

(No Model.)

D. M. WESTON.

MANUFACTURE OF STRAINER PLATES.

No. 258,516.

Patented May 23, 1882.

Fig:1.

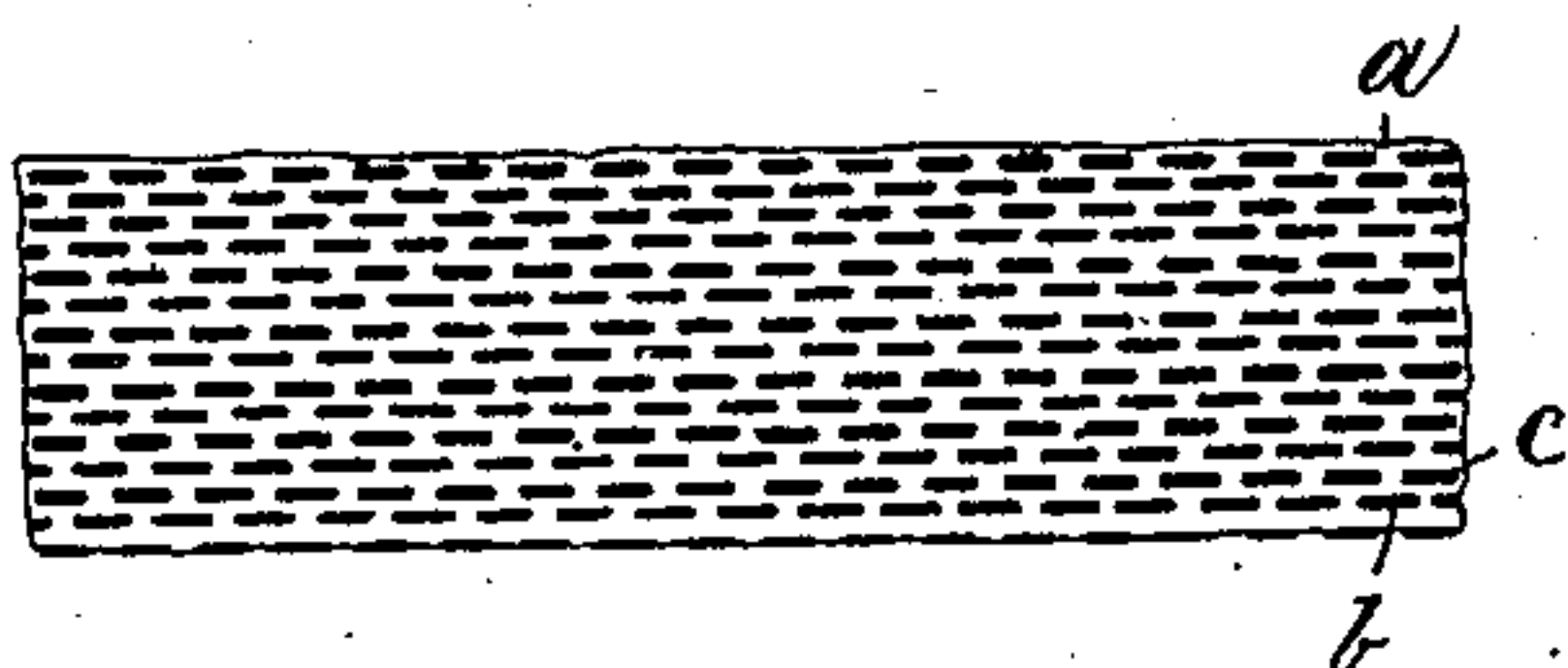
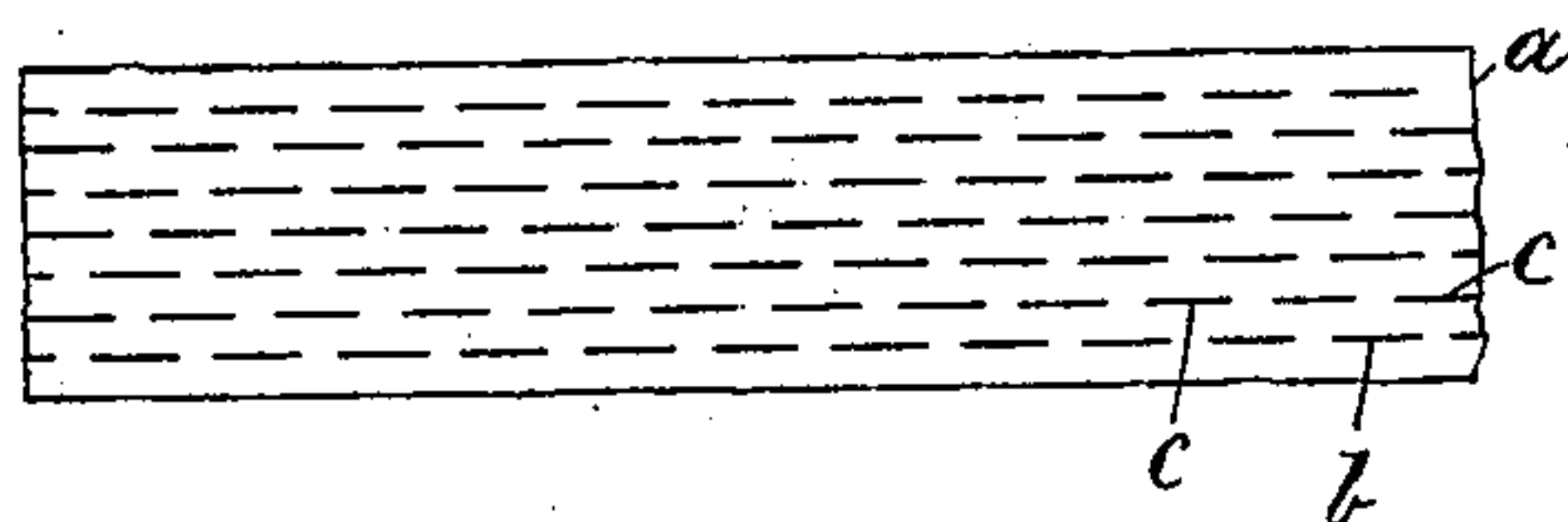


Fig:2.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## MANUFACTURE OF STRAINER-PLATE.

SPECIFICATION forming part of Letters Patent No. 258,516, dated May 23, 1882.

Application filed February 20, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID M. WESTON, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Manufacture of Sheet-Metal Strainer-Plate, of which the following description, in connection with the accompanying drawings, is a specification.

Material for strainers is now most commonly made of wire or of metal punched with small round holes. For some classes of work it is desirable that the openings for the passage of the liquid material through the strainer-plate be made finer than can be well done with wire and finer than can be attained by round punching.

In accordance with my invention I take a thin metal plate, preferably sheet-brass, and provide the same by punching with a series of oblong slots. This metal plate so punched is then rolled and elongated between rollers, such elongation of the plate causing the slots made by the punches to be partially closed or contracted in width, the degree of their contraction depending upon the extent of the elongation of the plate during rolling. By my method I am enabled to produce a strainer-plate having finer slots than could be made by punches. The punches used by me are as small as can be used in gangs, and operate certainly on sheet metal, and the slots produced of a certain size by punching are made smaller in width or finer by rolling.

Figure 1 represents a piece of thin metal provided with slots as left by the punches, and

Fig. 2 a view of the same after it has been rolled.

In the practice of my invention I first take a piece of sheet metal, *a*, and punch through it a series of elongated slots, *b c*, by means of a gang of punches or otherwise. I have shown the slots in series *b* as so located with relation to the slots of the series of slots *c* that their ends overlap. The plate *a*, having a series of slots punched in it, as described, is next rolled between suitable rolls, which elongates the plate and causes the slots to be uniformly closed or made narrower as they are elongated by the elongation of the metal, such action leaving the metal plate as shown in Fig. 2, where it will be seen that the slots *b c* are longer and narrower than in Fig. 1.

The plate shown in Fig. 2 will be stiffer and harder than that shown in Fig. 1, and will be made very smooth.

I claim—

The herein-described method of producing metal strainer-plate, it comprehending punching through the plate a series of elongated slots, and then further elongating and contracting the width of the said slots by rolling the said plate, substantially as described.

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

DAVID M. WESTON.

Witnesses:

G. W. GREGORY,  
W. H. SIGSTON.