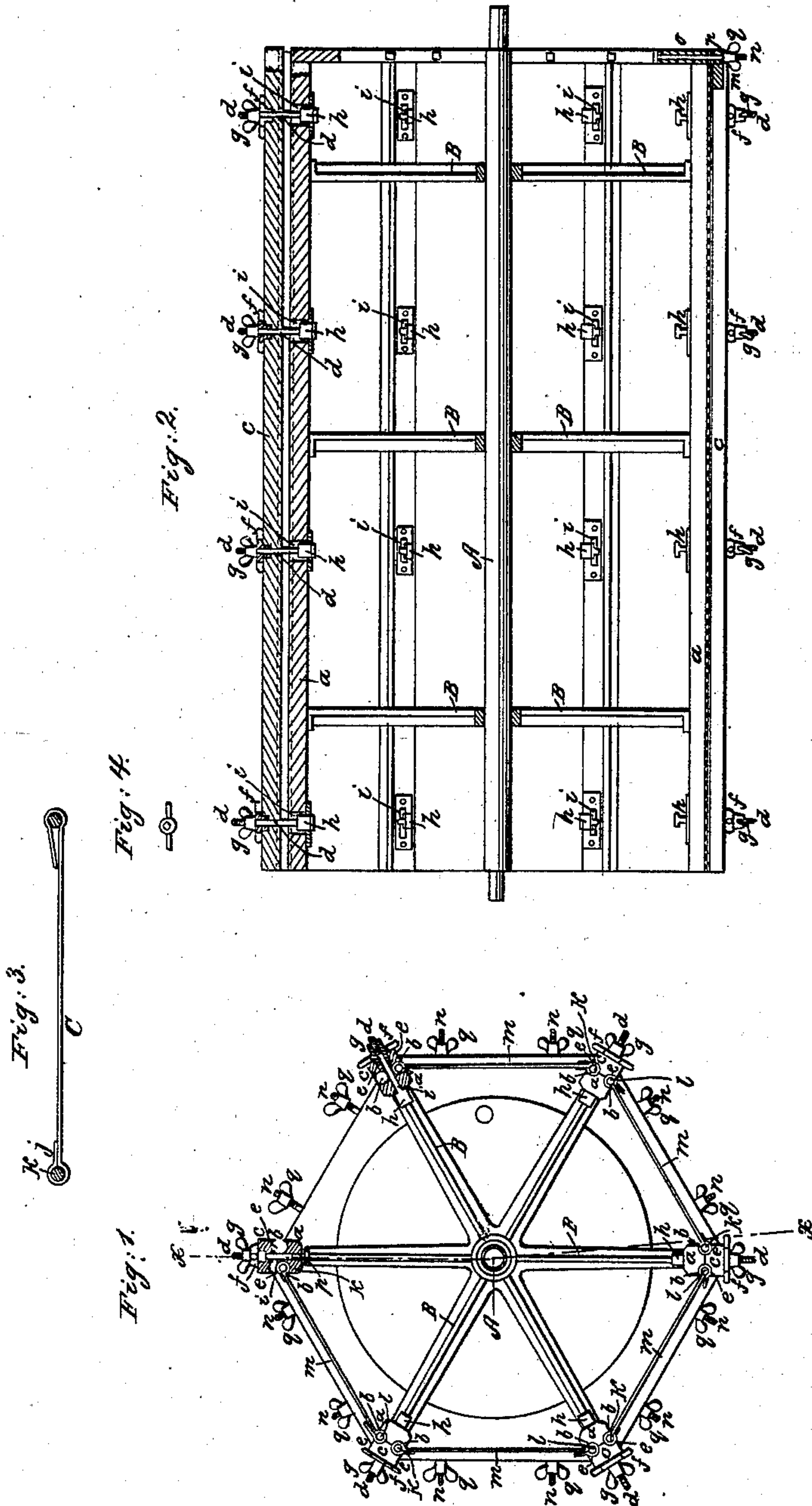


J. WOODVILLE.

Mode of Attaching Bolting Cloth to Reels.

No. 17,126.

Patented April 21, 1857.



UNITED STATES PATENT OFFICE.

JOHN WOODVILLE, OF CHILLICOTHE, OHIO.

MODE OF ATTACHING BOLTING-CLOTHS TO REELS.

Specification of Letters Patent No. 17,126, dated April 21, 1857.

To all whom it may concern:

Be it known that I, JOHN WOODVILLE, of Chillicothe, in the county of Ross and State of Ohio, have invented a new and Improved Mode of Attaching Bolting-Cloths to Reels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a transverse vertical section of a bolt reel, with the cloth attached to it according to my improved mode. Fig. 2 is a longitudinal section of ditto, (x) (x) Fig. 1, showing the plane of section. Fig. 3 is a detached end view of one of the sections or pieces of cloth of a bolt, the ends of the cylindrical rods being also shown. Fig. 4 is a detached view of one of the washers which are placed on the bolts of the clamps.

My invention consists in having the bolting cloth formed in sections; and the sections secured to the several sides of the reel by means of clamps and rods as will be hereinafter fully shown and described, whereby the cloth is not only firmly secured to the reel but may be readily attached to, and detached from it, and also stretched upon the reel with a greater or less degree of tension as may be required.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A represents a shaft, having several sets of radial arms B attached, the arms B having bars (a) attached to their ends, the bars (a) being parallel with the shaft A.

The above parts are constructed precisely similar to the usual bolt reels and therefore, a more minute description is not required.

The outer surfaces of the bars (a) have each two longitudinal grooves (b) made in them, as shown in Fig. 1, and to each bar (a) a bar (c) is attached by bolts (d). The inner surfaces of the bars (c) have each two longitudinal grooves (e) (e) made in them, the grooves in the bars (c) being directly over or in line with the grooves in the bars (a). The bolts (d) pass through the bars (c) and bars (a), and a washer (f) is placed on the outer end of each bolt, and a nut (g) outside the washer. The lower ends of the bolts have each an oblong and T-shaped head (h) formed on them, the oblong heads

passing through oblong slots (i) in the bars (a).

The bolting cloth is formed in sections C, the sections being made a trifle wider than the space between the bars (a). One side of each section B of the cloth has a hem (j) formed on it and cylindrical rods (k) are fitted in these hems. The opposite ends of the sections B are wrapped around cylindrical rods (l). The rods (k) (l) of each section are fitted in the grooves (b) of the bars (a) and by the bars (c) are secured on the bars (a) by the bolts (d), the grooves (e) in the bars (c) fitting over the rods (k) (l). The rods (k) (l) prevent the cloth from slipping between the bars (a) (c).

The rods of the bolts (d) between the screw threads and heads (h) are of square form and the washers (f) are fitted on the square portions. In order therefore to lower the bars (c) from the bars (a) all that is required is, merely, to turn the bolts (d) by means of the washers (f) till the heads (h) are brought in line longitudinally with the slots (i) in the bars (a) and the heads will be allowed to pass into the slots (i) and the bars (c) may be raised or moved at a requisite distance from the bars (a) so that the rods (k) (l) may be removed from or adjusted in the grooves (b). By this arrangement the bars (c) may be quickly secured to and detached from the bars (a).

At the feed end of the reel, bars (m) are secured by screws (n), said screws passing through the rim (o) at the end of the reel, and through slots (p) formed in the bars (m). The bars (m) are secured down upon the ends of the sections B by nuts (q) which are fitted on the ends of the screws (n).

By the above improvement it will be seen that the sections B may be readily attached to, and detached from, the reel, and the sections may also be stretched upon the reel as taut as desired by wrapping one side of them more or less around the rods (l). The advantages of the improvement are, that the cloth, by being so readily attached to and detached from the reel, may be removed therefrom to be washed, mended, etc. The cloth may also be more readily fitted to the reel than in the old way, where the cloth is merely tacked to the bars (d). A section also if injured may be replaced by a new

one without affecting the others. This improvement is applicable either to the silk or wire-cloth bolts.

Having thus described my invention, what
5 I claim as new, and desire to secure by Letters Patent, is:

1. Forming the cloth in sections C, and securing the sections to the reel by means of the rods (*k*), (*l*), and bars (*c*) which are
10 attached to the bars (*a*) by bolts (*d*), and the bars (*m*) which are attached to the rim

(*o*), by screws (*n*), the whole being arranged as shown and described, for the purpose set forth.

2. I further claim the bolts (*d*) provided 15 with the oblong and T-shaped heads (*h*), and washers (*f*), when arranged specifically as shown, for the purpose set forth.

JOHN WOODVILLE.

Witnesses:

WILLIAM TUSCH,
SELIM FRAS COHEN.