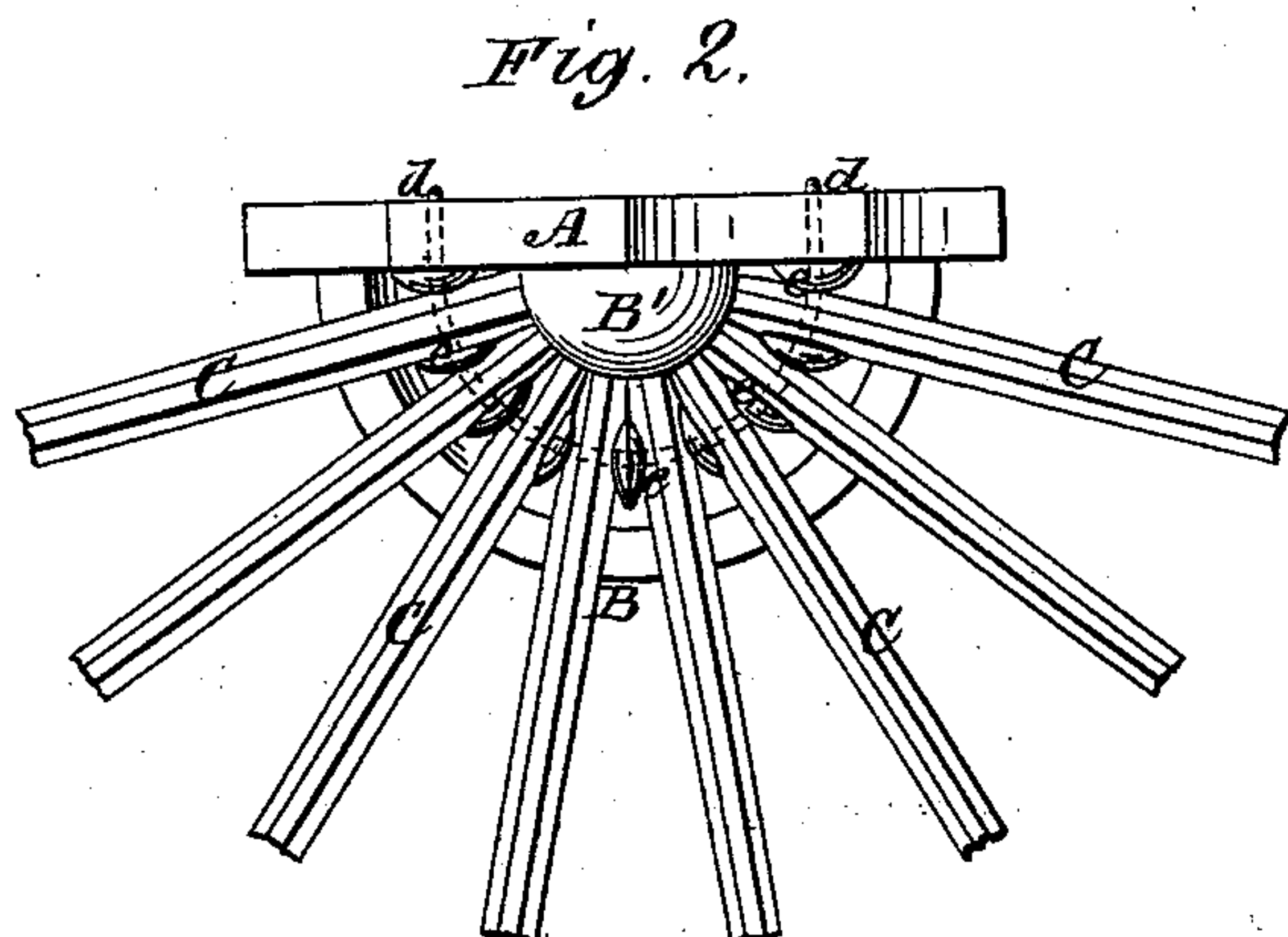
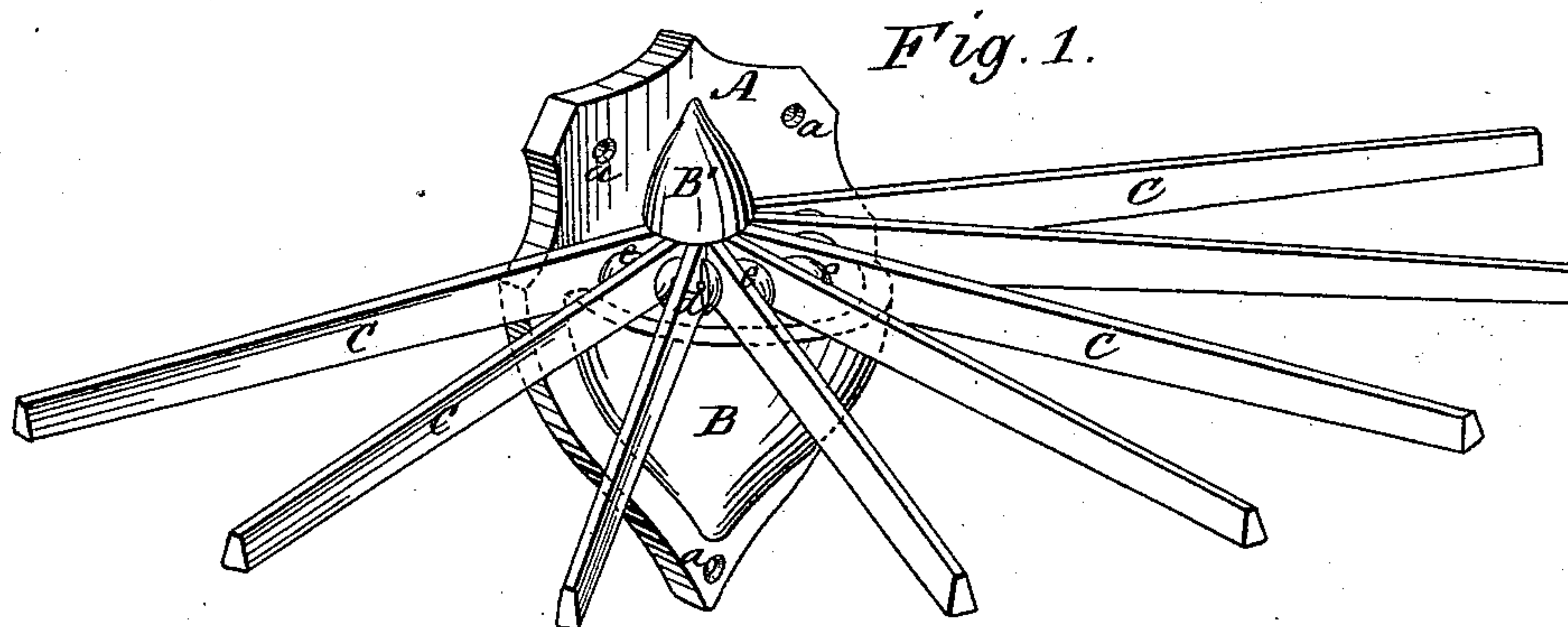


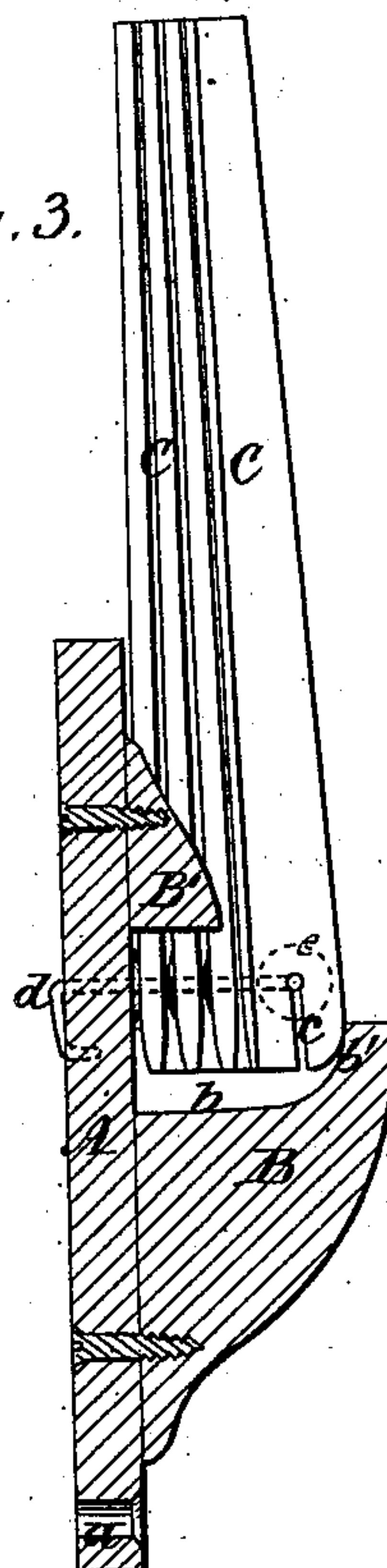
C. B. KOON.  
CLOTHES-DRIER.

No. 193,164.

Patented July 17, 1877.



*Fig. 3.*



*Fig. 4.*



Witnesses:

*J. D. Patten,*  
*A. E. Straub*

Inventor:

*Charles B. Koon,*  
by *E. E. Masson* atty.

# UNITED STATES PATENT OFFICE.

CHARLES B. KOON, OF AUBURN, NEW YORK.

## IMPROVEMENT IN CLOTHES-DRIERS.

Specification forming part of Letters Patent No. **193,164**, dated July 17, 1877; application filed November 25, 1876.

*To all whom it may concern:*

Be it known that I, CHARLES B. KOON, of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Clothes-Driers; and that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents, in perspective, the clothes-drier, with the radial arms open, ready for use. Fig. 2 represents the same in top view, with the arms broken or shortened. Fig. 3 represents the same in vertical section, with the arms folded up. Fig. 4 represents one of the washers used to retain the arms in their relative positions.

My invention relates to that class of clothes-driers in which the drier is fastened to the wall or other convenient support; and it consists of a bracket to which are fastened two conical bearings, to receive one end of a series of radial bars or arms, connected thereto by a bent wire. Said bars may be beveled upon either or both sides, or left of such other shape in that regard as may be desired. I have shown them as beveled on both sides in the drawings, because I deem that form the best on account of strength. They are provided with longitudinal slots through their inner ends, and are retained firmly in place upon the wire and apart one from the other, by convex washers, as will be hereafter more fully described.

In the drawings, A represents a board cut out in the form of a shield, or other suitable design, and having holes *a* for the reception of screws, by which it can be secured to a wall, post, &c. To the board or back A is secured, by screws or otherwise, the bearing B, in the form of an inverted cone, and the smaller conical bearing B', the base of each cone being parallel one to the other, and at a distance apart equal to the thickness of the inner end of the radial arms or bars C. These

bars are retained in connection with the bracket thus formed by means of the curved wire *d*, clinched to the back of the shield A. For that purpose the bars C are slotted at *c*, so that they can be secured to the wire after the latter is clinched, and permit any broken bar to be replaced without difficulty by a new one. To retain the bars in a fixed position upon the wire *d*, I place upon the wire the washers *e e*, convex upon one or both sides, which add to the stability of the bars either when lowered ready for use or when folded up.

The bearing B is hollow at *b*, to receive the inner end of the radial arms, the inclined part *b'* corresponding with the beveled or rounded ends of the bars C, to allow them to be folded up and elevated past their center of gravity, and remain in that position without any fastenings.

If the bars are beveled, when folded up the beveled sides will permit each bar to stand radially close to the others, and thus occupy less space than if made of a rectangular form.

I am aware that metallic brackets for clothes-driers have been made with perforations to receive radial arms, so as to support said arms upon each side, but such brackets are heavy, complex, and difficult to mold.

I am also aware that wooden brackets have been used to support the slotted inner ends of the radial arms, which are pivoted to a wire entering said slot; but said arms, having no side supports when in use, are liable to be shifted and crowded against each other, and I do not claim these devices.

What I claim is—

The combination of the double conical bracket A B B' with slotted bars C, retained in their places upon the wire *d* by washers *e*, convex on one or both sides, substantially as described.

CHARLES B. KOON.

Witnesses:

D. WRIGHT,  
ROLLIN TRACY.