

H. M. BEECHER.  
Carriage-Steps.

No. 156,626.

Patented Nov. 10, 1874.

Fig. 1.

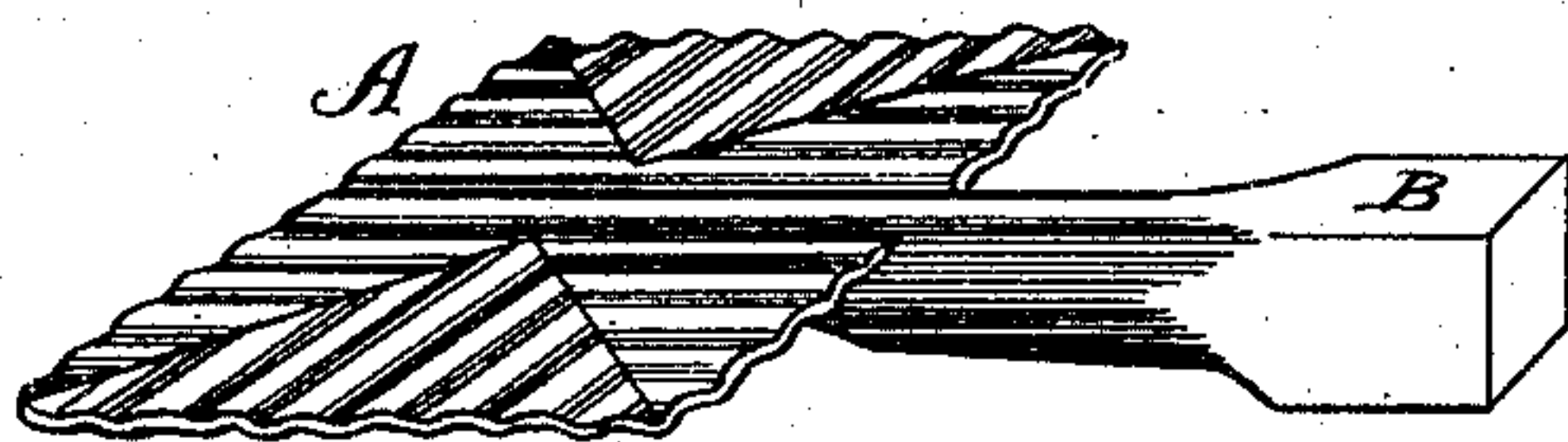
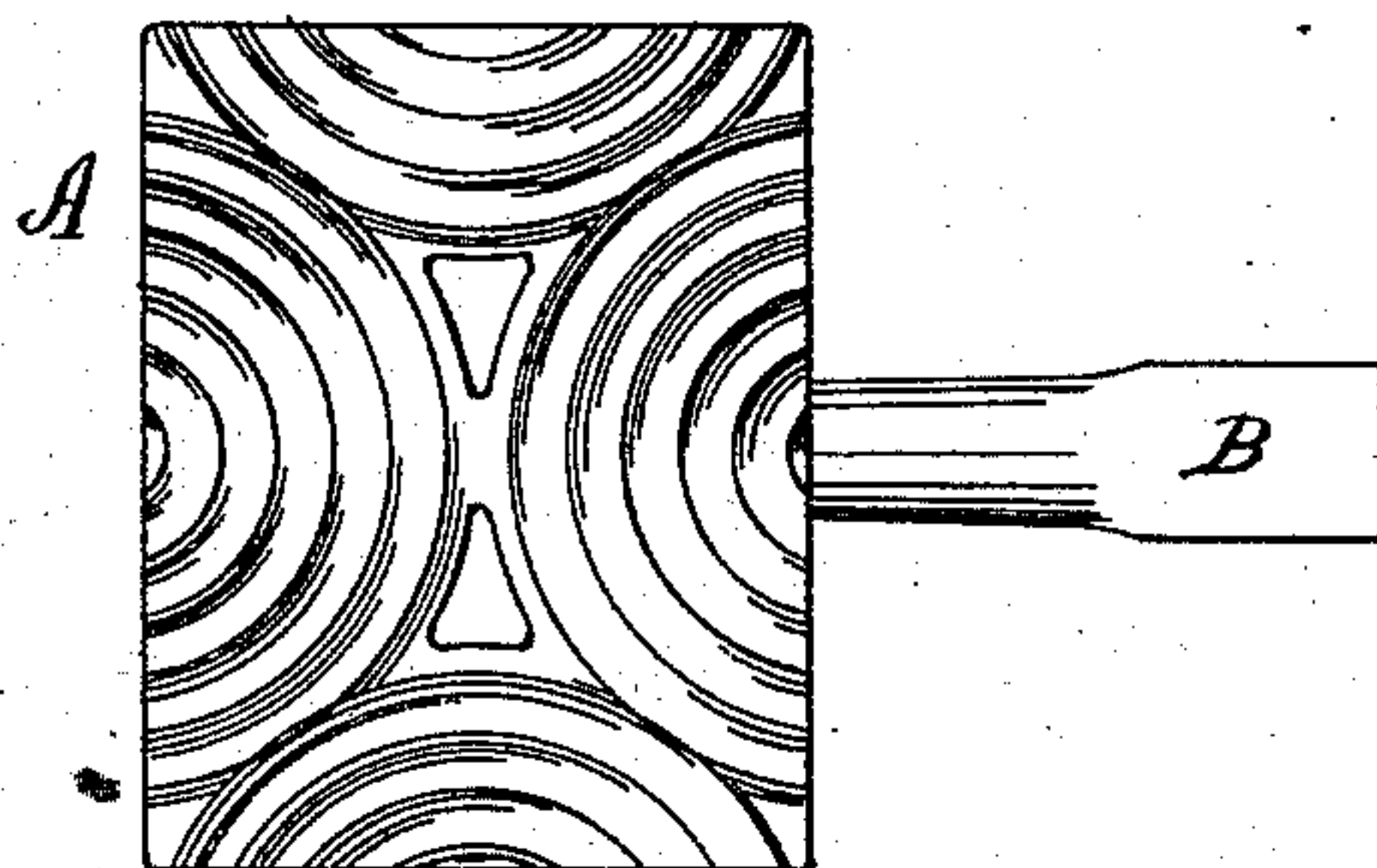


Fig. 2.



Witnesses,  
Wm. G. Curtis.  
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# UNITED STATES PATENT OFFICE

HENRY M. BEECHER, OF WEST MERIDEN, CONNECTICUT.

## IMPROVEMENT IN CARRIAGE-STEPS.

Specification forming part of Letters Patent No. **156,626**, dated November 10, 1874; application filed July 31, 1873.

*To all whom it may concern:*

Be it known that I, HENRY M. BEECHER, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new and Improved Carriage-Step Pad, of which the following is a specification:

In my improved step-pad the thin portion or pad proper is corrugated, the corrugations extending to the edges of the metal pad, whereby the desirable inequality of surface is produced and the stiffness of the pad is increased.

In the accompanying drawing, Figure 1 is a perspective view of a step-pad and its shank, which embody my invention; and Fig. 2 is a top view of a like article, which also embodies my invention.

The pad proper A is of thin metal, to which pad is attached the stump or shank B. The pad A is corrugated by means of dies, which wrinkle both the upper and lower surfaces of the pad, the furrows upon one side being opposite the elevations upon the other side. These corrugations serve not only to produce an uneven surface, but also to stiffen the pad and increase its strength without increasing its weight.

The corrugations may be parallel elevations and depressions, either straight or curved, as shown in Figs. 1 and 2; or they may all radiate from the center, or be varied in similar ways, so as to produce varying designs; in all of which the direction of the corrugations shall

be such as to extend to the edge of the pad, and thereby produce a waved edge, as shown in Fig. 1, and without a ridge bordering the edge. By such arrangement of the corrugations a single pair of dies will answer to forge several sizes of pads, as the edge of the pad can be trimmed down to any desired size.

Heretofore ribbed or embossed step-pads have been provided either with a plain surface near the edge or a raised ledge. In stepping into a carriage it is often that the foot will rest upon the corner of the step-pad only, and if the edge of the pad is smooth the foot is liable to slip thereon. In my step-pad the corrugations extend to the extreme edge of the pad, whereby accidental slipping of the foot when bearing cornerwise upon the pad is prevented.

I am aware that ribbed step-pads having a ridge or ledge bordering their edges have been previously produced, as shown in the patent to F. B. Morse, August 29, 1871, and March 22, 1870; and such step-pads I do not claim.

I claim as my invention—

As a new article of manufacture, the metallic carriage-step pad A, having the rigidly-connected stump B, and provided with corrugations extending to the edges, substantially as set forth.

HENRY M. BEECHER.

Witnesses:

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