

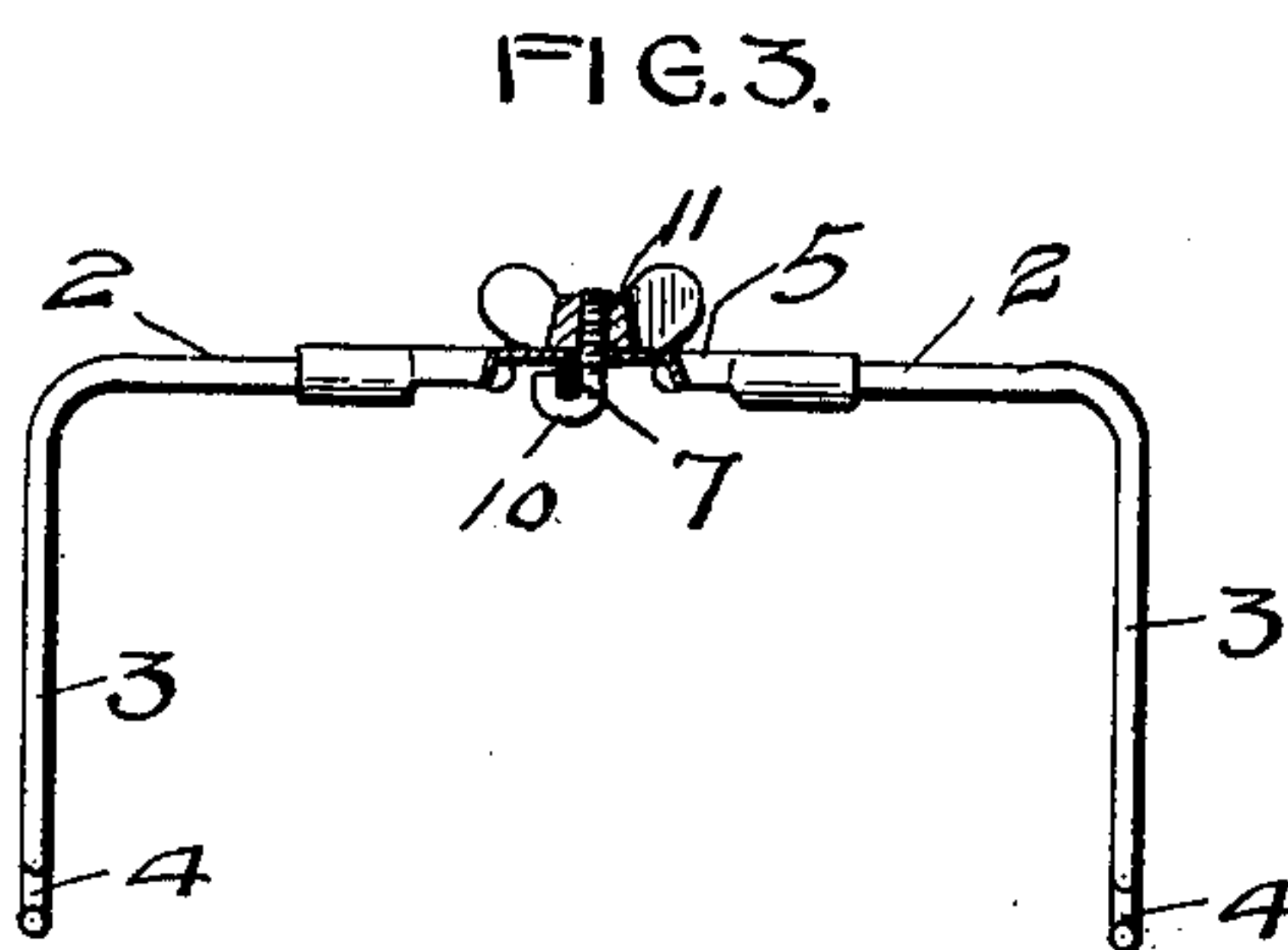
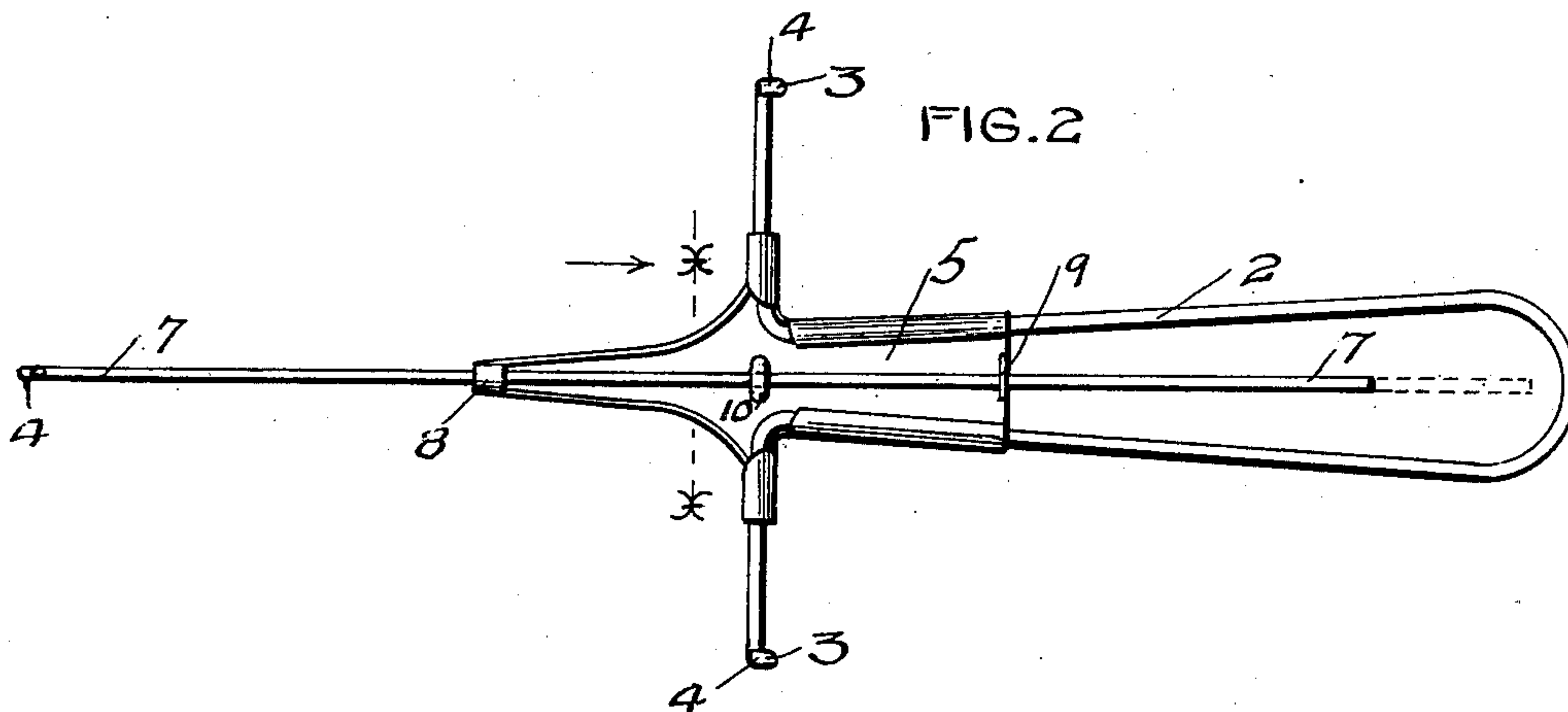
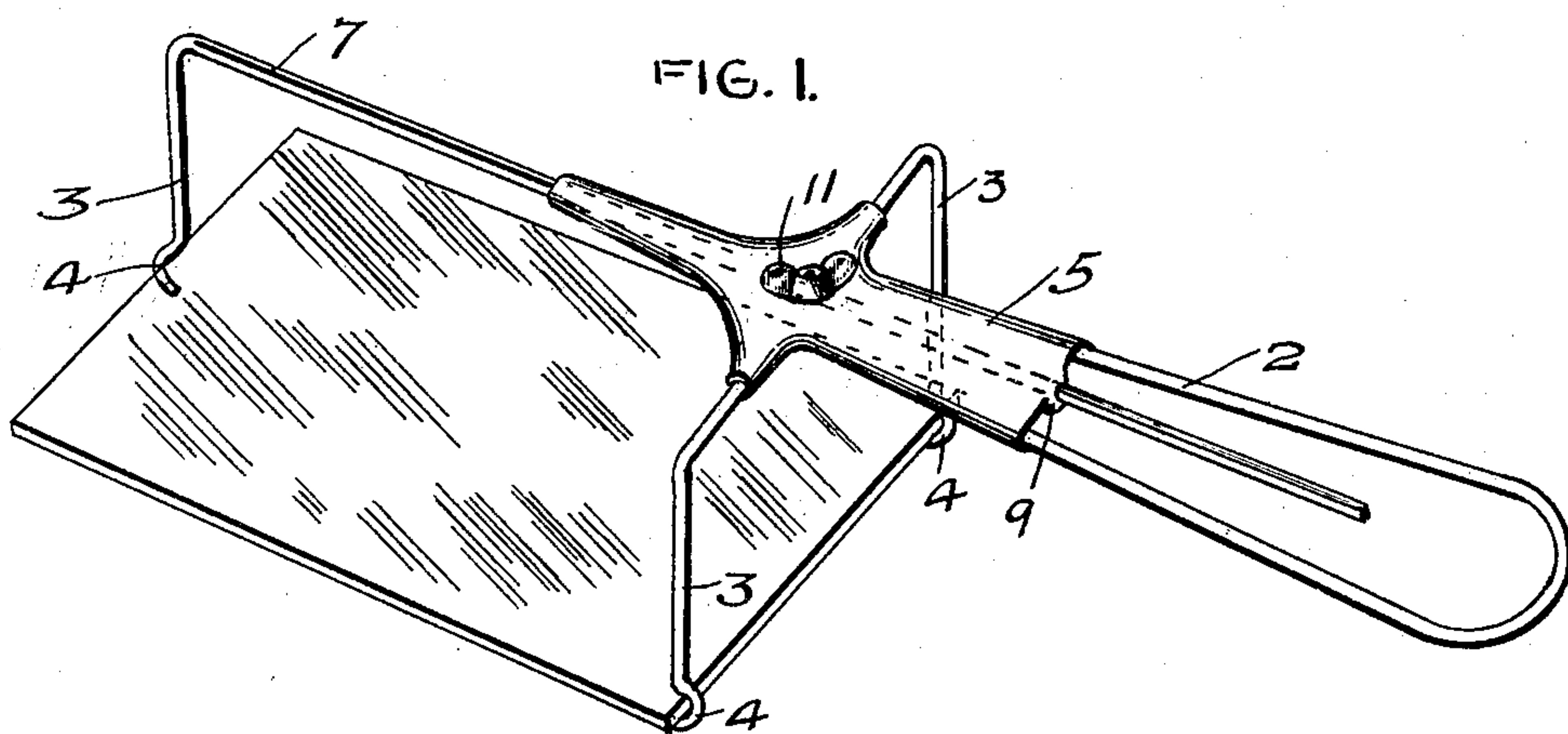
No. 649,723.

Patented May 15, 1900.

W. C. FISCHER & F. C. SCHADE.
PHOTOGRAPHIC PLATE LIFTER.

(Application filed Oct. 6, 1899.)

(No Model.)



WITNESSES.
Ed. Stasde
Richard Paul.

INVENTORS.
WALTER C. FISCHER
FRANK C. SCHADE
BY *Paul Ottaway*
THEIR ATTYS.

UNITED STATES PATENT OFFICE.

WALTER C. FISCHER AND FRANK C. SCHADE, OF ST. PAUL, MINNESOTA.

PHOTOGRAPHIC-PLATE LIFTER.

SPECIFICATION forming part of Letters Patent No. 649,723, dated May 15, 1900.

Application filed October 6, 1899. Serial No. 732,754. (No model.)

To all whom it may concern:

Be it known that we, WALTER C. FISCHER and FRANK C. SCHADE, of St. Paul, Ramsey county, Minnesota, have invented certain new and useful Improvements in Photographic-Plate Lifters, of which the following is a specification.

Our invention relates to devices for manipulating photographic plates during the process of developing and drying the same; and one object of the invention is to provide means to permit the photographer or other person developing the plate to manipulate the same in the pan containing the developing chemicals without the necessity of touching his fingers to the plate during the developing process or having them stained or discolored by contact with the developing fluid.

A further object is to provide means whereby a photographic plate may be readily lifted out of the developing-pan to permit the operator to examine the plate and note the stages of development of the negative.

A further object is to provide means whereby the handling of the plate as it is passed through the various baths after being removed from the developing-pan is greatly facilitated.

The invention consists generally in various constructions and combinations, all as hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective of a photographic-plate lifter embodying our invention. Fig. 2 is a plan view looking at the underside of the device. Fig. 3 is a sectional view on the line $x x$ of Fig. 2.

In the drawings, 2 represents a loop, preferably of brass or steel wire, forming the handle of the device, the ends of the wire being bent outwardly at substantially right angles to the handle and turned downwardly at their outer ends, forming legs or prongs 3 of sufficient length to permit the photographic plate supported by the lifter to be dipped into the developing fluid, while the handle projects over the end of the pan in position to be conveniently grasped by the operator. The lower ends of the legs 3 are provided with hooks 4 or other suitable means adapted to engage the end of the plate, and said legs

are supported and prevented from spreading by a sheet-metal plate 5, corresponding substantially in form to an arrow or spear head, the edges of its shank portion being turned under the handle portion 2, while the edges of the extensions on the sides of the plate 5, that correspond substantially in position and form to the barbs of an arrow-head, are bent or turned under the horizontal portions of the legs 3, thus bridging the wire handle and legs and securing them firmly together. We prefer to support the outer end of the plate upon a rod 7, also preferably of wire, having a downwardly-turned outer end terminating, preferably, in a hook corresponding to those provided upon the legs 3 and adapted to engage and support the outer end of the plate that is being developed. The rod 7 is preferably flattened, as shown, to increase its rigidity, and in order that the device may be adapted for use with plates of different size we prefer to make it longitudinally adjustable, and to this end provide depending lips or lugs 8 and 9 on the pointed end and shank portions of said plate 5, said lips being preferably integral with said plate 5 and having square holes, wherein the rod 7 is adapted to slide. A bearing-point for the rod 7 is thus secured at each end of the plate 5; but it is also desirable to provide a third bearing-point and also means for preventing the rod from slipping while the device is in use. We therefore provide a clamping device consisting, preferably, of a hook 10, engaging the rod 7, preferably at a point midway between the bearings 8 and 9, and having a threaded shank extending up through a hole in said plate 5 and provided with a thumb-nut 11, by means of which the rod may be firmly clamped to the under side of said plate and held rigidly while the device is in use, but readily loosened and adjusted to permit the use of the lifter on plates of different size. A photographic plate may be readily placed in the lifter by resting one end of the plate upon the ends of the legs 3 and then springing the rod 7, so that its hooked end will slide over the outer end of the plate, and the legs being composed of spring-wire will clamp or grip the edges of the plate and hold it securely, the two legs 3 3 forming a base or support for the lower end of the plate while

the rod 7 is being slipped over the upper end. The use of the rod 7, extending over the plate to its outer end and forming a single bearing or support therefor, greatly facilitates the insertion of a plate into or its removal from the lifter.

Our invention is designed, primarily, as a lifter to facilitate the handling of photographic plates; but it is also adapted for handling pie-plates, kettle-covers, and like articles.

While we have shown the rod 7 adjustable, it will be understood that the same may be rigidly secured to the plate 5, if preferred, that the shape of the plate 5, the form of the prongs or legs 3, and the relative arrangement of the same with respect to the plate and handle, and the material of which the lifter is composed may be varied, and in various other ways the details of the device we have herein shown and described may be modified without departing from our invention.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A photographic-plate lifter, comprising a wire handle having integral depending legs, a sheet-metal plate 5 provided at the intersection of said legs and handle, a third leg slidably supported in bearings at the ends of

said plate 5 in line with said handle and having a depending outer end between which and the legs on said handle a plate may be clamped and supported, and a clamping device provided on said plate 5 at an intermediate point between the bearing-points of said sliding leg thereon, for the purpose specified.

2. A photographic-plate lifter, comprising a looped wire handle 2, having depending integral legs 3, provided with hooks 4, to engage the edge of the plate, a sheet-metal bridging or strengthening plate 5, substantially in the form of an arrow-head, provided at the intersection of said legs and handle and having its edges bent down under the same, said plate being provided with sockets near its ends, a rod 7, slidable in said sockets and having a hooked depending outer end to support the outer end of a plate, and a clamping device provided on said plate 5, between said sockets and engaging said rod 7, and whereby the same may be adjustably secured in said sockets, substantially as described.

In witness whereof we have hereunto set our hands this 28th day of September, 1899.

WALTER C. FISCHER.

FRANK C. SCHADE.

In presence of—

C. G. HAWLEY,

RICHARD PAUL.