

W. A. TANGEMAN.  
Target.

No. 225,734.

Patented Mar. 23, 1880.

Fig. 1.

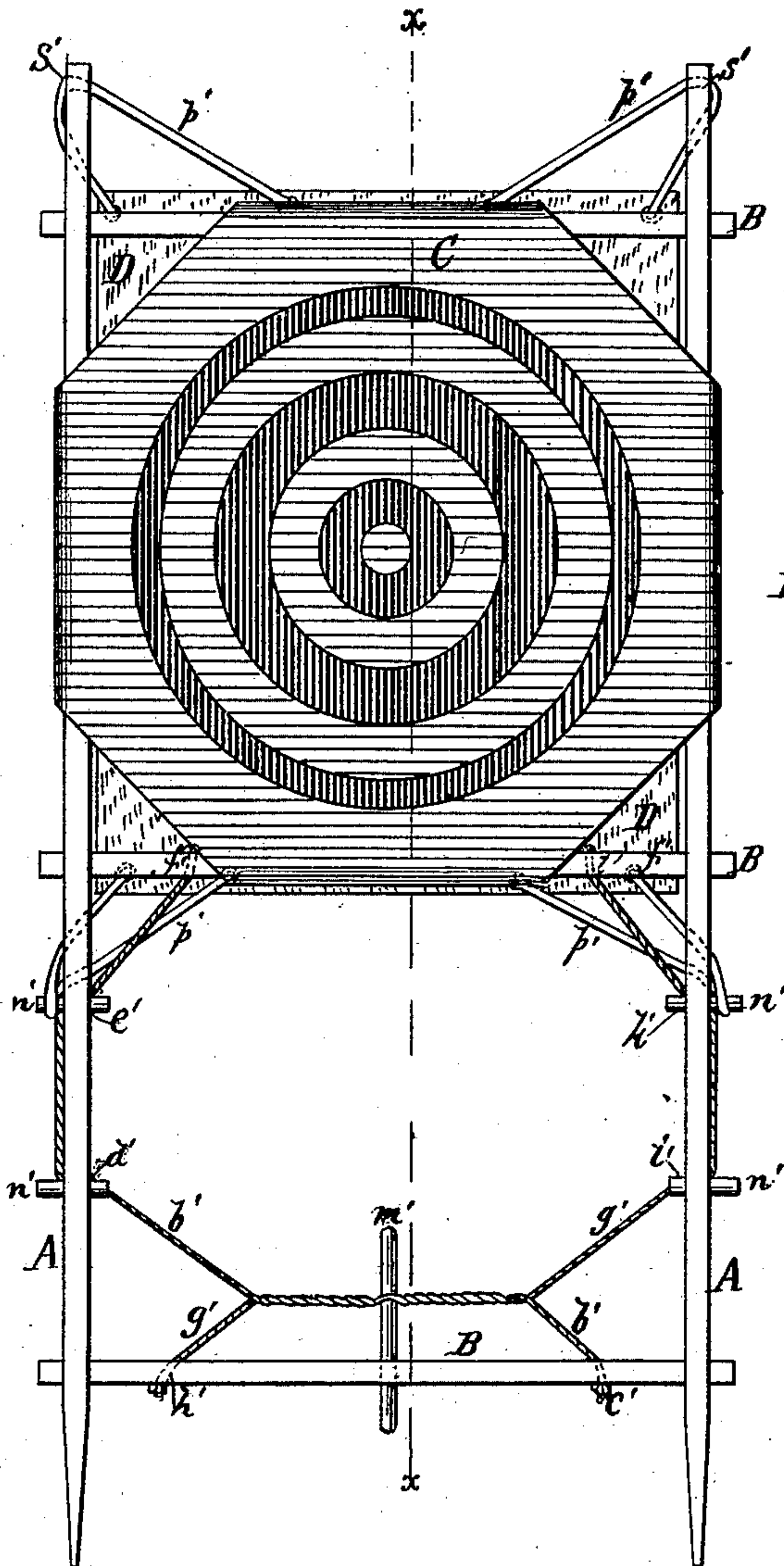


Fig. 2.

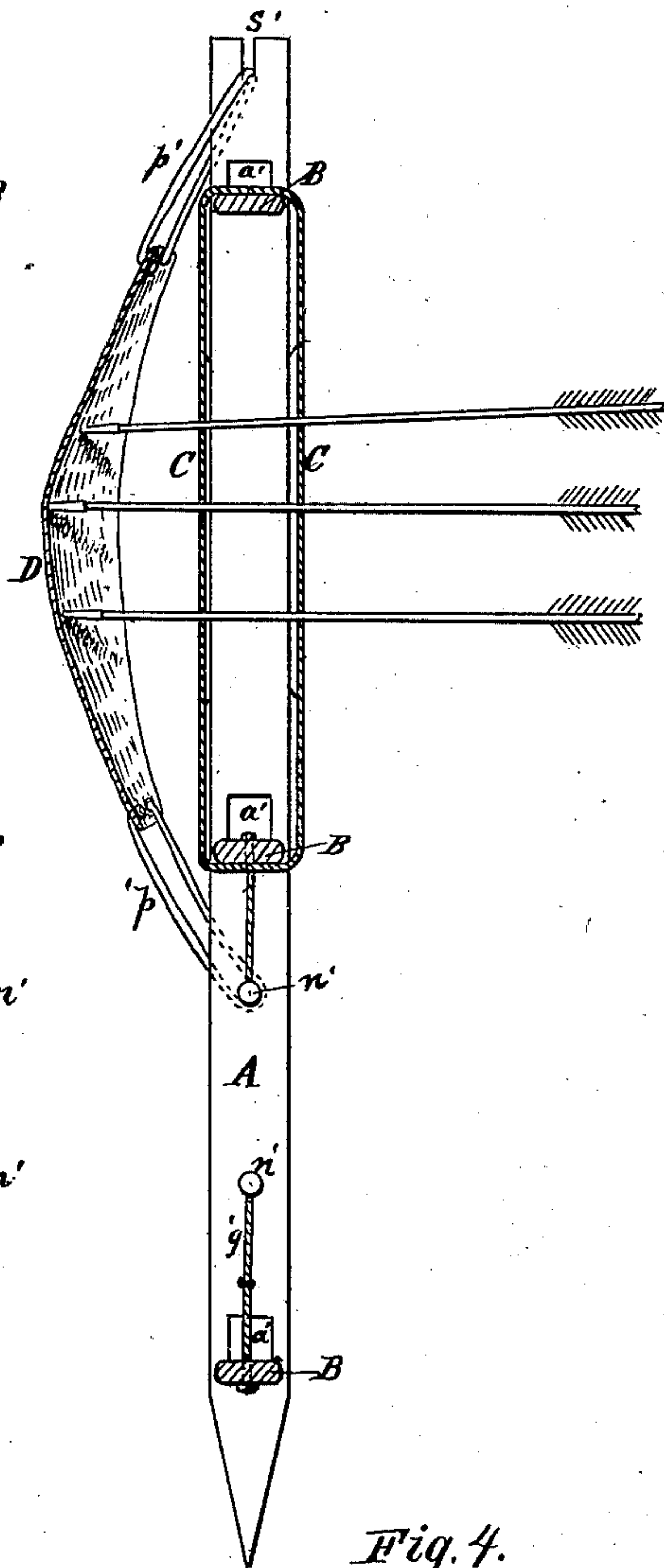


Fig. 3.

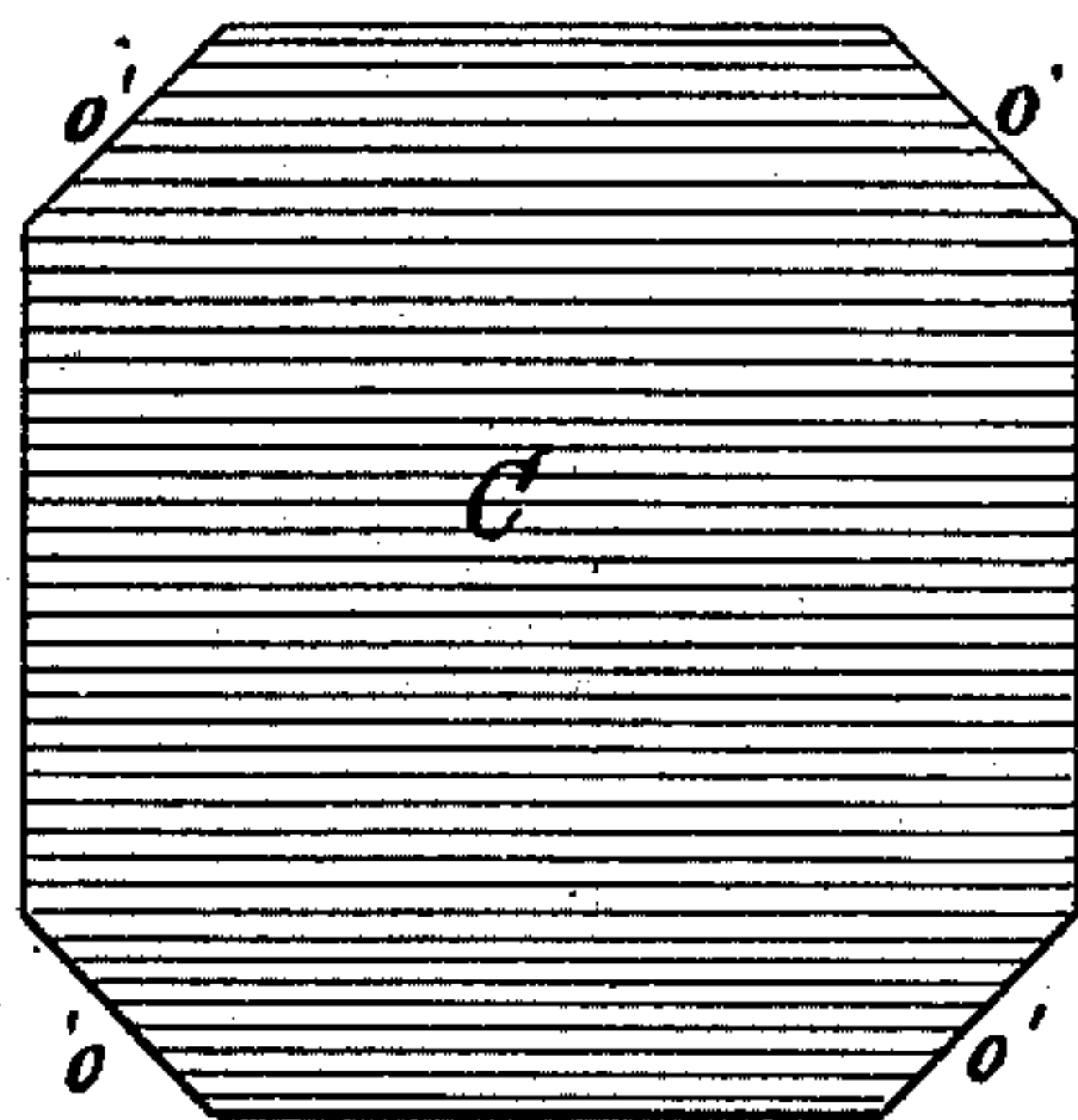
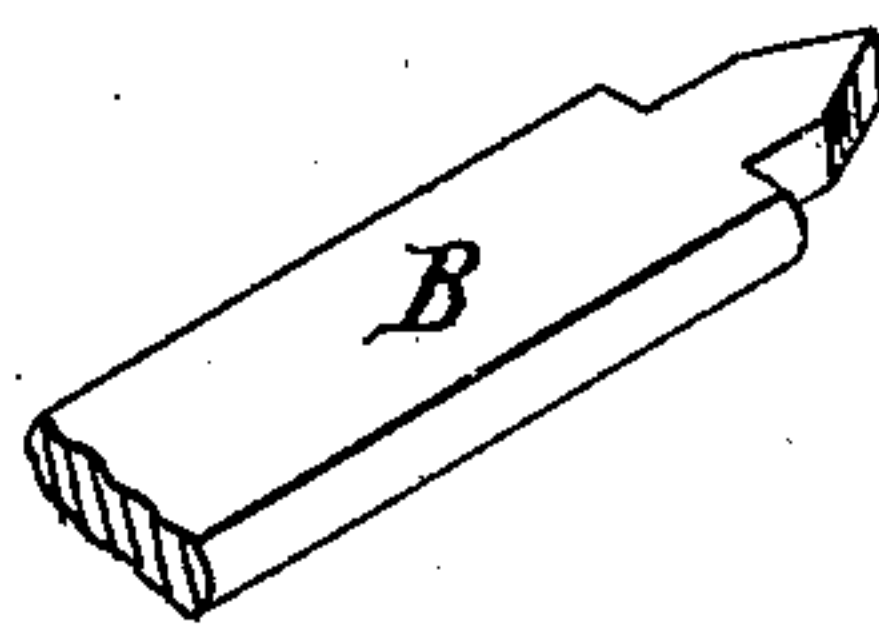


Fig. 4.



WITNESSES:

Henry N. Miller  
C. Sedgwick

INVENTOR:

W. A. Tangeman  
BY *Munn & Co.*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

WILLIAM A. TANGEMAN, OF LOCKLAND, OHIO.

## TARGET.

SPECIFICATION forming part of Letters Patent No. 225,734, dated March 23, 1880.

Application filed June 28, 1879.

*To all whom it may concern:*

Be it known that I, WILLIAM A. TANGEMAN, of Lockland, in the county of Hamilton and State of Ohio, have invented a new and Improved Target and Target-Stand, of which the following is a specification.

Figure 1 is a front elevation of the target and stand. Fig. 2 is a vertical section of the same on line  $x x$ , Fig. 1. Fig. 3 is a plan of one of the halves of the target before they are sewed together. Fig. 4 is a perspective view, showing the shape of the ends of the horizontal bars of the stand.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide a target and target-stand to be used in archery lighter and more durable than those now in use, and possessing the advantage over all others of stopping the arrows and allowing them to be easily withdrawn and without injury.

The invention consists of a rectangular stand composed of two upright and three cross pieces of wood loosely mortised and tenoned together, and held and braced to each other partly by a simple arrangement of cords and partly by the octagonal target of cloth, stout paper, or other fabric, that is made of two like pieces sewed together and drawn over the upper section of the stand; and it further consists of a target-back made of closely-woven cloth and affixed to the stand just behind the target by elastic straps, that cause it to yield under the impact of the arrow, and thereby check its further progress.

A A represent the standards, mortised at  $a'$  to receive the ends of the cross-pieces B B, that are inserted therein.

The cord  $b'$  is passed through the slot  $c'$  in the lower cross-piece, thence in turn through the holes  $d' e'$  in one of the standards, and thence diagonally up through the slot  $f'$  in the central cross-piece; and the cord  $g'$  is passed in succession through the corresponding holes  $h', i', k',$  and  $l'$ . The ends of both cords are then knotted, so that they may not draw through the holes or slots, and are twisted by the pin  $m'$  until the parts of the stand are drawn together and held firmly. The four pins  $n' n'$ ,

driven in the holes in the standards, help to make the stand rigid.

The target C consists of two pieces of cloth, paper, or other fabric, of the shape as shown in Fig. 3, that are sewed together, excepting at the shorter edges  $O'$ , leaving four corner openings. This is fixed upon the stand, as shown, so as to embrace and hold firmly together the upper parts of the standards and the central and upper cross-pieces, and when stretched upon the stand in this way the opposite faces of the target are separate from each other by the width of a standard.

The target-back D, of closely-woven stout cloth, is held just behind the target by loops  $p'$ , of rubber or other elastic material, two of which are engaged in the slots  $s'$  in the tops of the standards, while the two lower ones are looped over the two highest of the pins  $n' n'$  in the sides of the standards.

When an arrow has passed through the target and strikes the target-back the latter yields so quickly as to be seldom cut or pierced by the arrow-head.

This target, with the two opposite faces having a space of three or four inches, or thereabout, between them, though constructed of a light material, has great effect in arresting the flight of the arrow, because both faces are quite elastic and so placed in relation to each other as to exert their fullest retarding effect, and what the target itself lacks of this capacity is supplied by the elastic back.

It is obvious, therefore, that in cheapness, lightness, and durability this target excels most, if not all, others; and the material used for it provides a suitable surface for painting or printing the rings and bull's-eye upon, whereas other targets require separate faces.

A target-face made of closely-woven cloth with the colors thickly laid on will be cut and torn by every arrow that strikes it. Hence I prefer to make my target of burlaps or other loosely-woven material, and to stain or dye it with the required colors, thus adding to its durability and cheapness.

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

1. The within-described target-stand, con-

sisting of the two standards A A and three cross-pieces, B B, mortised and tenoned together, and held and braced in proper relative position to each other by the cords *b'* and *g'*,  
5 substantially as herein shown and described.

2. The double target C, consisting of two octagonal pieces of cloth, paper, or other fabric united at their alternate edges, and held stretched and apart by the standards and  
10 cross-pieces of the target-stand, substantially as herein shown and described.

3. The combination of the stand, consisting of standards A A and cross-pieces B B, double-faced target C, and elastic target-back D, constructed and arranged substantially as herein  
15 shown, and for the purpose described.

WILLIAM A. TANGEMAN.

Witnesses:

N. W. MAXWELL,  
JOHN S. CONNER.