

No. 621,798.

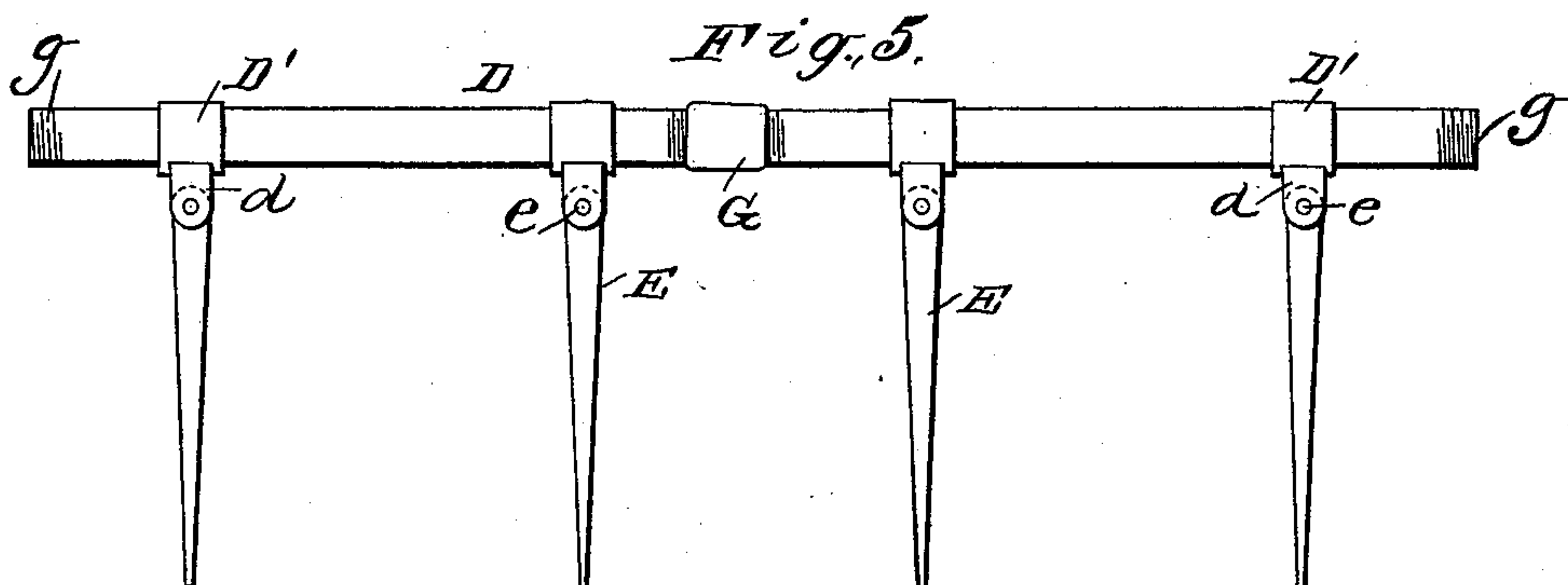
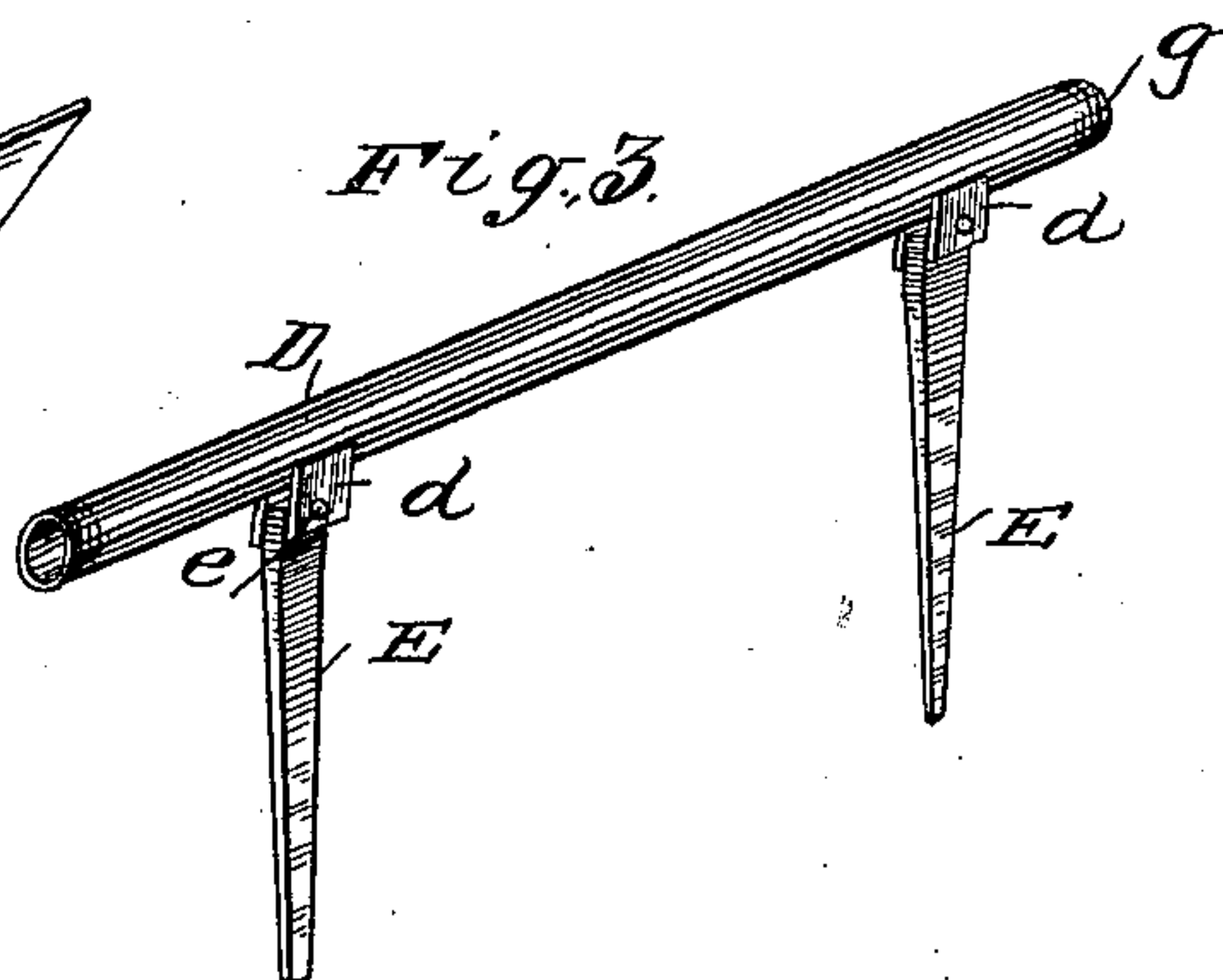
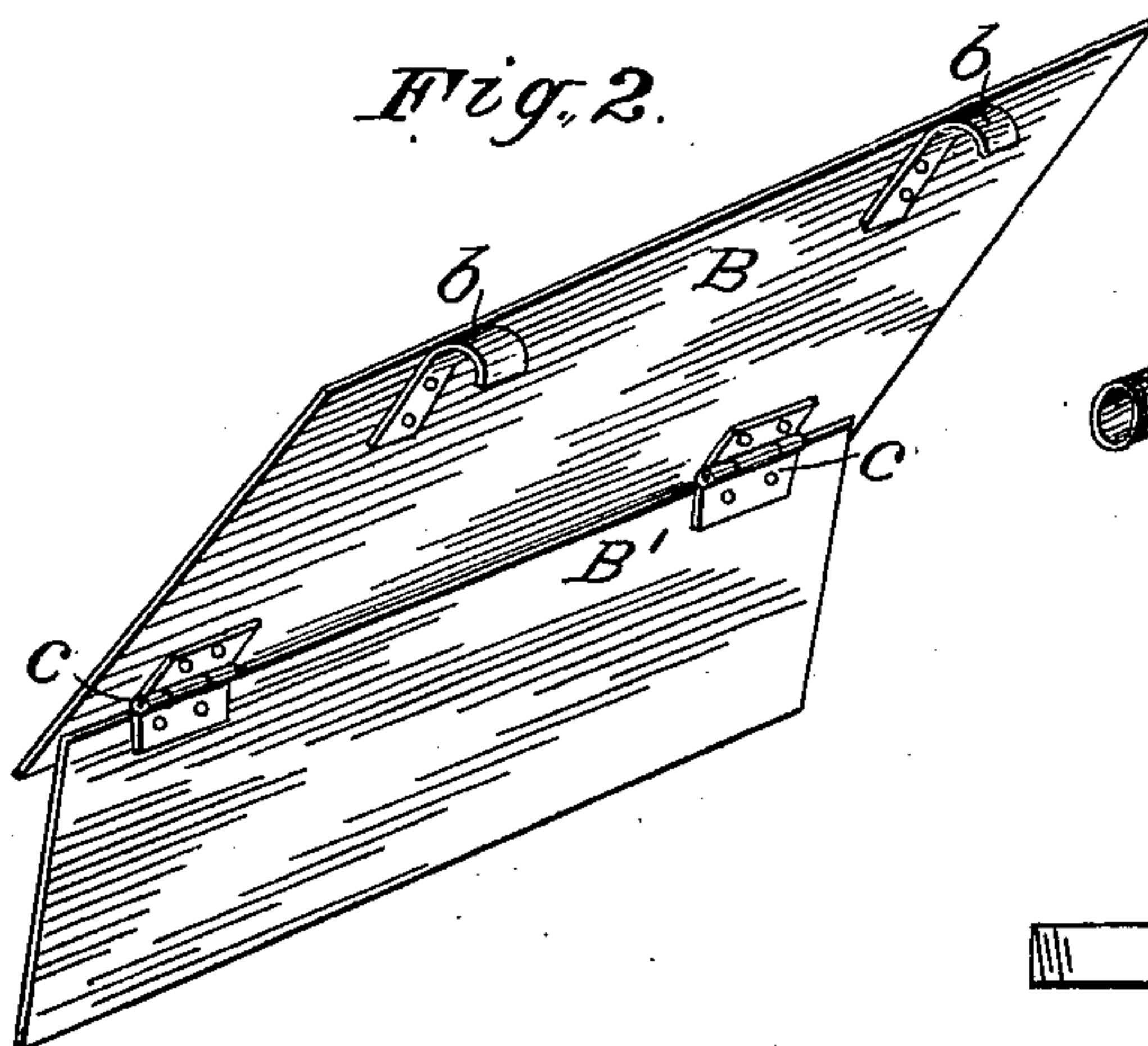
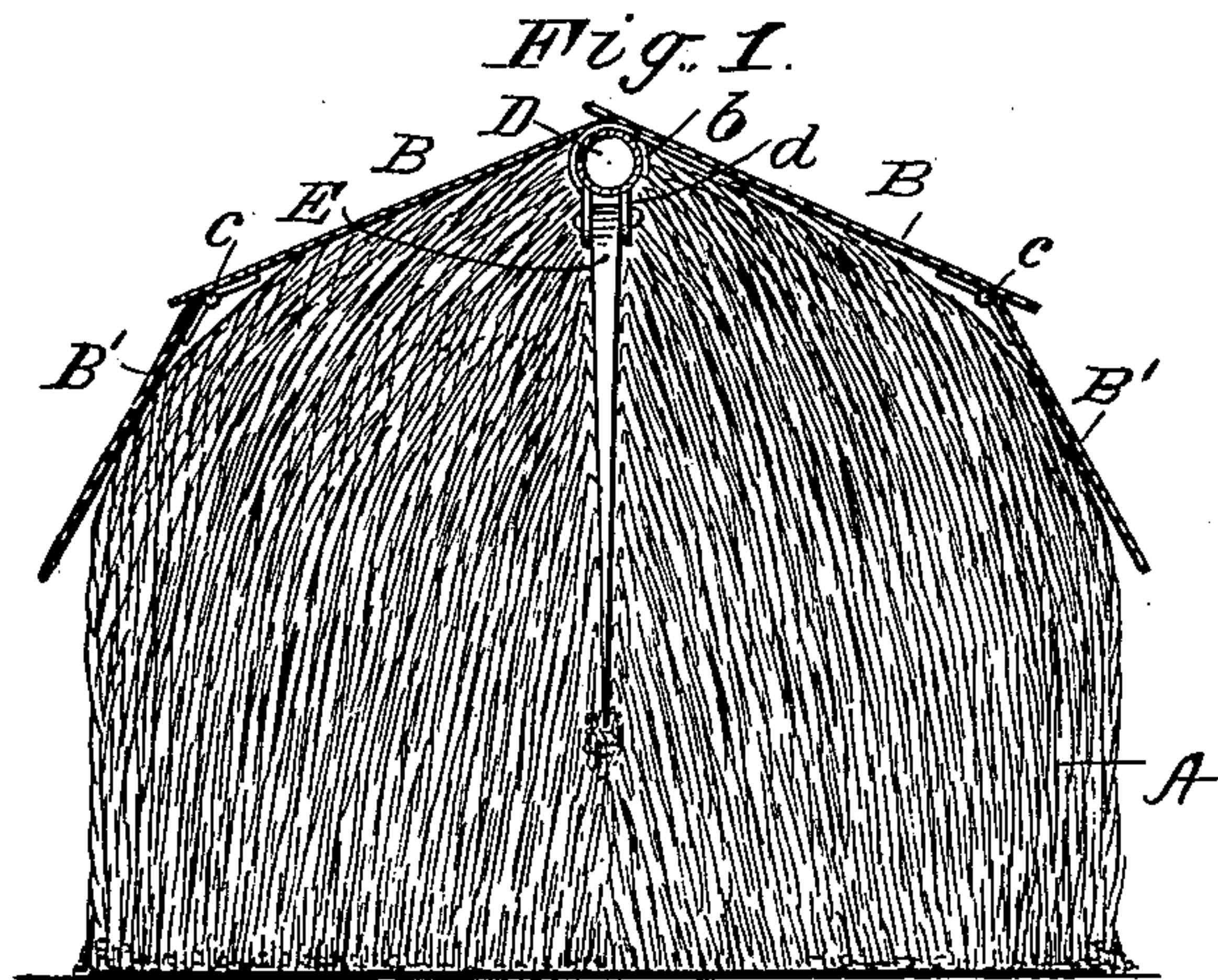
Patented Mar. 28, 1899.

J. B. DEEMS.

COVER OR ROOF FOR PROTECTING GRAIN OR HAY.

(Application filed June 25, 1898.)

(No Model.)



Witnesses.
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UNITED STATES PATENT OFFICE.

JOSHUA B. DEEMS, OF DANKINS, COLORADO.

COVER OR ROOF FOR PROTECTING GRAIN OR HAY.

SPECIFICATION forming part of Letters Patent No. 621,798, dated March 28, 1899.

Application filed June 25, 1898. Serial No. 684,511. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA B. DEEMS, a citizen of the United States, residing at Dankins, in the county of Pueblo and State of Colorado, have invented certain new and useful Improvements in Covers or Roofs for Protecting Grain or Hay; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in covers or roofs for protecting grain or hay from the inclemency of the weather.

The object of the improvement is to provide a portable cover which may be sufficiently strong, yet light and easy to handle.

The present invention is so constructed that the cover or roof can be taken down in sections as the grain or hay stack is reduced in size from constant use.

In my improved cover I provide stakes which are pivotally secured to a ridge-pole for holding the roof against wind or storm. The ridge-pole is formed of tubing, which preferably are coupled together by ordinary thimbles or couplings. The advantages of this course of construction are obvious to those conversant with the manipulation of portable roofs as the grain or hay is consumed. Consequently the stack is reduced in size, the stack remaining at its original height; but it is shortened as the grain is taken from one end only. By this means the stakes are exposed to view and are inconvenient and dangerous to the farmer. To overcome these objections, I have made the ridge-pole and roof in sections, so that they can be removed as the hay or grain is taken away from the stack. I prefer to have the stakes independent of the tubing forming the ridge-pole, as by this device the stakes may be removed independent of the tubing without disarranging the roof-sections. The stakes are hinged or pivoted to ears either with the ridge-pole or sleeves,

which are adapted to slide over the ridge-pole. By this construction the stakes can be doubled up parallel with the ridge-pole when stored away.

In the drawings similar letters of reference indicate like parts in all the figures.

Figure 1 is a transverse vertical section of my improved grain-cover secured to a stack and the stake being exposed. Fig. 2 is a perspective view of a portion of the roof or cover, exhibiting its supporting-hooks for embracing the ridge-pole tube. Fig. 3 is a perspective view of a ridge-pole section with its accompanying pivoted stakes. Fig. 4 represents the ridge-pole with the stakes folded up when not in use. Fig. 5 represents in side elevation the sectional ridge-pole joined by a thimble and also the stakes pivoted to independent sleeves.

My improved roof or cover for hay or grain consists of metallic plates B and B', hinged in any suitable manner at C and adapted to conform to the contour of a stack A.

These covers can be made of any desired material, such as boards or shingles, but preferably of galvanized iron of light gage—about No. 18. The weight of these covers is such that they will generally remain over the stack through gravity; but to provide against storms and also to prevent the several sections forming a cover or roof from slipping or being blown off during a storm I have provided stakes E, which are driven or forced into the stack, as indicated in Fig. 1 of the accompanying drawings. Said stakes are secured to a tubular ridge-pole D, the latter extending the entire length of the stack. Said stakes E can be rigidly secured to the ridge-pole; but I find it more convenient to pivotally connect them, as indicated in the various figures. By this means they can be folded up for transportation, as indicated at Fig. 4. Pins e form the hinge or pivot on which the heads of the stakes E turn or are fulcrumed. Said pins e pass through ears d for supporting the stakes. In Fig. 3 the ears d are secured direct to the ridge-pole; but it is preferable to secure them to sleeves D', as indicated at

Fig. 5, as said stakes, with their accompanying sleeves, can be removed or adjusted to any point desired in a stack.

5 The roof is provided with hooks *b* for embracing the ridge-pole. By forming them in this manner it is found more convenient for handling, as the ridge-pole is first put or secured on the stack, when the roof-sections are hooked on.

10 In a long stack the roof-sections are made short in the direction of their length and the joints are broken in a manner similar to putting on shingles. In the drawings I have shown only one length, as it is sufficient to
15 fully understand my invention.

The ridge-pole can be made indefinite as regards its length by joining each section by a thimble *G*, as shown in Fig. 5. All the tubes are screw-threaded, as indicated at *g g*,
20 for the purpose aforesaid.

I do not limit myself to the exact construction of the present device as regards the ridge-pole and its connections, as they can be varied somewhat and yet cover the spirit of my in-
25 vention.

Having described my invention, that which I consider as new, and desire to secure by Letters Patent of the United States, is—

30 1. A portable roof-cover made up in sections and secured to a sectional tubular ridge-pole provided with pivoted stakes for the purpose, substantially as described.

2. A portable roof-cover made up in sections, and secured to a sectional tubular ridge-pole substantially as described. 35

3. A portable roof-cover made up in sections, and adapted to be loosely hooked to a tubular ridge-pole, as shown and described.

4. In combination with a portable roof a tubular ridge-pole made up in sections and provided with stakes, for holding said roof substantially as described. 40

5. In combination with a portable roof, a tubular ridge-pole made up in sections and provided with hinged or pivoted stakes secured to sleeves, substantially as described. 45

6. In combination with a portable roof a tubular ridge-pole made up in sections and joined together by couplings or thimbles, and provided with pivoted stakes substantially
50 as specified.

7. In combination with a portable roof a tubular ridge-pole made up in sections and joined together by screw-threaded couplings or thimbles and provided with pivoted stakes secured to independent sleeves and adapted to fit on said tubular ridge-pole, for the purpose as shown and described. 55

In testimony whereof I affix my signature in presence of two witnesses.

JOSHUA B. DEEMS.

Witnesses:

MARK RICE,
JESSE CRAIG.