

S. W. YOUNG.

Eyelets.

No. 138,221.

Patented April 22, 1873.

Fig. 1.

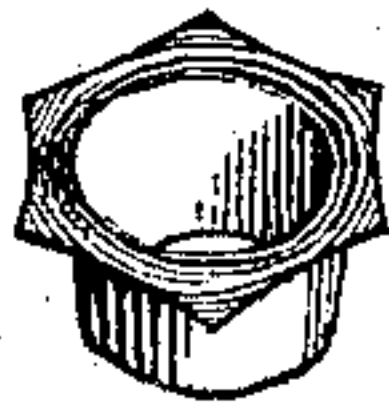


Fig. 2.

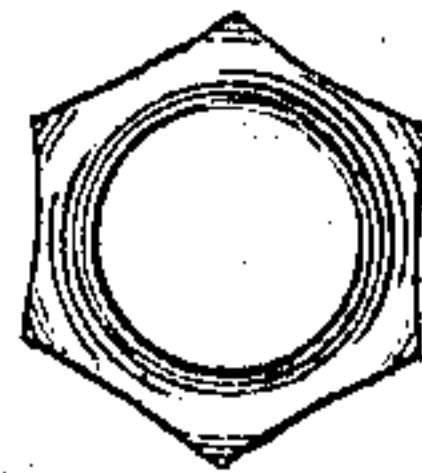


Fig. 3.

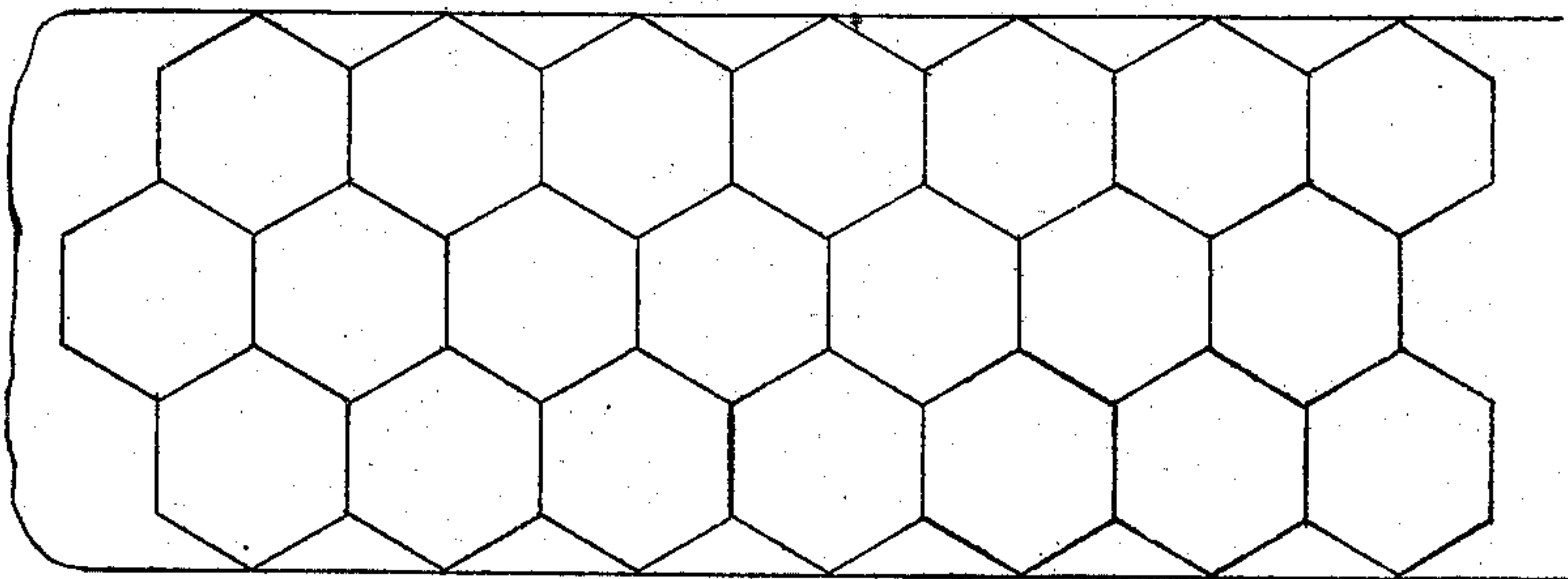
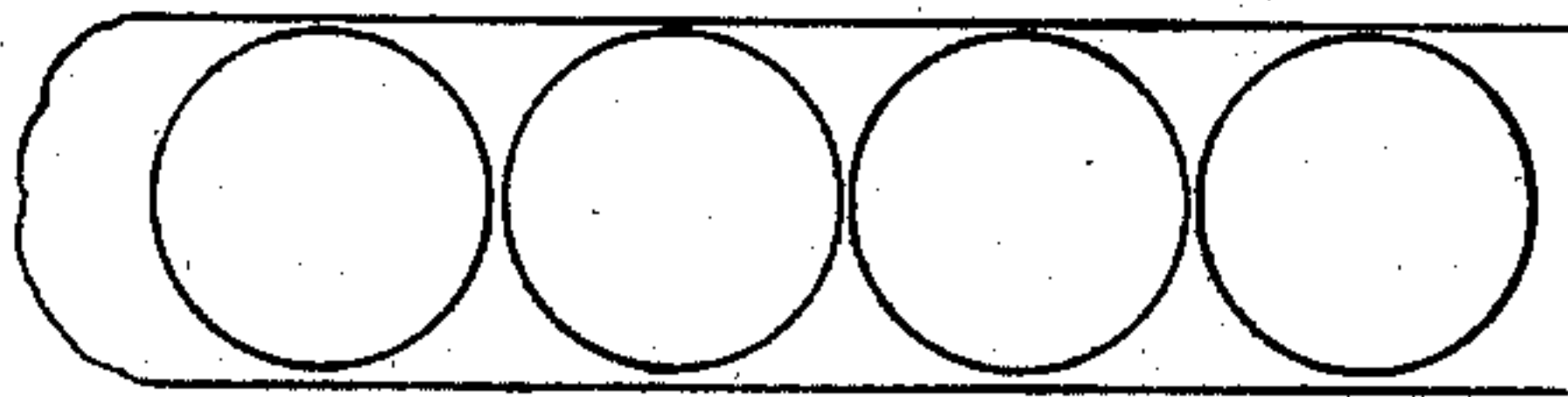


Fig. 4.



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IMPROVEMENT IN EYELETS.

Specification forming part of Letters Patent No. **138,221**, dated April 22, 1873; application filed April 26, 1872.

To all whom it may concern:

Be it known that I, SOLOMON W. YOUNG, of the city of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Eyelets, and also in the manufacture of the same, whereby eyelets of a weight equal to that of those heretofore manufactured can be made with an appreciable economy in material; and I do hereby declare that the following specification, taken in connection with the drawing making a part of the same, is a full, clear, and exact description thereof, in which—

Figure 1 is a perspective view of my improved eyelet. Fig. 2 is an end view, and Fig. 3 represents the manner in which the stock is cut. Fig. 4 shows the round blank as cut for the manufacture of eyelets now in use.

My invention consists in making the eyelets with a hexagonal flange and forming them from hexagonal blanks. By reason of the hexagonal outlines of the blanks I am enabled to doubly utilize the cuts on two, three, or more sides of every blank, by having the cuts of one blank made available in the cutting of succeeding blanks.

In the accompanying drawing, Fig. 1 represents an eyelet made from a piece of metal cut of a hexagon shape. In forming the flange of such eyelets the points have a tendency to curve downward, which is advantageous in setting as they would penetrate or embed in the material when used.

Fig. 3 shows the blanks as cut from the stock to the best advantage, each hexagon forming an eyelet, this being the only shape approximating to a circle that can be used in attaining the result required.

Fig. 4 shows the round blank as cut from strips of stock now used in the manufacture of eyelets, by which actual experimenting shows three-eighths of the stock is made into eyelets, and five-eighths is waste or scrap to be remelted, whereas the hexagonal blanks by my method manufactured into eyelets seven-eighths of the stocks is made into eyelets, leaving but one-eighth waste or scraps.

In giving the size of the circular eyelet-blanks, as shown in Fig. 4, I do not intend

that it shall be considered as of proper dimensions to make eyelets of the same weight as would be made from hexagonal blanks of the dimensions given in Fig. 3.

It is to be understood if the hexagonal eyelets be made of the same weight as the round ones, that the waste in stock will be lessened from five-eighths of the gross weight to about one-eighth. The hexagonal flange, midway between the points or corners, will, of course, be somewhat less in width than the flange of the round eyelet, while at the points the width thereof will be somewhat greater.

In cutting my hexagonal blanks the dies will have less work to do than if cutting the round blanks. In the latter case, one complete circumferential cut is necessary for each blank, while in the case of the hexagonal blanks a group of seven, for instance, will be cut, clean and free, by the actual cutting of but five; and in, say, a group of nineteen blanks only twelve are actually cut, and, therefore, in cutting so many blanks, the cutters have really about seven-nineteenths less labor to perform than in cutting the round eyelet, assuming the circumferential line to be the same in both. The cutters or dies will require changing and sharpening quite as often as with the round dies, but a greater number of blanks will be cut in a given time, and, therefore, an important economy in cost of manufacture is realized by my invention.

The advantages accruing from the hexagonal-flanged eyelet will be appreciable more fully in connection with the shoe trade than elsewhere.

The round-flanged eyelet in setting becomes so curved that when attempts are made to flatten them they will cut the leather (if soft) to a greater or less extent, and if the leather be not very tough are liable to tear out on one side on being strained. In the hexagonal-flanged eyelets that portion of the flange between the points will not be so liable to curve under, but will flatten, while the points will be slightly curved under and embedded in the leather. These points will also serve as braces, for they extend radially from all sides of the flange to a point further from the inner surface of the eyelet than the outer edge of the flange in the circular-flanged eyelets.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. As a new article of manufacture, an eyelet having a hexagonal flange, substantially as described.

2. The method of cutting blanks for hexagonal-flanged eyelets, substantially as described,

whereby each cut of the dies on any one blank will contribute to the cutting of one, two, three, or more sides of succeeding blanks, as and for the purposes specified.

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