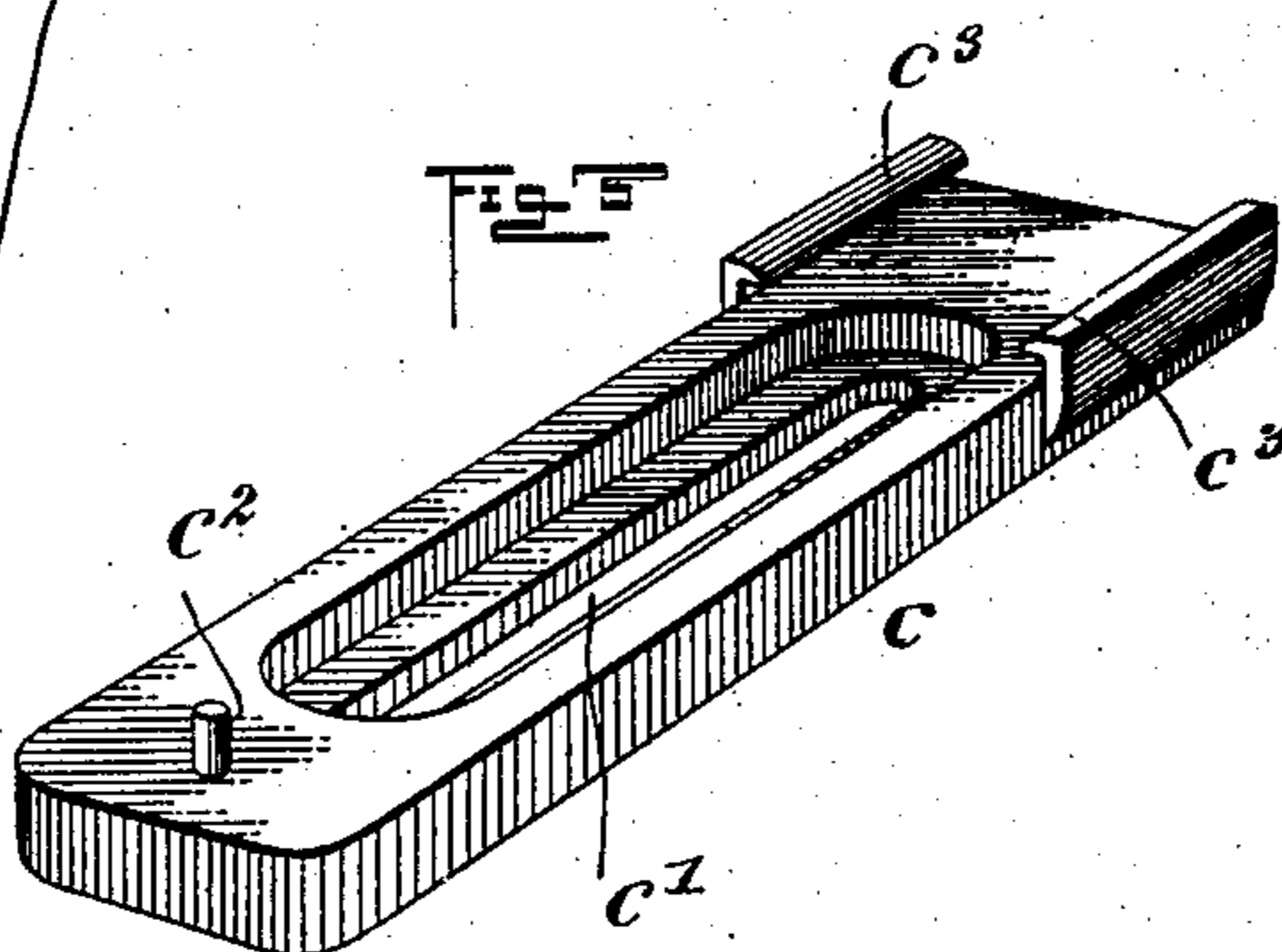
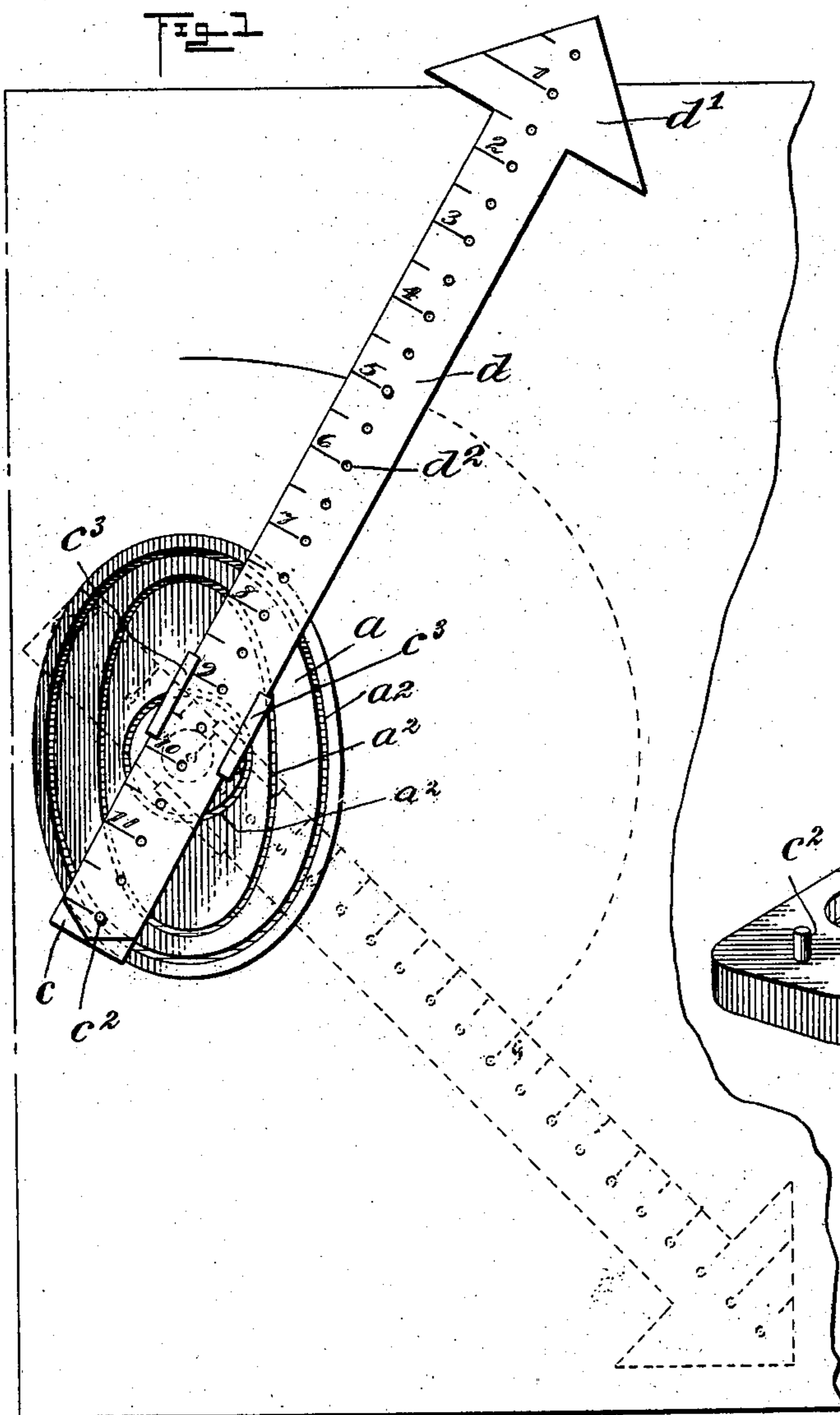
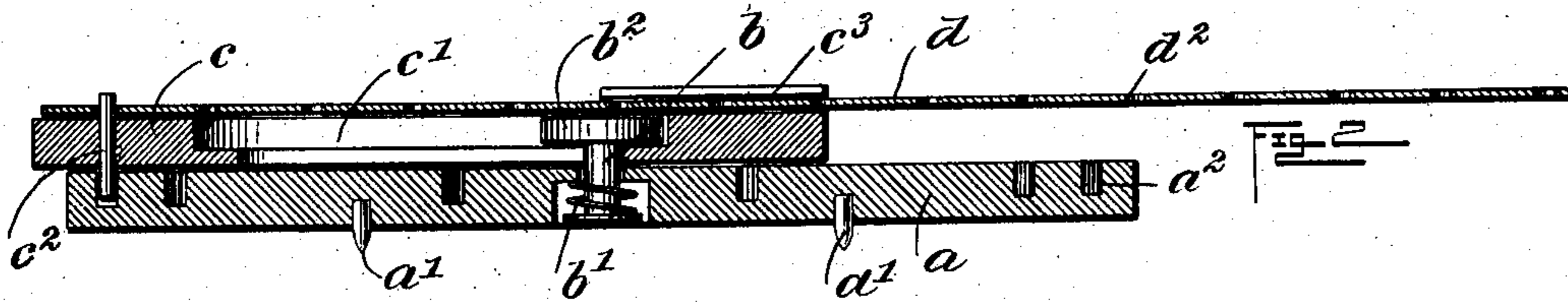


No. 742,047.

PATENTED OCT. 20, 1903.

F. MOEHLE.  
MARKING INSTRUMENT.  
APPLICATION FILED DEC. 26, 1902.

NO MODEL.



WITNESSES:

*G. B. Henry*

*Isaac B. Owens*

INVENTOR

*Friedrich Moehle*

BY

*Munn*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

FRIEDRICH MOEHLE, OF MASON CITY, IOWA.

## MARKING INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 742,047, dated October 20, 1903.

Application filed December 26, 1902. Serial No. 136,646. (No model.)

*To all whom it may concern:*

Be it known that I, FRIEDRICH MOEHLE, a citizen of the United States, and a resident of Mason City, in the county of Cerro Gordo and State of Iowa, have invented a new and Improved Marking Instrument, of which the following is a full, clear, and exact description.

This invention relates to a device used for describing and laying off various figures, such as circles, ovals, and squares. It is especially useful in marking off mats for pictures; but obviously it may be used in many other connections.

The device comprises a base with a central pin and a number of grooves of various forms therein. On the pin an arm is mounted to slide and to swing, said arm having a pin arranged to run in any of the before-mentioned grooves. By adjusting this pin in the desired groove the arm may be swung over the base and various ovals or circles described. Other measurements may be made by the arm for describing squares and other analogous figures.

This specification is an exact description of one example of the invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the invention. Fig. 2 is a longitudinal section thereof, and Fig. 3 is a detail perspective view of the arm.

$a$  indicates the base, which is preferably provided with pins  $a'$  projecting from its bottom and facilitating holding the base stationary on the work. The base is formed in its upper face with a number of ovate and circular grooves  $a^2$ .

$b$  indicates the central pin, which is fitted to move axially in the base and which is held down in the position shown in Fig. 2 by means of a spring  $b'$ . At its upper end the pin  $b$  is provided with a head  $b^2$ , and this is received in a groove  $c'$  in an arm  $c$ , thus mounting the arm to slide longitudinally on the pin and to swing around the center thereof. The arm  $c$  has a pin  $c^2$ , which projects above and below the arm, the lower end of the pin being adapted to enter any one of

the grooves  $a^2$ . The spring  $b'$  holds the base yielding in the position shown in Fig. 2; but by compressing the spring and drawing upward the pin  $b$  the pin  $c^2$  may be disengaged from one groove and engaged with another.

$d$  indicates an extension of the arm  $c$ , which extension is preferably constructed of a metal plate having a triangular head  $d'$  and a number of orifices  $d^2$  along its length. The arm  $c$  has overhanging guides  $c^3$ , so that the extension  $d$  may be held slidably on top of the arm and the pin  $c^2$  entered into any one of the perforations  $d^2$ . The extension  $d$  is preferably provided with a scale, as shown, so that measurements may be made therefrom.

The use of the invention will be quite apparent from the foregoing description. To describe a circle, the pin  $c^2$  should be adjusted to the circular groove  $a^2$ , and to describe ovals this pin should be adjusted to an ovate groove. A square may be laid down by taking the desired measurements from the center of the base  $a$  along the arm  $d$ , and when these measurements are laid off the square may be drawn with a ruler. Also the extension  $d$  of the arm may be entirely removed from the device and used as a straight-edge and rule independently of the other parts of the device.

This invention may be used with or independently of the marking-bar disclosed in my copending application, Serial No. 113,126, filed June 25, 1902.

Various changes in the form, proportions, and minor details of my invention may be resorted to at will without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the intent of my claims.

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

1. The combination with a base having a groove therein, of an arm mounted to turn and to slide on the base and having a part running in said groove, for the purpose specified, and an arm extension mounted on the arm, the said arm having overhanging guides loosely engaging the arm extension and also having a projected portion, and the arm extension being perforated to engage said projected portion of the arm.

2. The combination of a base having a groove therein, a headed pin, a spring yield-  
ingly holding said pin in operative position,  
an arm having a groove therein, said pin  
5 extending through the groove and the head  
engaging the upper surface of the arm,  
whereby to mount the arm to turn around the  
pin and to slide thereon and a pin attached to  
the arm and working in the groove in the base.
- 10 3. The combination of a base having a  
groove therein, a headed pin, a spring yield-  
ingly holding said pin in operative position,  
an arm having a groove therein, said pin ex-  
tending through the groove and the head en-  
gaging the upper surface of the arm, where- 15  
by to mount the arm to turn around the pin  
and to slide thereon, and a pin attached to  
the arm and working in the groove in the  
base, and an arm extension adjustably mount-  
ed on the arm. 20

In testimony whereof I have signed my  
name to this specification in the presence of  
two subscribing witnesses.

FRIEDRICH MOEHLE.

Witnesses:

J. C. BROWN,

W. E. SATTERLEE.