

(No Model.)

F. W. OHLINGER.
IRRIGATOR.

No. 434,834.

Patented Aug. 19, 1890.

Fig. 1.

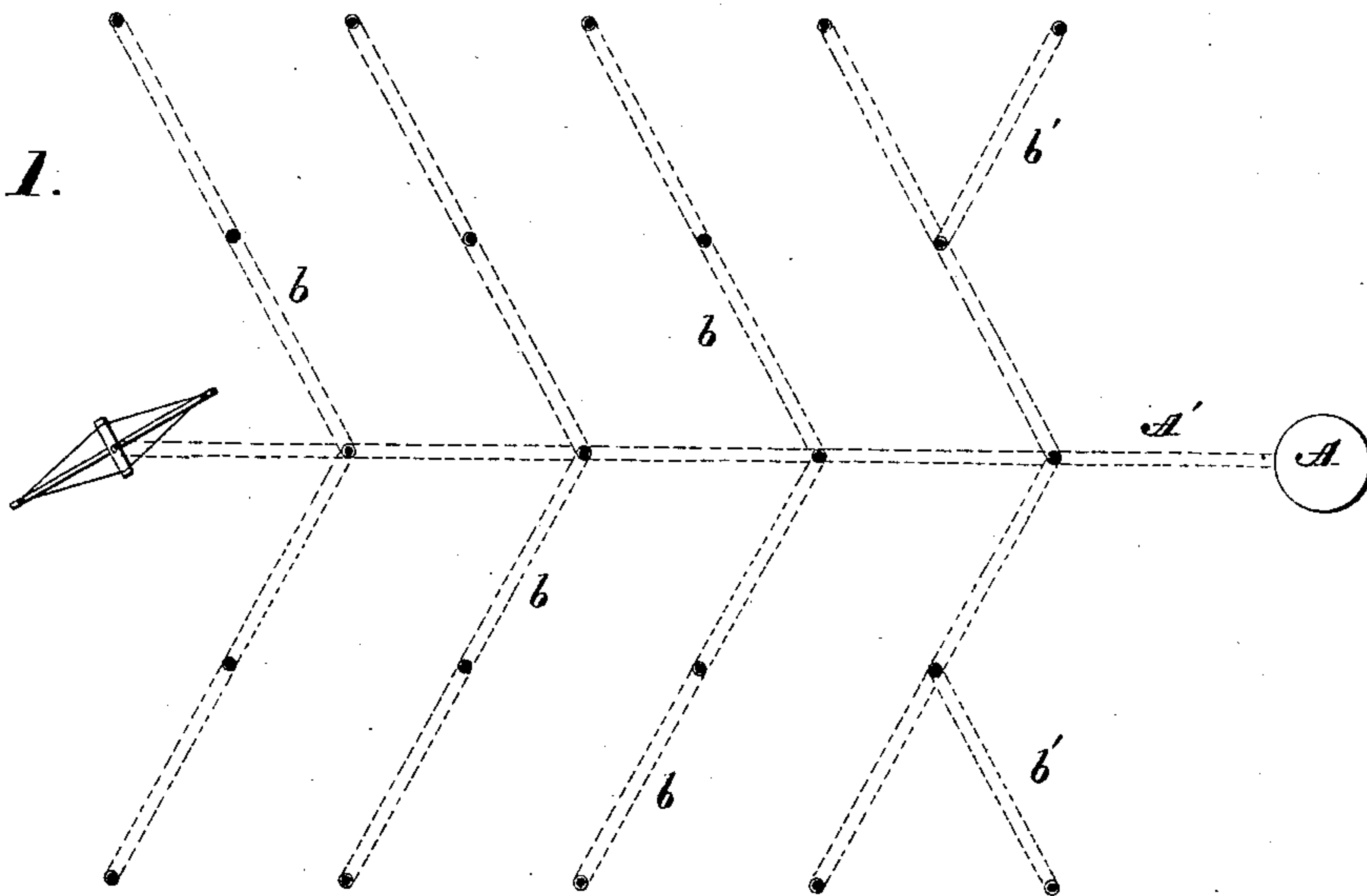


Fig. 2.

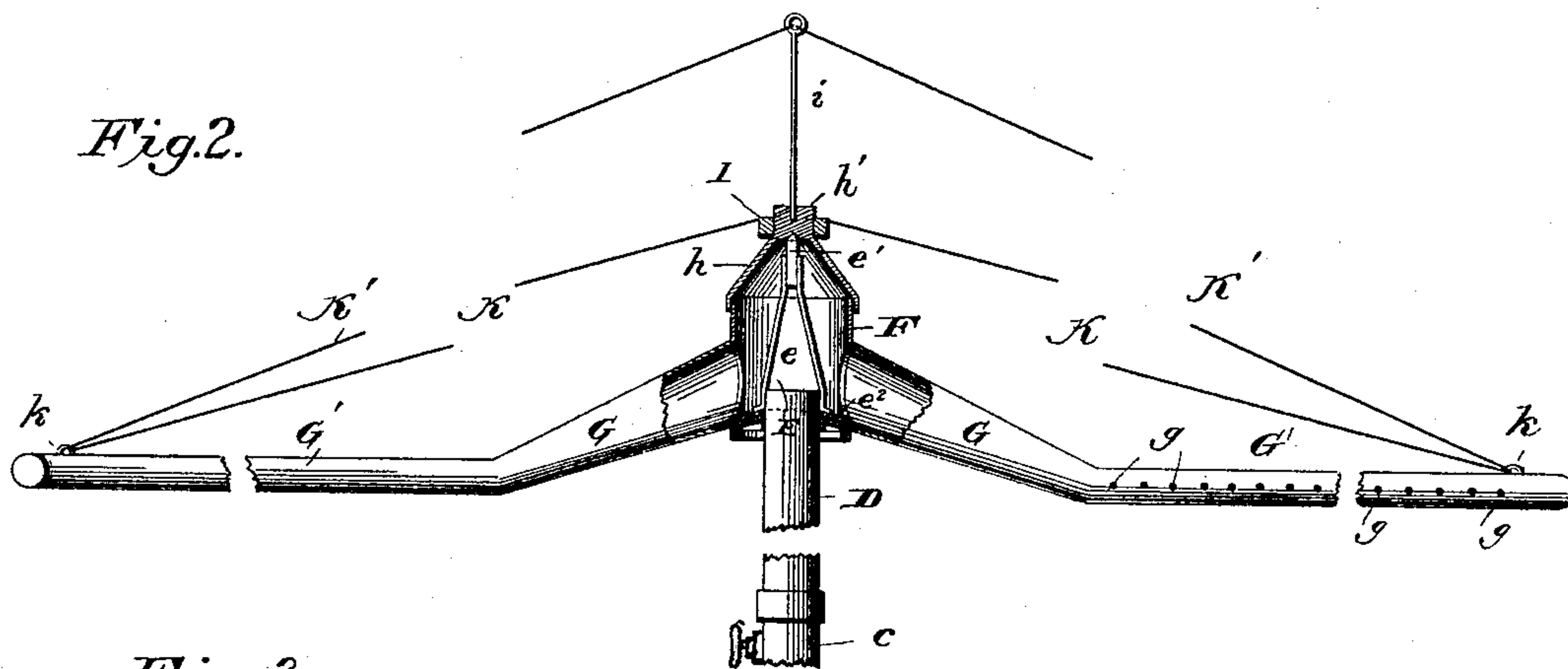
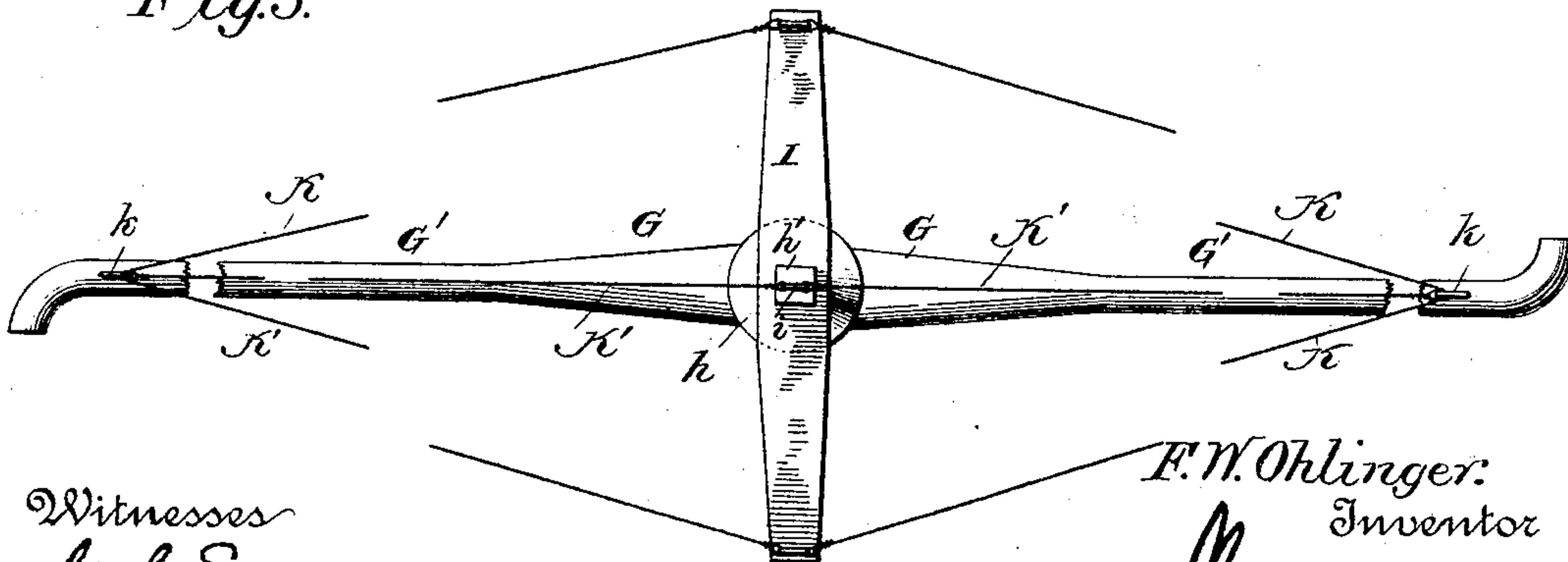


Fig. 3.



Witnesses

L. S. Elliott
E. W. Johnson

F. W. Ohlinger
Inventor

By his Attorney

[Signature]

UNITED STATES PATENT OFFICE.

FREDERICK W. OHLINGER, OF HAINES CITY, FLORIDA.

IRRIGATOR.

SPECIFICATION forming part of Letters Patent No. 434,834, dated August 19, 1890.

Application filed April 3, 1890. Serial No. 346,453. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. OHLINGER, a citizen of the United States of America, residing at Haines City, in the county of Polk and State of Florida, have invented certain new and useful Improvements in Irrigators; and I do hereby 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 letters of reference marked thereon, which form a part of this specification.

This invention relates to irrigating devices; and it consists in the improved construction hereinafter described and set forth, whereby a simple and efficient irrigator is provided.

In the accompanying drawings, Figure 1 is a plan view showing the application of my improved irrigator to a section of a field. Fig. 2 is a side view, partly in section, of the rotary sprinkler, and Fig. 3 is a plan view.

A refers to a water-supply or tank, which is connected by a pipe or pipes sunk in the ground parallel with the surface thereof at such a depth that they will not interfere with the plowing or cultivating of the field. The main pipe A' is provided with a series of branches *b* and *b'*, which have at suitable intervals vertical sections *c* attached thereto, said sections extending about four feet above the surface of the ground where they are provided with cut-off cocks. The upper ends of these pipes are preferably screw-threaded for connecting the vertical removable pipes of the irrigators thereto.

D refers to the vertical removable stand-pipes, the lower ends of which are screw-threaded to engage with the projecting ends of the pipes *c*, and the upper end of each of the pipes D is provided with a casting E, having two upwardly-projecting arms *e*, which terminate in a bearing-pin *e'*. The lower portion of the casting is made up of a flanged disk *e*², which extends downwardly from the upper edge of the pipe and lies over a correspondingly-flanged disk formed on the lower end of the box F to which arms *G* are attached. The upper end of this box F has secured thereto a cone *h*, the lower edge of which

is internally screw-threaded, so as to be removably secured thereto, and the upper part of this cone *h* has a rectangular portion *h'*, to which can be secured a cross-arm I, socketed for the reception of a rod *i*.

To the box F are rigidly secured two downwardly-depending arms *G*, which taper, as shown, and to the ends of these downwardly-depending arms are secured horizontal arms *G'*, which are provided with a series of minute perforations *g*, which are located on opposite sides of the arms. The ends of the arms are curved, as shown, and near the outer ends the arms *G'* are provided with eyes *k*, to which are secured pairs of guy-wires *K K*, which extend to the end of the cross-bar I, while single guy-wires *K'* extend from the eyes *k* to the upper end of the rod *i*. By this construction of the irrigator it will be readily observed that when water is admitted to the stand-pipe these arms will become filled, and as said water is under pressure it will be discharged through the openings *g* and cause a rotation of the arms, so that the water will fall to the ground in minute streams or spray, thereby providing means for irrigating the ground in approximately the same manner as a natural rain-fall. The removable conical cap admits of the stand-pipe being passed down vertically through the box F until its disk bears on that of the said box.

I am aware that prior to my invention it has been proposed to provide lawn-sprinklers with stand-pipes and radial arms through which the water is discharged to rotate said arms, and I do not claim such construction as my invention, as these lawn-sprinklers, though admirably serving the purposes for which they are intended, cannot be used advantageously for irrigating lands for growing crops.

With my improved device several or more sprinklers can be used, and they can be removed from the supply-pipes and transferred to another portion of the field. As the irrigating-arms are of great length in practice it has been found necessary to supply the supports hereinbefore described.

I claim—

1. In a revolving irrigator, a stand-pipe provided at its upper end with a casting E, a downwardly-inclined disk *e*², and a pivot-pin,

a box or housing having a removable conical top through which the stand-pipe can be passed, downwardly-extending arms G, and horizontal perforated arms G', attached thereto, substantially as and for the purpose set forth.

2. The combination, in a centrifugal irrigator, of the pipe D, having a casting or pivot rigidly secured to the upper end thereof and provided with a downwardly - projecting flange, a boxing or housing having a removable cone forming a bearing for the pivot-

pin, a cross-bar I and vertical bar i, and guys K K and K' extending from the cross-bar I and upright i to near the ends of discharge-pipes G', the pipes G being connected to the housing and tapered, as shown, the parts being organized substantially as set forth.

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

FREDERICK W. OHLINGER.

Witnesses:

HARRISON JONES,

A. B. STROUD.