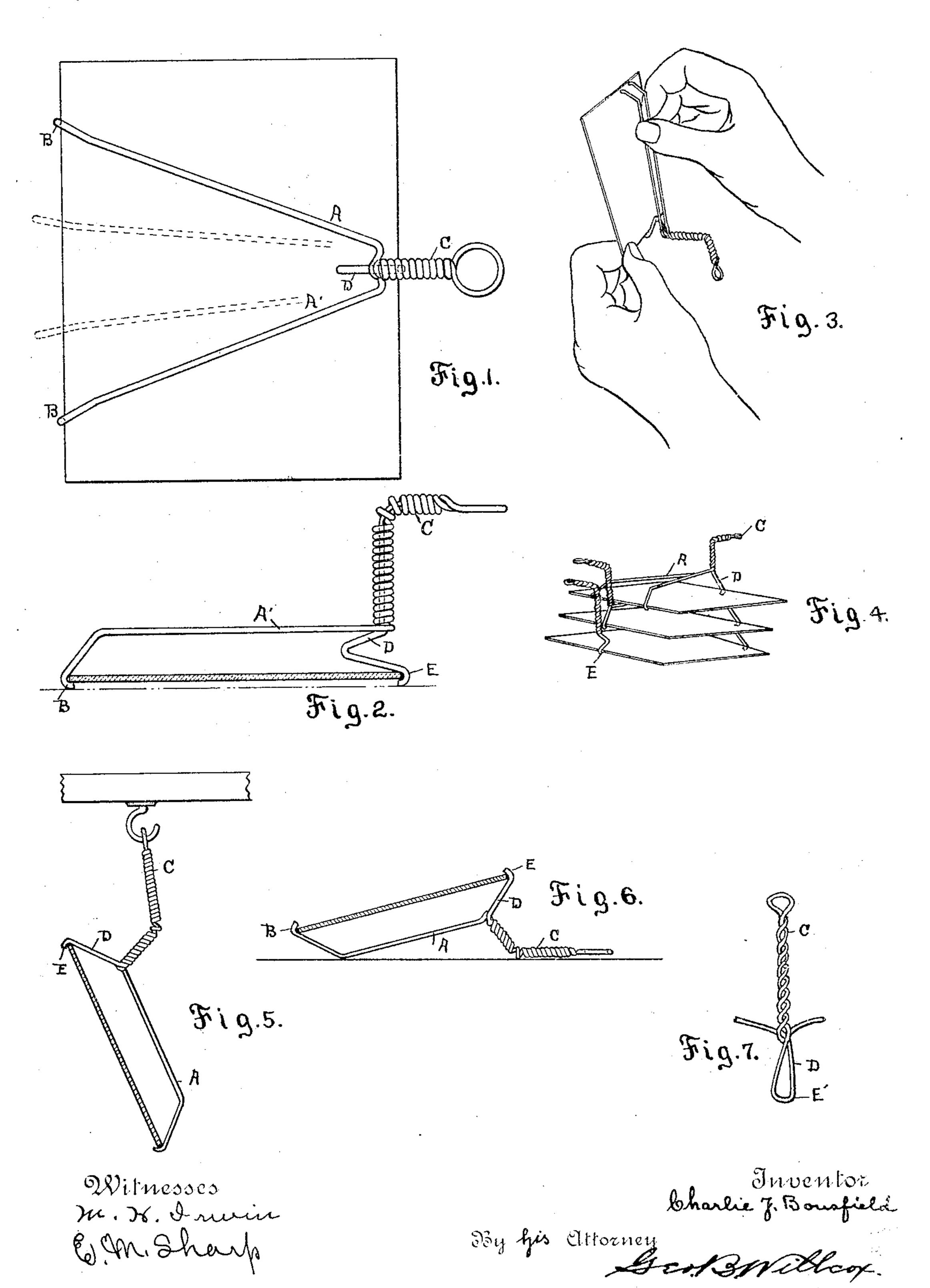
C. J. BOUSFIELD. DEVICE FOR HOLDING NEGATIVES.

(Application filed May 15, 1899.)

(No Model.)



UNITED STATES PATENT OFFICE.

CHARLIE J. BOUSFIELD, OF BAY CITY, MICHIGAN.

DEVICE FOR HOLDING NEGATIVES.

SPECIFICATION forming part of Letters Patent No. 640,739, dated January 9, 1900.

Application filed May 15, 1899. Serial No. 716,823. (No model.)

To all whom it may concern:

Be it known that I, CHARLIE J. BOUSFIELD, a citizen of the United States, residing at Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Photographic-Plate Holders; 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.

My invention relates to photographic-plate holders; and the improvement consists in certain arrangements and combinations of parts 15 of the device forming means whereby I accomplish the objects of my invention, which are, first, to provide a plate-holder that is simple in construction and that can be manufactured at small cost; second, to provide a 20 plate-holder that will automatically clamp the edge of a plate and hold it securely without slipping; third, to provide a plate-holder that will allow of inspection of all parts of the plate and permit its manipulation in the de-25 veloping-baths without wetting or soiling the hands of the operator, and, fourth, to provide means for draining and drying the plate without liability of injury to the film by dust or dirt lighting upon it. I accomplish these 30 objects by the means illustrated in the accompanying drawings throughout the several views, of which similar letters and characters of reference designate similar parts and devices.

Figure 1 is a top view of a plate-holder attached to a photographic plate. Fig. 2 is a side view of the same. Fig. 3 shows the mode of placing the plate-holder in position on the plate. Fig. 4 shows a series of plates nested for convenience in fixing, washing, or drying. Fig. 5 shows a plate with holder attached suspended from a hook for drying, inspection, &c. Fig. 6 shows another position of the device for draining and drying the plate.

45 Fig. 7 is a detail of the handle formed of a single piece of wire.

As is plainly shown in the drawings, the invention consists of a frame, preferably formed of German silver, aluminium, or other flexible wire bent into the desired shape.

A A' are spring-arms, preferably formed by bending the two ends of a single piece of

wire so as to form horizontal arms having downwardly and inwardly projecting end portions or hooks B for seizing the edge of a plate. 55 The arms A A' are raised above the surface of the plate to avoid injuring the sensitive film. The middle portion of the wire is twisted to form the upwardly and outwardly projecting handle C, by which the plate is manipufolated. A shorter downwardly and inwardly projecting arm D, having a hooked end E, is adapted to engage the edge of the plate opposite the hooks BB. The other end of the wire D is preferably intertwisted with the handle 65 C and is thus held in position.

To detach the holder from the plate, the arms A and A' are pressed together, as indicated by dotted lines in Fig. 1 and also shown in Fig. 3, thus releasing the hooked ends of 70 the arms from engagement with the edge of the plate. The arms A A' normally tend to spring apart, and thus engage and securely hold the plate against the hooked end E.

While I have shown and described the 75 holder as formed of two pieces of intertwisted wire, it could equally well be made of a single piece, the end E' being formed by a loop, as is shown in Fig. 7.

By means of this device a negative may be 80 developed, fixed, washed, and thoroughly inspected without danger of soiling the hands of the operator or injuring the film.

The negatives may be quickly and safely piled or nested in the bath after the manner 85 indicated in Fig. 4 or distributed closely over the surface of the developing-tray, since there are no projecting parts to interfere with the neighboring plates. In practice I prefer to attach the device to the exposed negative in 90 the dark room as soon as it is taken from the plate-holder of the camera and to leave it attached to the negative until the latter has been put through all the processes of developing, fixing, washing, and drying. The small 95 projecting ends or hooks B B and E serve to prevent soiling the negative if it is set on a table or other surface, as shown in Fig. 2. In drying the device may be inverted, as shown in Fig. 6, in which position the plate may ef- 100 fectually drain, having the film side underneath, where it is not liable to be injured by particles of dirt or dust settling upon it. The device may also be suspended from a

hook by means of a loop in the handle C, as is shown in Fig. 5, for convenience in examining the negative.

What I claim is—

1. A holder for photographic plates comprising a handle, a short arm projecting below said handle and having a hook for engaging an edge of the plate, two divergent flexible arms attached to said handle, each arm ro having a hook for engaging the edge of the plate and holding it by reason of the tendency of the flexible arms to further diverge.

2. A photographic-plate holder made of flexible wire comprising two flexible and nor- MICHAEL VAN VLIET.

mally-divergent arms, each having a hook at 15 its extremity for engaging an edge of the plate when the arms spread apart; an arm having a hook adapted to engage the edge of the plate that is opposite the first-mentioned hooks; and a handle formed by intertwisting 20 the wire forming the arms, substantially as described.

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

CHARLIE J. BOUSFIELD.

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Witnesses:

M. H. IRWIN,