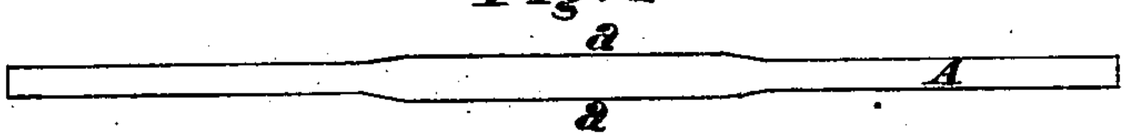


Fig. 3

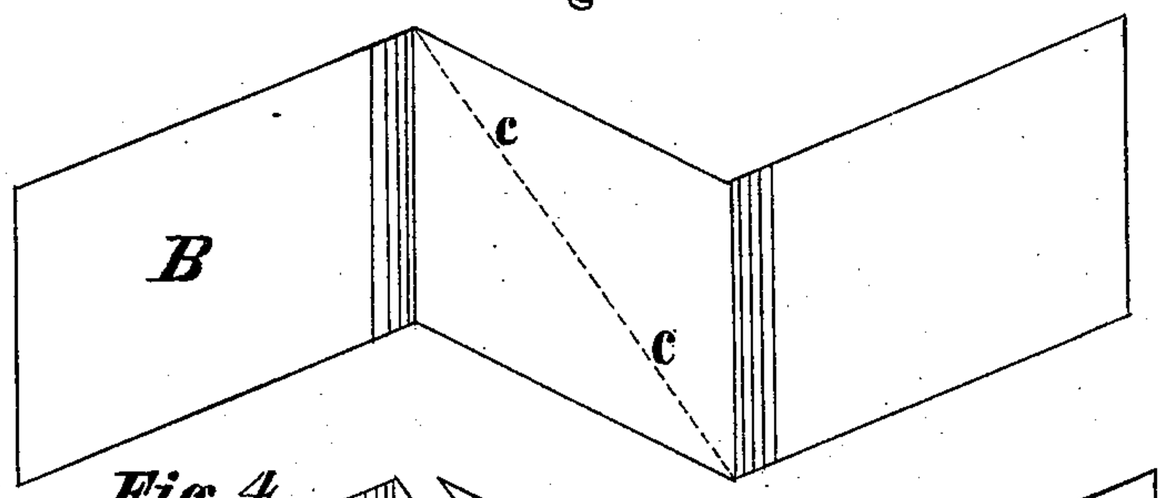


Fig. 4

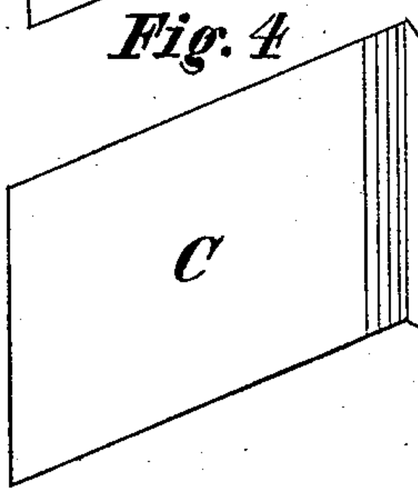


Fig. 5

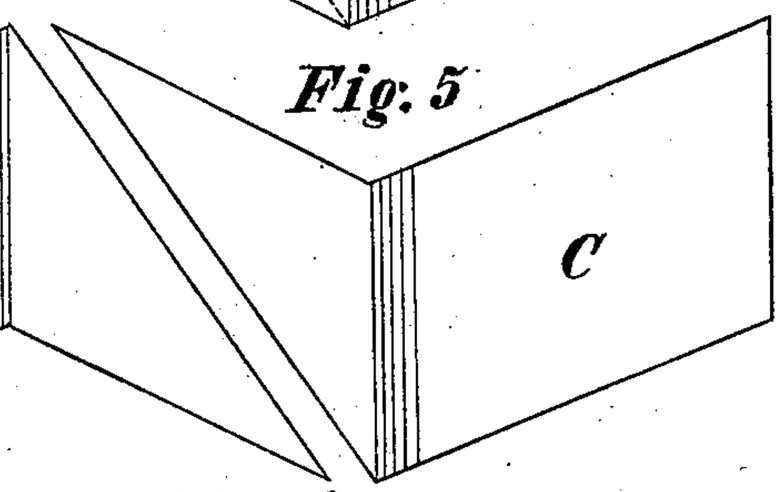
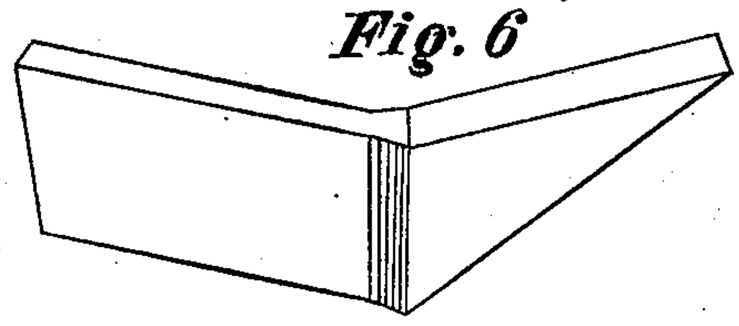


Fig. 6



Witnesses

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UNITED STATES PATENT OFFICE.

DENNIS SPAULDING, OF CHICAGO, ILL., ASSIGNOR TO N. W. SPAULDING & BROTHERS, OF SAME PLACE.

MANUFACTURE OF SAW-TEETH BLANKS.

SPECIFICATION forming part of Letters Patent No. 226,426, dated April 13, 1880.

Application filed September 26, 1879.

To all whom it may concern:

Be it known that I, DENNIS SPAULDING, residing in the city of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Making Saw-Teeth Blanks for Inserted Teeth for Saws; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a rolled plate or bar of steel, from which the blanks that are to form the teeth are cut. Fig. 2 represents an end view of such plate of steel. Fig. 3 represents a section of the plate cut off of a peculiar shape, from which section two blanks are formed. Figs. 4 and 5 represent such section after being cut into blanks, each section forming two blanks; and Fig. 6 represents an angular view of a blank.

Saw-teeth of almost all kinds, and removable saw-teeth in particular, require greater thickness of metal at their point and throat (the parts projecting outside of the saw-plate) than in the shank of the teeth inserted in the plate, for the reason that if a tooth is of uniform thickness from the point to the throat it prevents the dust from getting out of the kerf past the tooth, or between the tooth and lumber being cut, thereby preventing friction and the consequent heating of the saw-plate; and this increased thickness has heretofore been obtained by placing the blank under a drop-die and upsetting the metal, and so thickening it at the part that makes the point and throat of the tooth, or else the blank was forged, both of which methods requiring the heating of the steel, also by other modes, all of which, however, involve considerable expense and labor and waste of material.

My improvement consists in securing the thickness required for the point and throat of the blank by having the steel plate or bar from which the blanks are cut rolled with a small swell or thickening of the plate lengthwise through the middle of the plate, the plate being of sufficient width, so that when it is cut up into sections of a uniform size and of a peculiar shape each section will, when cut in two in the middle, form two blanks of equal size, and evenly dividing the thickened part of the plate between the two blanks to form the point and throat of the blanks, thus obviating the necessity of upsetting or forging the metal in order to secure the needed thickness for the point and throat of a blank.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents a plate or bar of steel which, in being rolled, has rolled upon it a swell or enlargement, *a*, in the center of the plate, parallel with its length, which swell or enlargement is on both sides of the plate, as seen in the drawings, Fig. 2. This plate or bar so rolled is put under the shears and cut off at the lines *b b*, so as to form the shaped section B, as shown in Fig. 3. This section B is then put under the shears and cut on the line *c c*, (shown in Fig. 3,) so as to form two equal-sized blanks, C C, as shown in Figs. 4 and 5 of the drawings, for the teeth.

It will be seen that the line *c c* extends diagonally across the full width of the swell or thickening rolled in the middle of the plate of steel, and the section B, when cut into two equal halves on the line *c c*, divides equally the swell or thickened part of the plate between the two blanks, which thicker part of the blank forms the point and throat of the tooth, as shown in Fig. 6 of the drawings.

It is obvious that a plate of steel can be made having one or more swells or thickenings running parallel lengthwise through the bar at proportionate distances apart, and thereby admitting of sections being cut therefrom of sufficient width to form two or more sections, like the section B above described, and each section having a swell or thickening in its center.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is the following:

The method described of manufacturing saw-teeth blanks, the same consisting in rolling the plate into the form shown in Figs. 1 and 2, dividing such plate into sections, as shown in Fig. 3, and cutting the sections into two equal parts on the diagonal line *c c*, as and for the purpose set forth.

DENNIS SPAULDING.

Witnesses:

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