

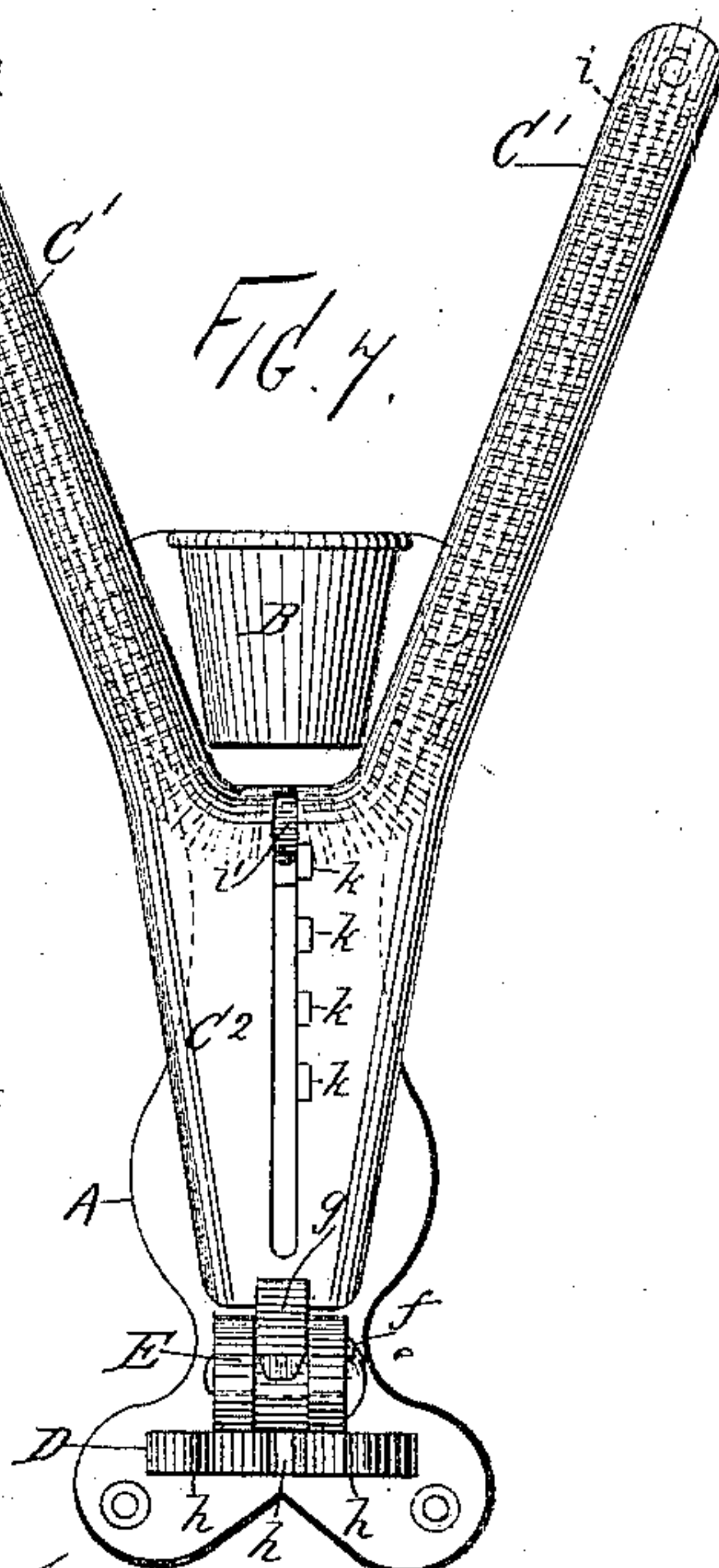
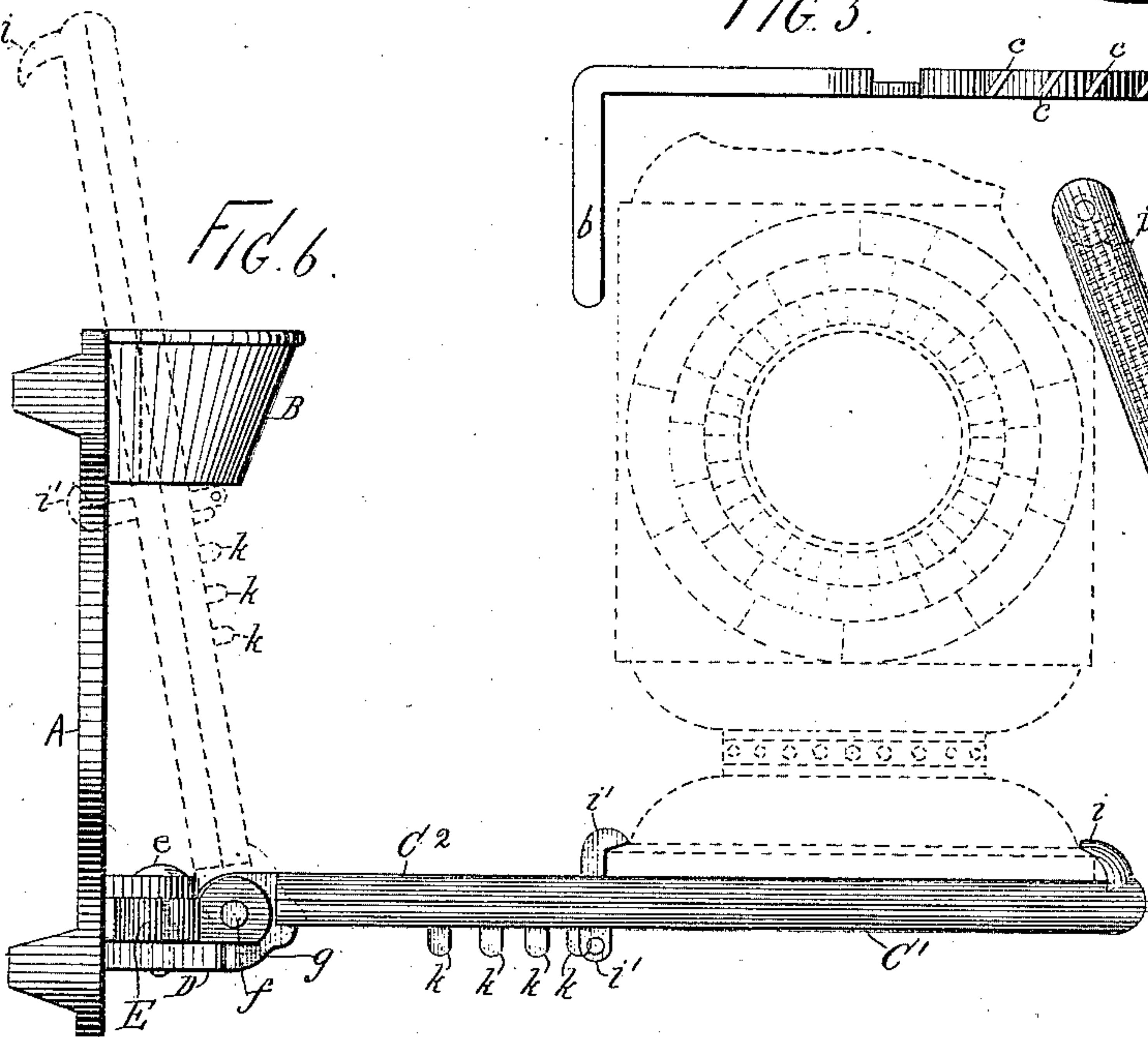
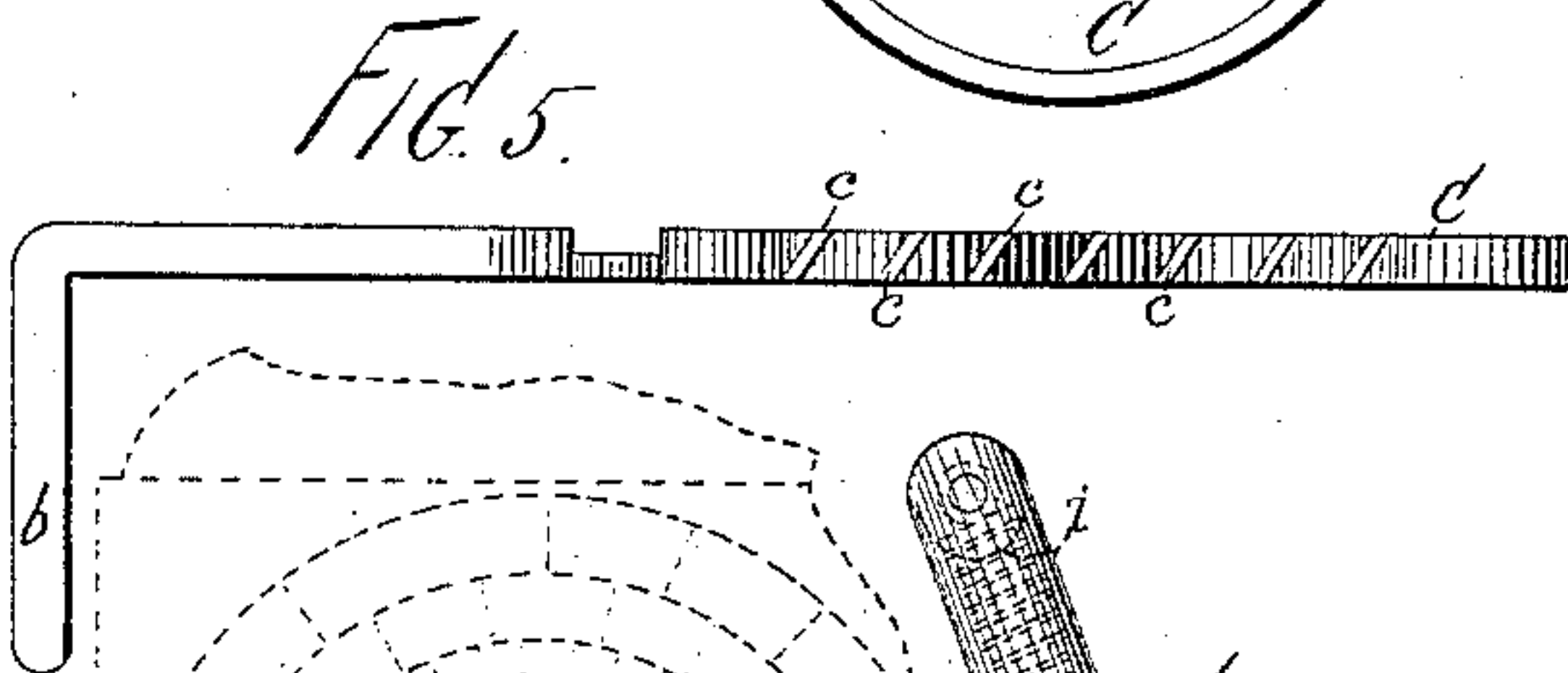
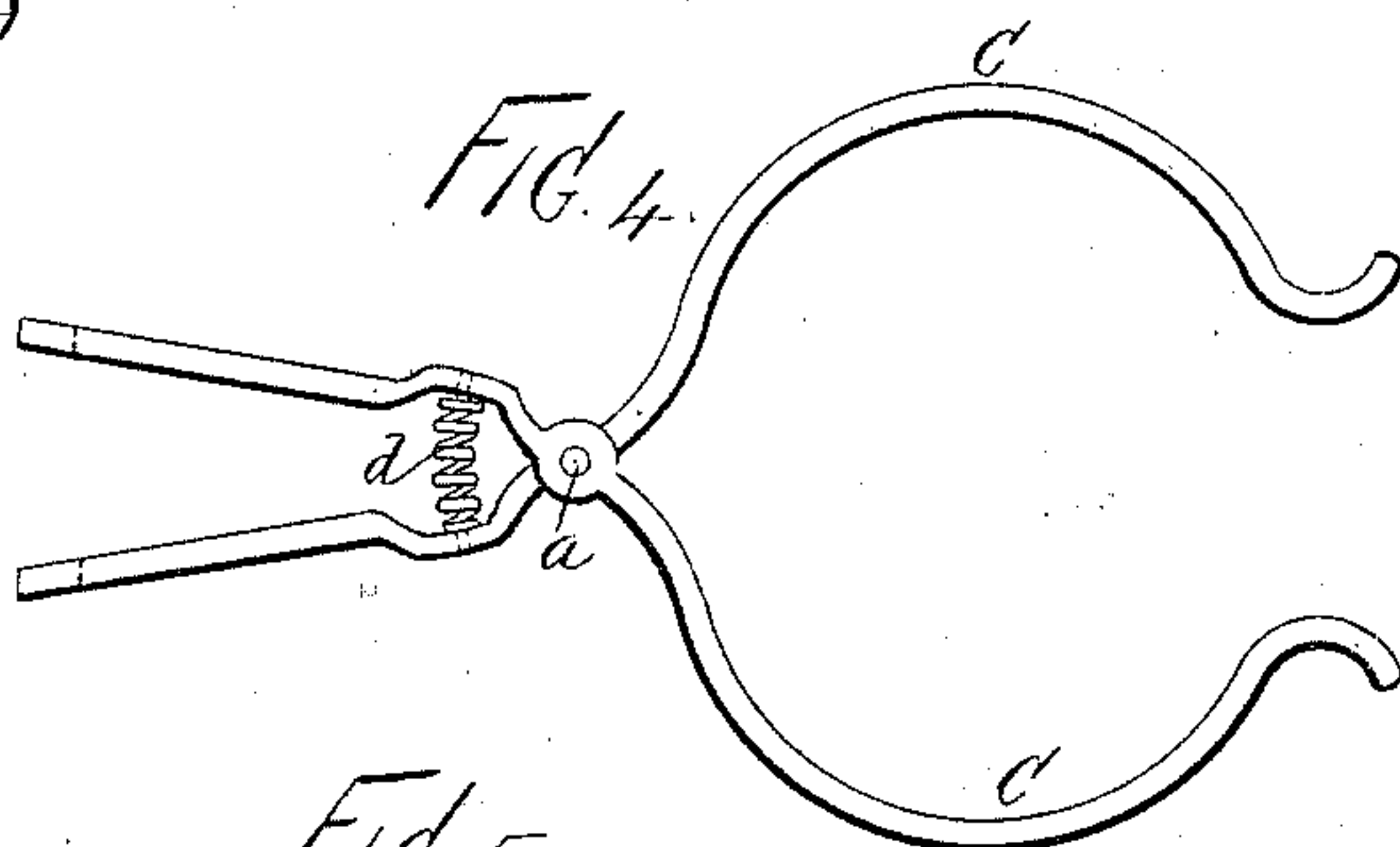
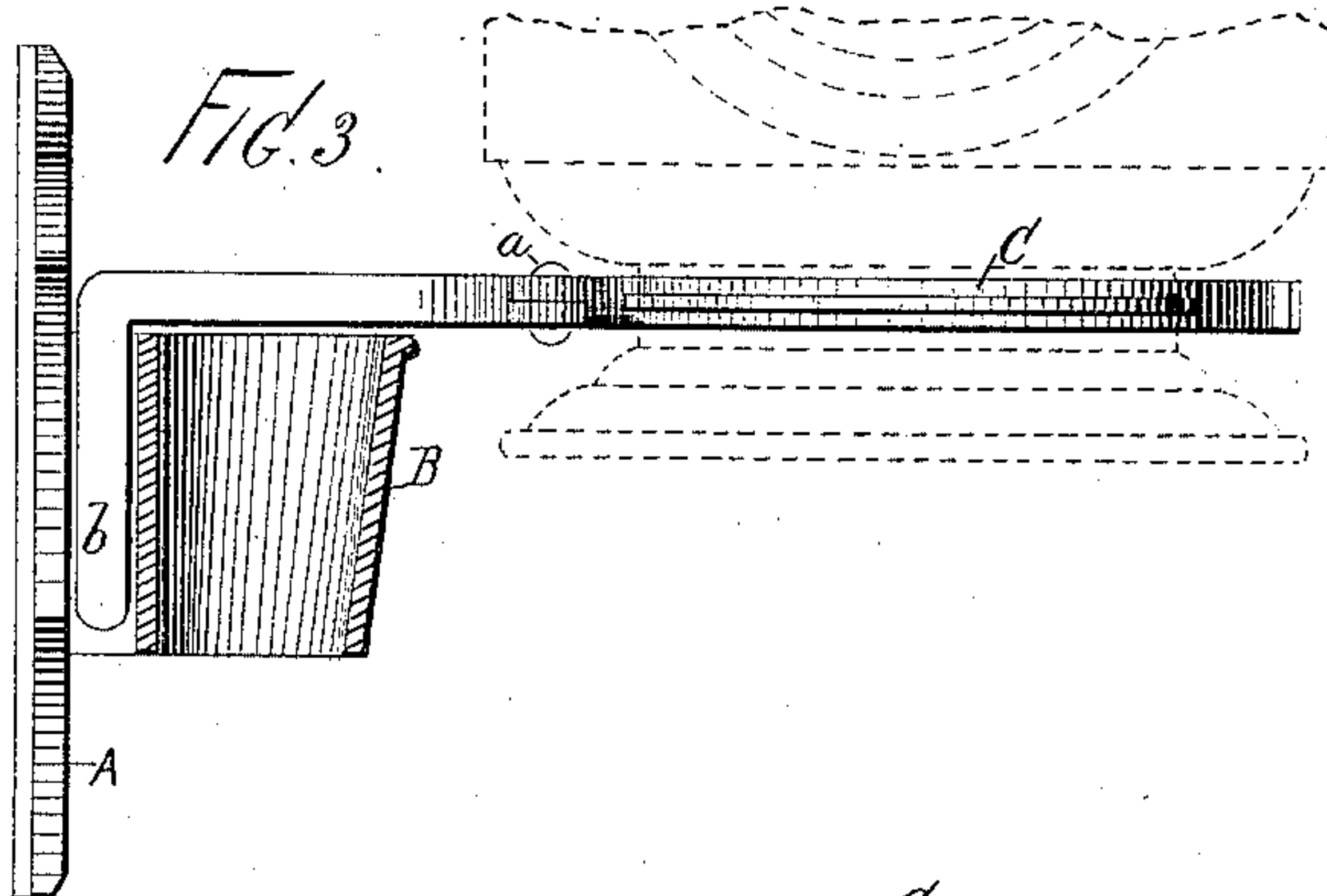
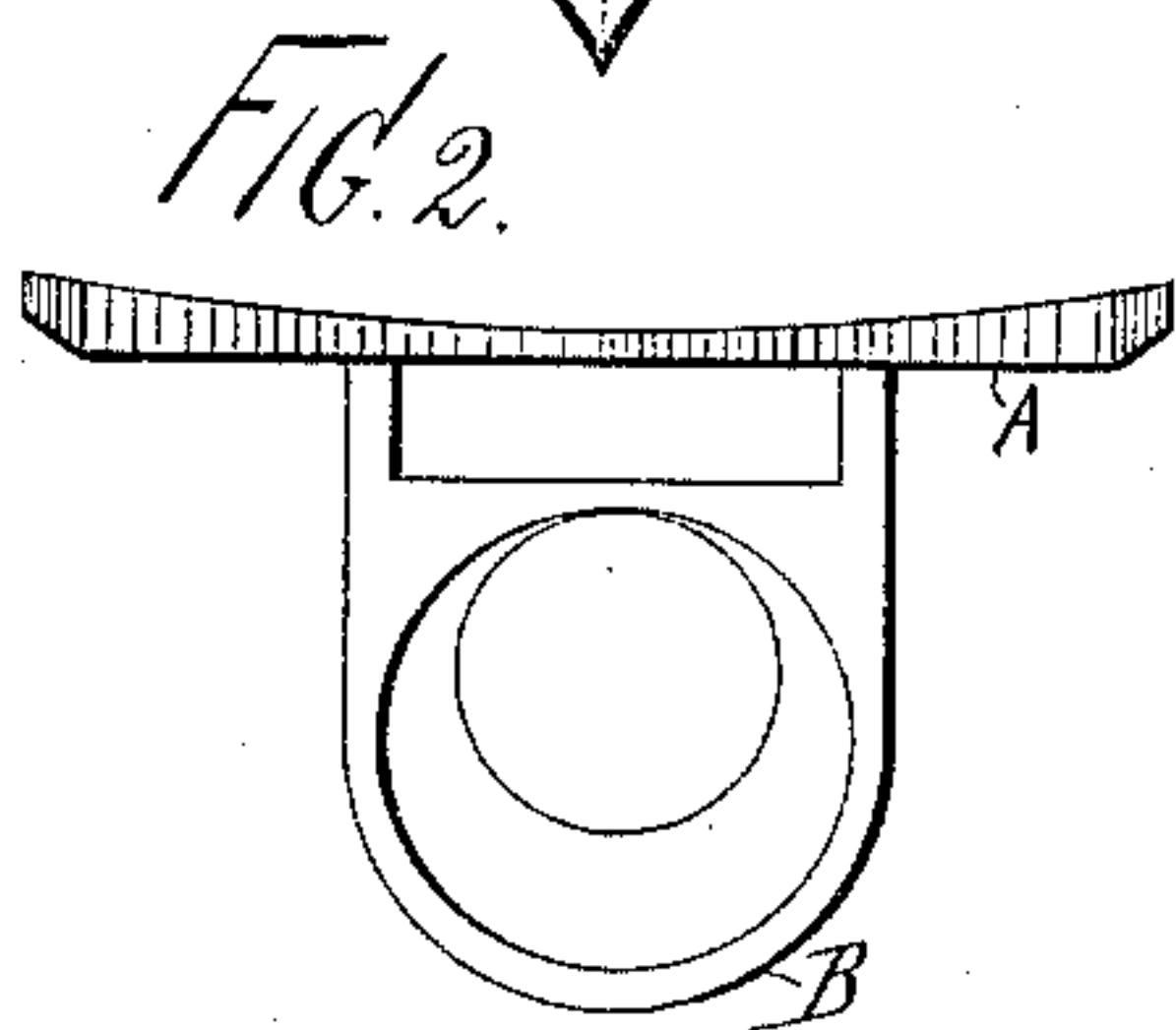
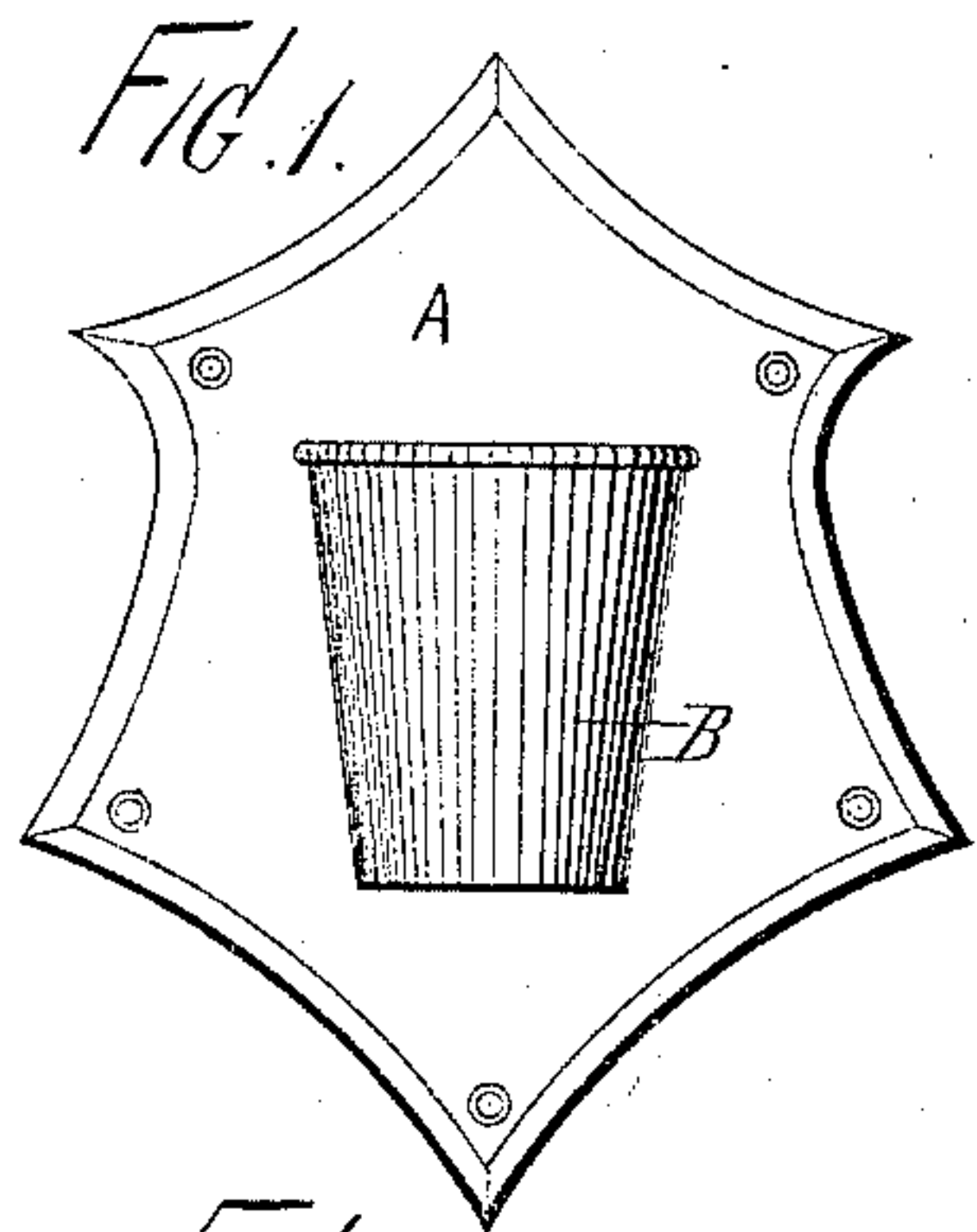
(No Model.)

F. W. COOLBAUGH.

HOLDER FOR SIGNAL LANTERNS AND FLAGS.

No. 310,652.

Patented Jan. 13, 1885.



Witnesses:
John Buckler,
Henry Lieb,

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UNITED STATES PATENT OFFICE.

FRANK W. COOLBAUGH, OF NEW YORK, N. Y.

HOLDER FOR SIGNAL LANTERNS AND FLAGS.

SPECIFICATION forming part of Letters Patent No. 310,652, dated January 13, 1885.

Application filed October 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANK W. COOLBAUGH, of New York city, county of New York, and State of New York, have invented certain new and useful Improvements in Holders for Signal Lanterns and Flags, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention has relation to devices intended for receiving, holding, and carrying signal-lanterns and signal-flags, such as are employed upon locomotives, railway-cars, and in other analogous situations, as indicated in United States Patent No. 232,461, issued to me September 21, 1880.

The object of my present invention is to provide a simple, cheap, durable, compact, and efficient holder of the character above named, wherein the lantern and flag may be easily and quickly adjusted, be securely held against danger of accidental displacement or disarrangement, and be readily removable when required, the device or holder being so constructed and arranged as to permit the flag-staff to be carried close to the base-plate and the lantern-clamp to be detached or folded up, (so as to economize space,) and the whole easily attachable upon any part of a car or engine, or other place of support.

To accomplish all of this, my improvements involve certain novel and useful arrangements or combinations of parts, peculiarities of construction, and principles of operation, all of which will be herein first fully described, and then pointed out in the claims.

The desirability of a specially-devised holder for signal-lanterns and signal-flags has now come to be well known, and is set forth in the specification of my previous patent above named.

In the accompanying drawings, forming part of this specification, Figure 1 is a front elevation, and Fig. 2 a horizontal section, of a socket-plate constructed and arranged for application to any support in accordance with my invention. Fig. 3 is a vertical section and partial elevation showing one form of my improved device, the position of the lantern therein being indicated by dotted lines. Fig. 4 is a plan view of the lantern-clamp shown

in Fig. 3, the same being detached and shown in open position, and Fig. 5 is a side elevation of one of the branches or arms of the lantern-clamp, showing the ribbed or furrowed interior surface thereof. Fig. 6 is a side elevation of a holder constructed in accordance with my invention, the clamp for the lantern being represented as connected with the base-plate at a point below the socket for the flag-staff, the position of the lantern therein being indicated by dotted lines, and the upturned position of the lantern-clamp being also indicated by dotted lines. Fig. 7 is a front elevation of the device arranged as shown in Fig. 6, the lantern-clamp being turned up.

In all these figures like letters of reference, wherever they occur, indicate corresponding parts.

A represents the base-plate, preferably made of malleable iron, upon or near the upper part of which is formed a socket, B, for the reception of the end of the flag-staff. As indicated in Fig. 2, the inner face of this base-plate is curved slightly, so that it may be readily applied upon the rounded corners of cars as well as upon flat or plain surfaces.

In some cases it is desirable to clamp the lantern around the lower part and above the base-ring, so as to hold it firmly. For this purpose I provide the two arms or jaws C C, the same being hinged together, as at *a*, and provided with depending tangs or projections *b* at their inner ends, by which they are held upon the base-plate, and with interior ribs, ridges, or other projections, as *c*, upon their inner surfaces.

The signal-lanterns commonly used have air-openings in the base-ring, substantially as indicated in Fig. 6, and the ribs *c* are employed to prevent the jaws C from closing up these openings, and thereby interfering with the supply of air necessary to the successful operation of the lantern, all of which will be readily understood.

When it is desired that the lantern be supported upon the base-plate at a point above the flag-staff socket, the tangs *b* enter a cavity formed for their reception between the socket B and the base-plate, as shown in Figs. 2, 3, and 6. In this position the clamp and the lantern therein are securely held until purposely

displaced. The arms are first opened to receive the lantern, and are automatically closed and held thereon by a suitable spring, *d*, which operates to maintain a pressure upon the lantern or to keep the clamp closed until purposely released. This spring *d* is shown as being located in suitable recesses in the arms. Of course it might be otherwise arranged or located, so long as it will permit the arms to move upon their hinge and automatically close them. This spring obviates all necessity of adjusting the clamp to the lantern by screws or other means, as heretofore practiced, and permits of the use of various sizes and styles of lanterns with the one pattern of clamp. The socket for receiving the tangs is widened sufficiently to accommodate them when spread apart as far as they will be in case the largest size of lantern be used.

When constructed as shown in Figs. 1 to 5, the lantern-support being detached, the flag-staff may be inserted in the socket provided for it, which socket projects only a short distance from the base-plate. This construction enables me to make the base-plate short, so that it will occupy but little space when in place. The arms *C* are locked against all danger of opening when the tangs thereon are inserted in the socket provided for them. The flag and lantern are not employed simultaneously, one being used for day and the other for night signals.

In some instances it is desirable to sustain the lantern-clamp at a point upon the base-plate below the flag-staff socket. In Figs. 6 and 7 the clamp is shown as being so formed that it may be conveniently mounted in that position.

D represents a step or support formed on or with the base-plate. Upon this is pivoted a short hinge-piece, *E*, as by the vertical bolt or rivet *e*, and upon the hinge-piece the lantern-clamp is mounted and secured, as by a horizontal bolt or rivet, *f*. The clamp can be turned up, as shown by dotted lines in Fig. 6, in which position it will be out of the way and occupy but little space, in no manner interfering with the use of the flag-staff socket for the purposes intended. The clamp when down may be swung from side to side, being held in the position to which it is adjusted by a lug or detent, *g*, mounted upon the lower side of the clamp and arranged to enter any one of a series of notches, *h h*, formed in the front face of the step or support *D*. In this form the spring-acting clamp is composed of two rigid arms, *C' C'*, joined with a central stem, *C''*, through the inner end of which the hinge bolt or rivet *f* is made to pass. Upon the outer ends of these arms are the hooks *i i*, arranged to fit over the base-piece of the lantern, as indicated, so that the lantern need not be clamped around the band which contains the air-openings. The hook *i'* is made adjustable in a slot in the central stem, and is held against the margin of the lantern-base by

spring-pressure, the springs for connecting with this adjustable hook being located in the arms *C' C'*, as shown by dotted lines in Fig. 7. The arms and the central stem are cast so that they are divided longitudinally, as shown in Fig. 6, the parts having an interior cavity sufficient to accommodate the springs. After the springs are located the parts may be secured together in any suitable way. By drawing back the hook *i'* and locating the base of the lantern in place it will be held by spring-pressure, as in the previous form, and with this advantage, that it is held at the bottom of its base, leaving the perforated ring of the lantern entirely exposed. This construction admits of the use of any size of lantern, and is automatically adjustable thereto same as in the other form.

To lock the lantern securely in place, I provide a number of lugs, *k k*, upon the bottom of the central stem, *C''*, the purpose of which is to engage with a pin or other locking medium, which may be passed through a perforation in the depending neck of the hook *i*, and prevent retraction of said hook and consequent loosening of the lantern. When the lantern-clamp is turned up as shown, the hook *i'* enters a perforation cut for it in the base-plate, and maintains the clamp in the proper position, leaving the flag-staff socket exposed for use. The base-plate may be of any outline. I generally make it with a narrow marginal bead or border, to give it strength, and prefer to mount it upon the car or in other situations, so that there will be left room behind it for free circulation of air, thus preventing decay from moisture.

Behind the flag-staff socket, (shown in Figs. 6 and 7,) is a recess for the reception of the tangs upon the lantern-clamp, when the latter is made as in Figs. 3 and 4, so that with the one base-plate either form of lantern-clamp may be employed.

The device constructed and arranged substantially in accordance with the foregoing explanations has been found in practice to admirably answer the purpose or object of the invention as previously set forth.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character herein set forth, the combination, with the base-plate carrying a socket for the flag-staff, of a lantern-clamp automatically adjusted to accommodate any size of lantern, and arranged to hold a lantern by spring-pressure, the arms of the clamp being divided longitudinally and having the springs located therein, substantially as shown and described.

2. In a device of the character herein set forth, the combination, with the base-plate carrying a socket for a flag-staff, of a lantern-clamp automatically adjustable to accommodate various sizes of lanterns, said clamp being arranged to hold a lantern by spring-

pressure thereon, and to be locked against accidental disarrangement of the clamp or its spring, the springs being located within the arms, substantially as and for the purposes set forth.

5 3. The combination, with the base-plate, of a flag-staff socket mounted thereon and arranged, as described, so as to leave a second socket or cavity behind the flag-staff socket,
10 for the purposes and objects named.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

F. W. COOLBAUGH.

Witnesses:

JOHN BUCKLER,
WORTH OSGOOD.