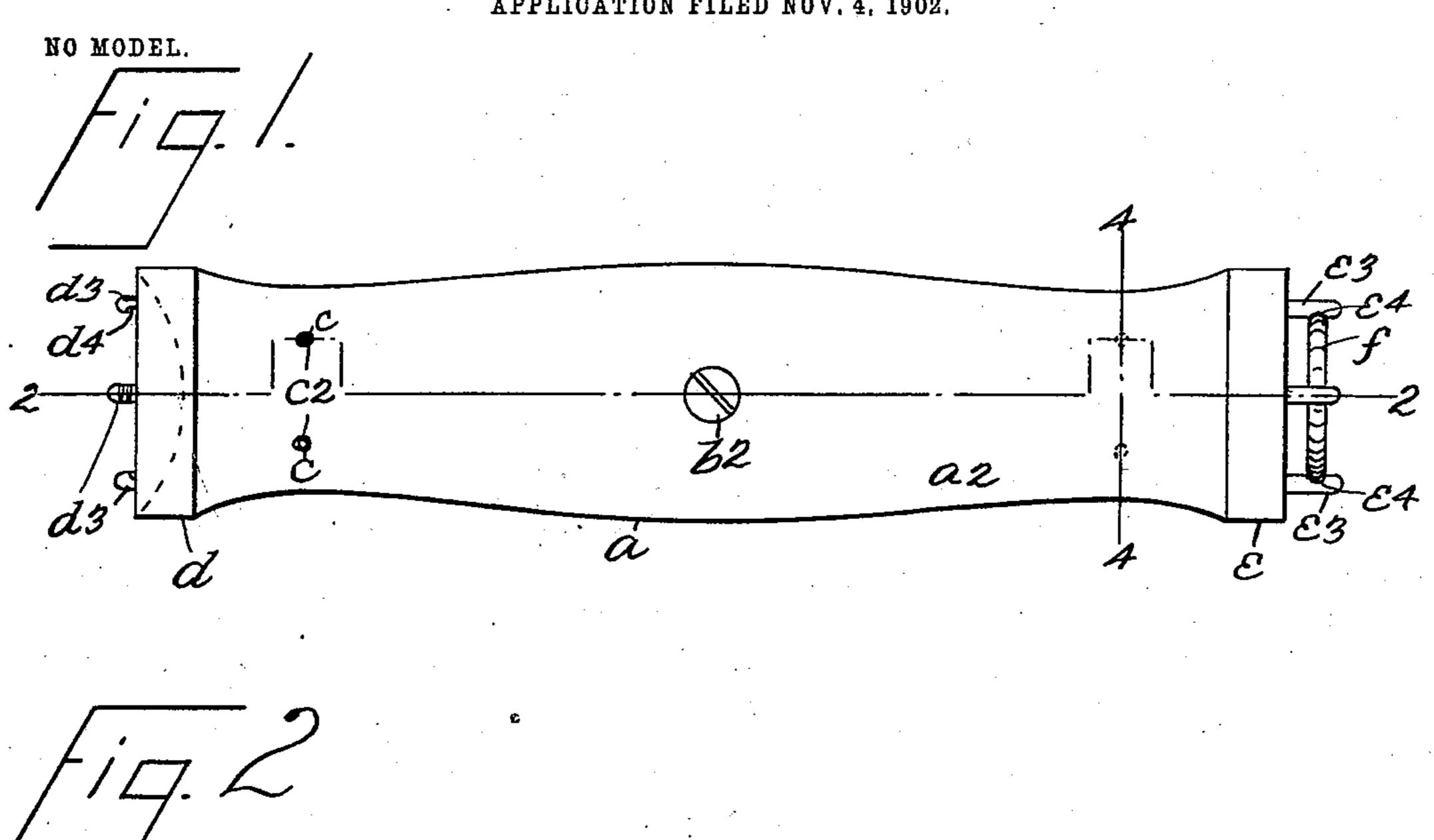
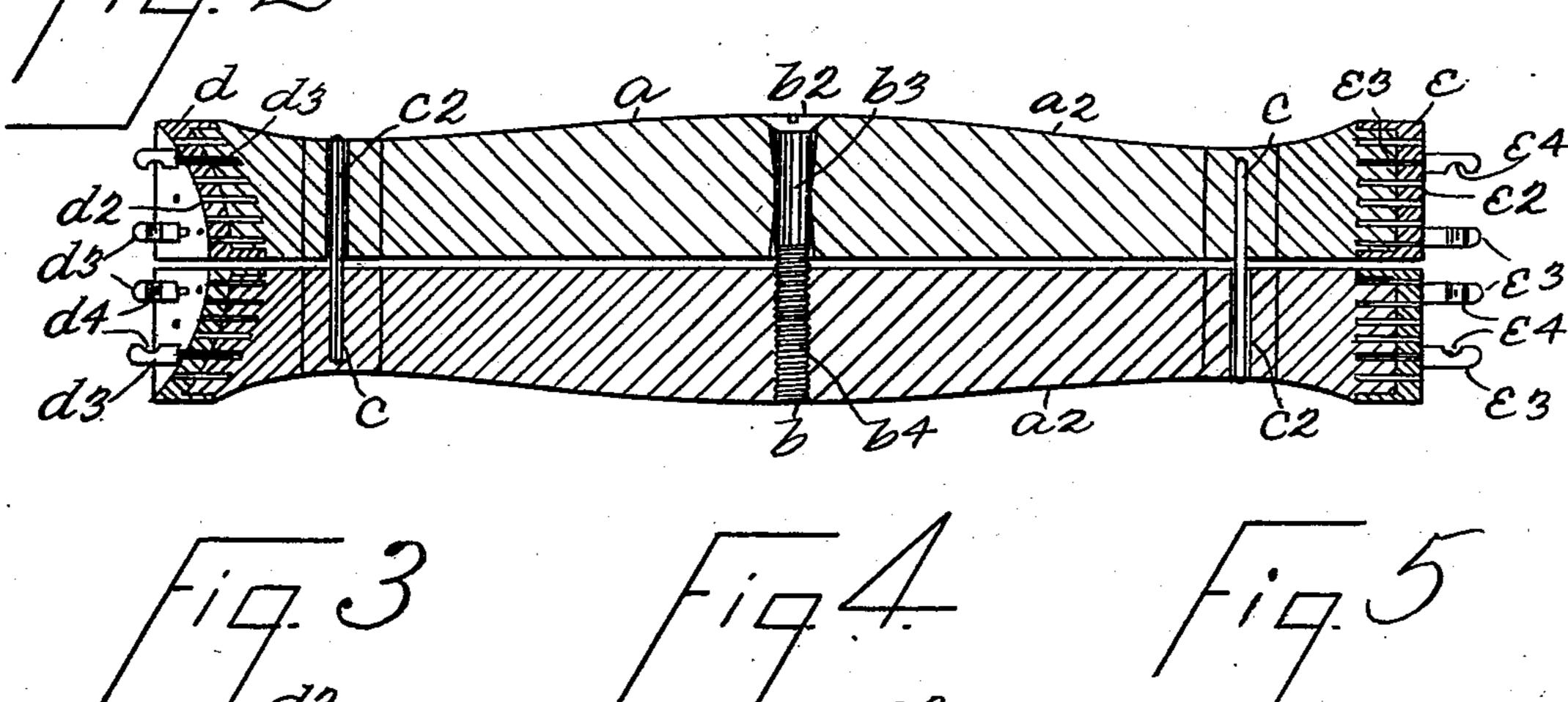
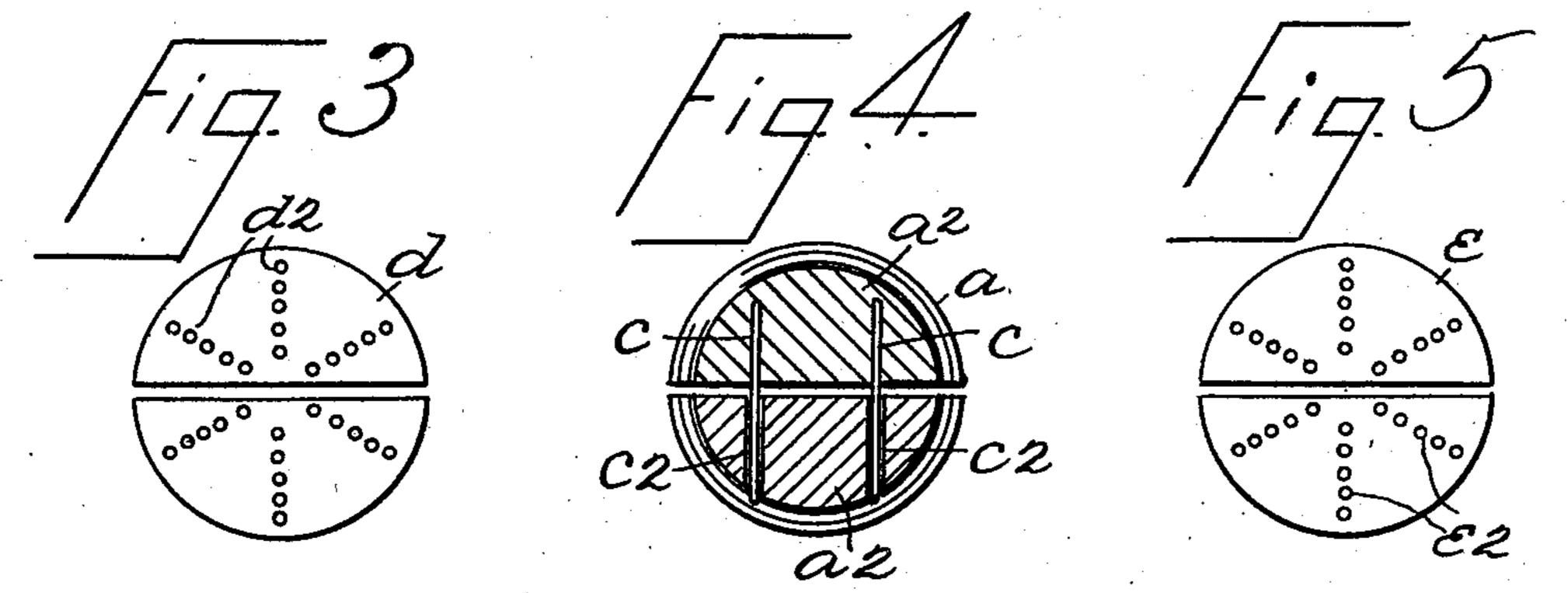
## J. HOFFMAN.

## ENGRAVER'S CLUTCH.

APPLICATION FILED NOV. 4, 1902.







**WITNESSES** 

INVENTOR. Joseph Hoffman

## United States Patent Office.

JOSEPH HOFFMAN, OF NEW YORK, N. Y.

## ENGRAVER'S CLUTCH.

SPECIFICATION forming part of Letters Patent No. 723,671, dated March 24, 1903.

Application filed November 4, 1902. Serial No. 130,024. (No model.)

To all whom it may concern:

Beit known that I, Joseph Hoffman, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Engravers' Clutches, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide an improved clutch device for use by engravers, diamond-setters, and others of this class for holding lockets, watches, and other articles of jewelry to be engraved and also set with diamonds or other precious stones when desired; and with this and other objects in view the invention consists in a device of the class specified constructed as hereinafter shown and described.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a side view of my improved clutch; Fig. 2, a longitudinal section thereof on the line 2 2 of Fig. 1; Fig. 3, an end view thereof; Fig. 4, a transverse section on the line 4 4 of Fig. 1, and Fig. 5 a view of the end opposite that shown in Fig. 3.

In the practice of my invention I provide a device of the class specified comprising a handle portion a, divided longitudinally and centrally into two similar parts  $a^2$ , and the said handle portion is preferably shaped as shown in the drawings, being smaller adjacent to both ends than at the said ends and the middle portion thereof, and the object of this form being to provide a more secure grip for the handle in the operation of the device.

The separate parts of the handle portion of the device in the form of construction shown are connected by a screw b, having a head  $b^2$ , and the shank portion  $b^3$  of which passes loosely through one of the parts  $a^2$ , and the screw-threaded portion  $b^4$  of which is secured in the other part  $a^2$ , the object of this construction being to provide means whereby the separate handle portions of the parts  $a^2$  will be capable of a slight lateral movement.

One of the parts  $a^2$  of the handle portion of

the device is also provided, adjacent to the opposite ends thereof, with pins c, which are rigidly secured therein, and which pass trans- 55 versely through openings  $c^2$  in the other part, and which serve as guides in the lateral movement of the ends of the parts  $a^2$ , as herein described. The opposite ends of the device are also provided with metal caps d and e, re- 60 spectively, and one of these caps, that designated by the reference character d in the form of construction shown, is cup-shaped in cross-section, as shown at  $d^2$ , while the other is flat, as shown at  $e^2$ ; but this difference in 65 the form of the caps d and e is not absolutely essential, nor are the cap portions d and e an absolute necessity.

The cap or end portions d and e are provided with radially-arranged holes  $d^2$  and  $e^2$ , 70 in which are secured headed pins  $d^3$  and  $e^3$ , respectively, and the heads of these pins are provided on their inner sides with notches or recesses  $d^4$  and  $e^4$ , respectively, the object of which is to enable the said pins to hold a 75 locket, watch, or other article, as shown at f in Fig. 1.

In practice the screw b is manipulated in such a manner that the separate parts of the device at one end thereof may be slightly 80 separated, so that the locket, watch, or other article to be engraved may be placed in position between the heads of the pins  $e^3$  and  $d^3$ , as shown in Fig. 1, and the screw b is then tightened, so as to hold the said locket, watch, 85 or other device securely in place. The clutch is then grasped securely in one hand adjacent to the end thereof which holds the article to be operated upon and an ordinary engraving-tool is grasped in the other hand, ao and the operation of engraving the article is performed in the usual manner, and in this operation the clutch may be pressed against the edge of a table, desk, or other article, so as to insure stability thereof.

It will be understood that in addition to engraving the article as above described the same may also be set with diamonds or precious stones in the usual manner, and in practice I prefer to place around the article 100 before it is set in the position shown in Fig. 1 a piece of chamois or other soft material which will cover the inner side and the perimeter or edges thereof in such a manner that the

end of the clutch and pins  $e^3$  will not injure the same.

The object in making the face of one end of the device cup-shaped, as shown at  $d^2$ , is to adapt the same for use in holding articles which are convex in cross-section, such as watches, lockets, and other articles of this class.

The holes  $d^2$  and  $e^2$  in the opposite end portions of the device are so arranged that the pins  $e^3$  may be adjusted radially, so as to adapt the device to hold articles of different diameters, and, if desired, these holes may be formed directly in the ends of the parts  $a^2$  without the use of the head portions d and e.

My invention is not limited to the exact means herein shown and described for connecting the parts α² of the device centrally thereof, and any suitable means may be employed for accomplishing this result which will permit of the separation of the parts and the lateral movement of the ends thereof, and other changes in and modification of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

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

Patent, is—

1. A device of the class described comprising a handle portion composed of two similar longitudinal parts, said handle portion being cylindrical in cross-section and the separate parts thereof being connected centrally so as to permit of lateral movement at the ends thereof, this connection serving also as a clamp to press the separate parts together, said parts being also provided adjacent to the ends thereof with transverse guide-pins sequenced in one part and movable in the other,

and said ends being also provided with radi-

ally-adjustable clutch-pins adapted to hold an article placed between the pins, substantially as shown and described

tially as shown and described.

2. A device of the class described comprising a handle portion composed of two similar longitudinal parts, said parts being semicy-lindrical in cross-section and being connected centrally so as to permit of lateral movement at the ends thereof, this connection serving so also as a clamp to press the separate parts together, said parts being also provided adjacent to the ends thereof with transverse guidepins secured in one part and movable in the other, and said ends being also provided with so clutch-pins adapted to hold different articles placed between the pins, said clutch-pins being radially adjustable, substantially as shown and described.

3. A double-ended clutch device compris- 60 ing a handle portion cylindrical in cross-section and composed of two similar longitudinal parts connected centrally by a screw which passes loosely through one part and is secured in the other, said parts being also provided 65 adjacent to each end with transversely-arranged pins secured in one part and movable in the other, said parts also being provided at their opposite ends with caps having radially-adjustable clutch-pins and one of said 70 caps being provided with a plane and the other with a concave surface, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in pres- 75 ence of the subscribing witnesses, this 3d day

of November, 1902.

JOSEPH HOFFMAN.

Witnesses:

J. C. LARSEN, F. A. STEWART.