

(No Model.)

C. EZARD.
HANDLE FOR SAUCEPANS.

No. 258,733.

Patented May 30, 1882.

FIG:1.

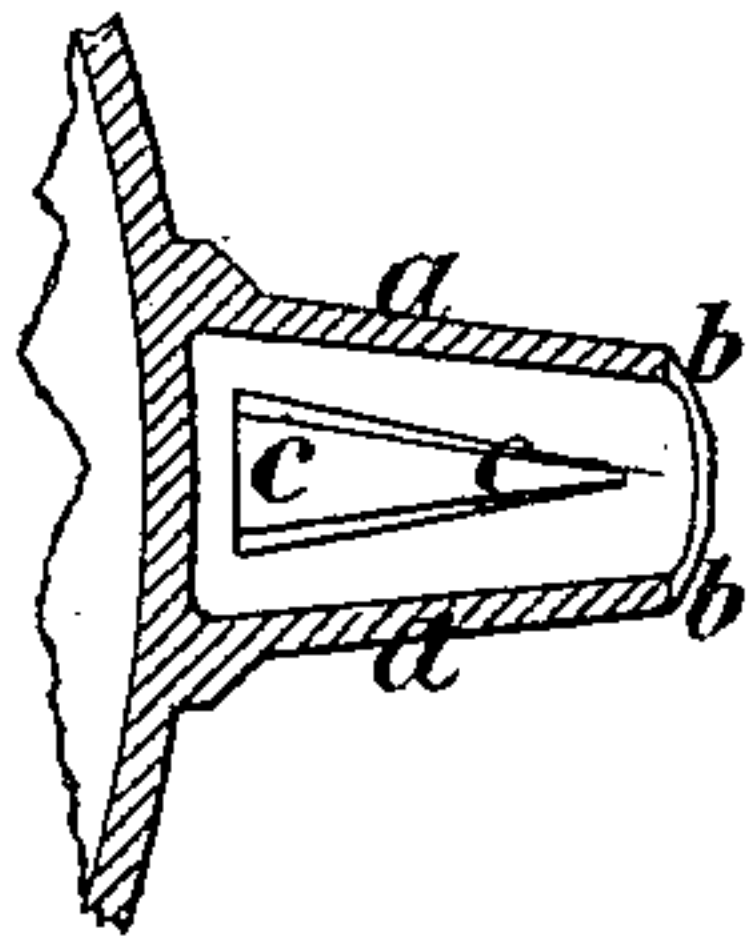


FIG:2.

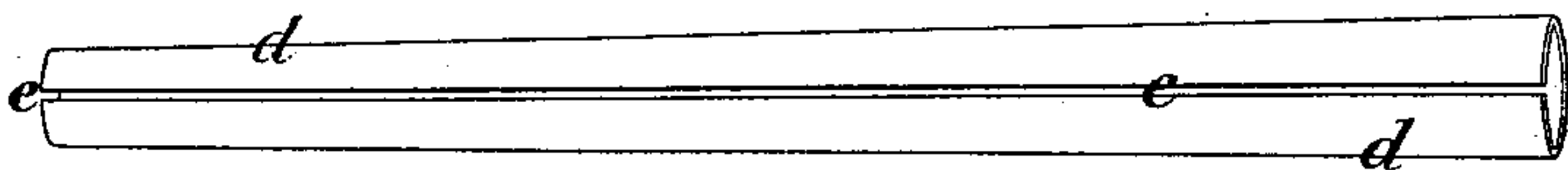


FIG:5.

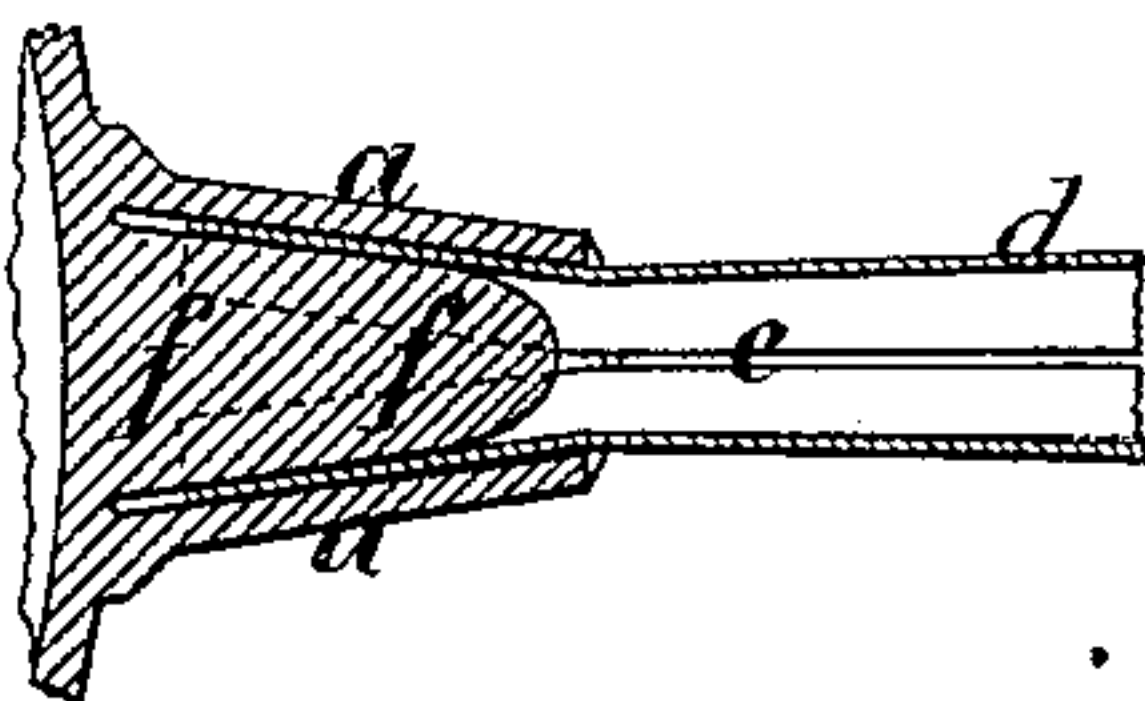


FIG:3.

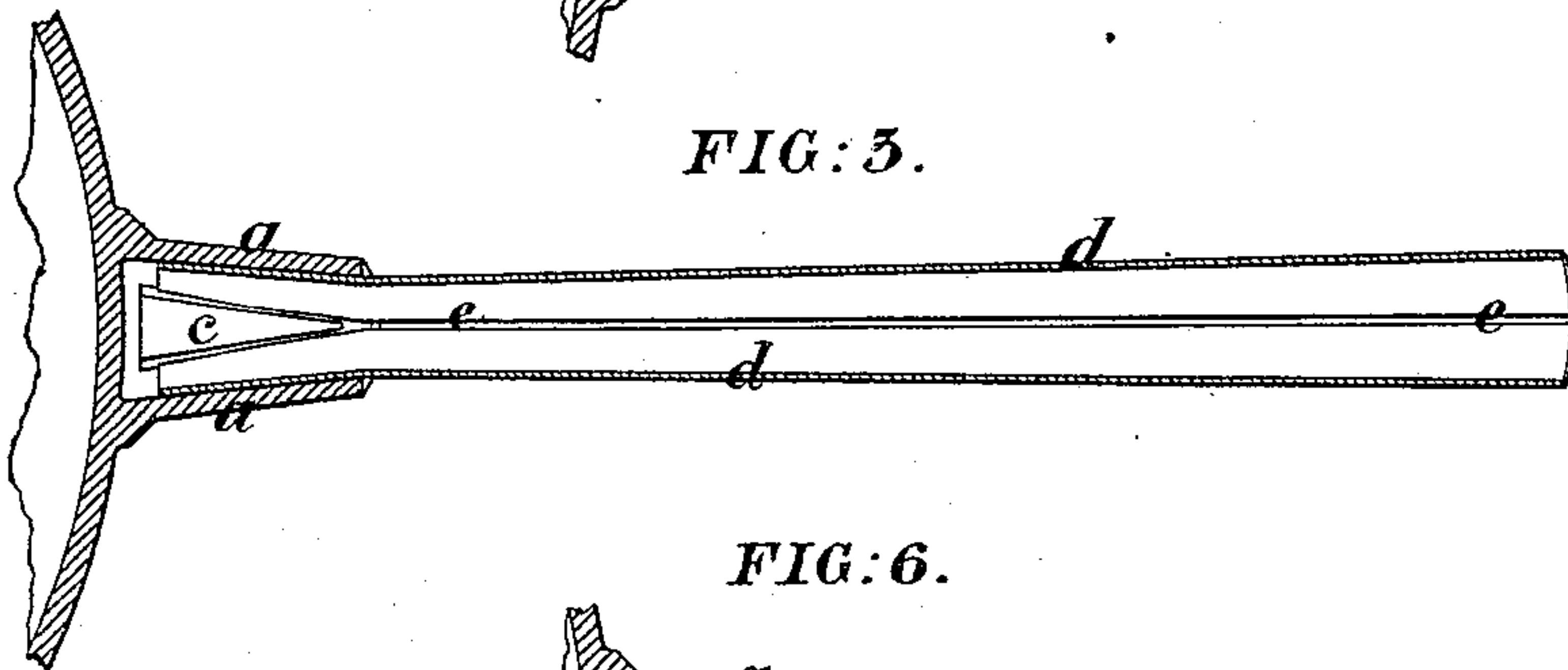


FIG:6.

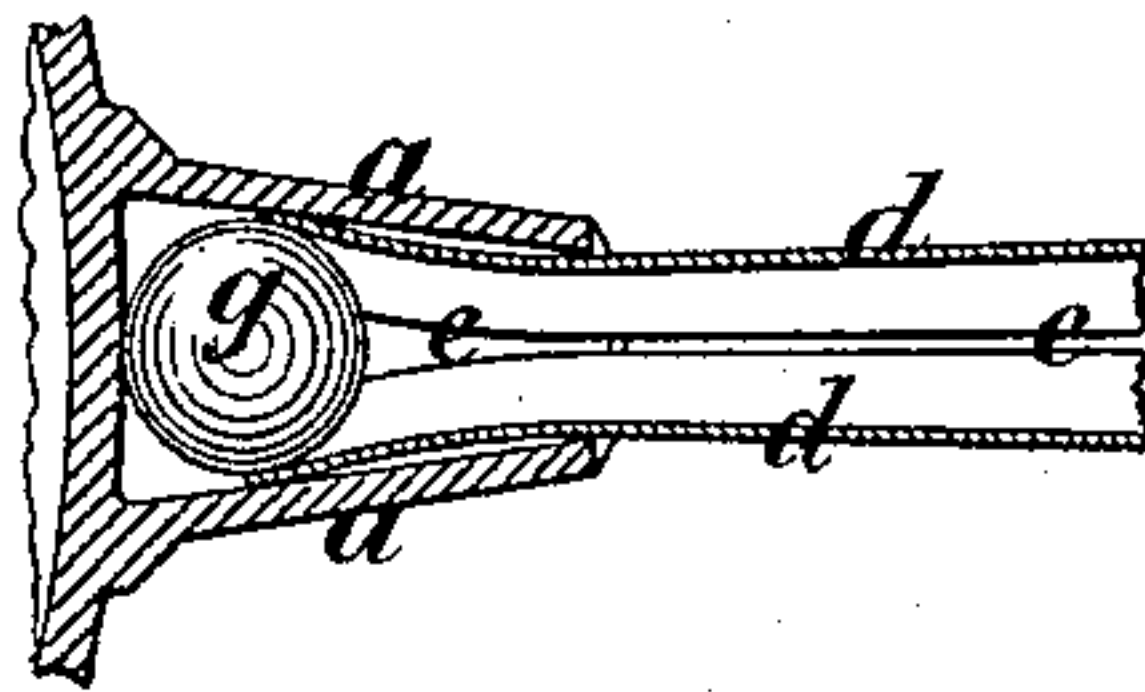
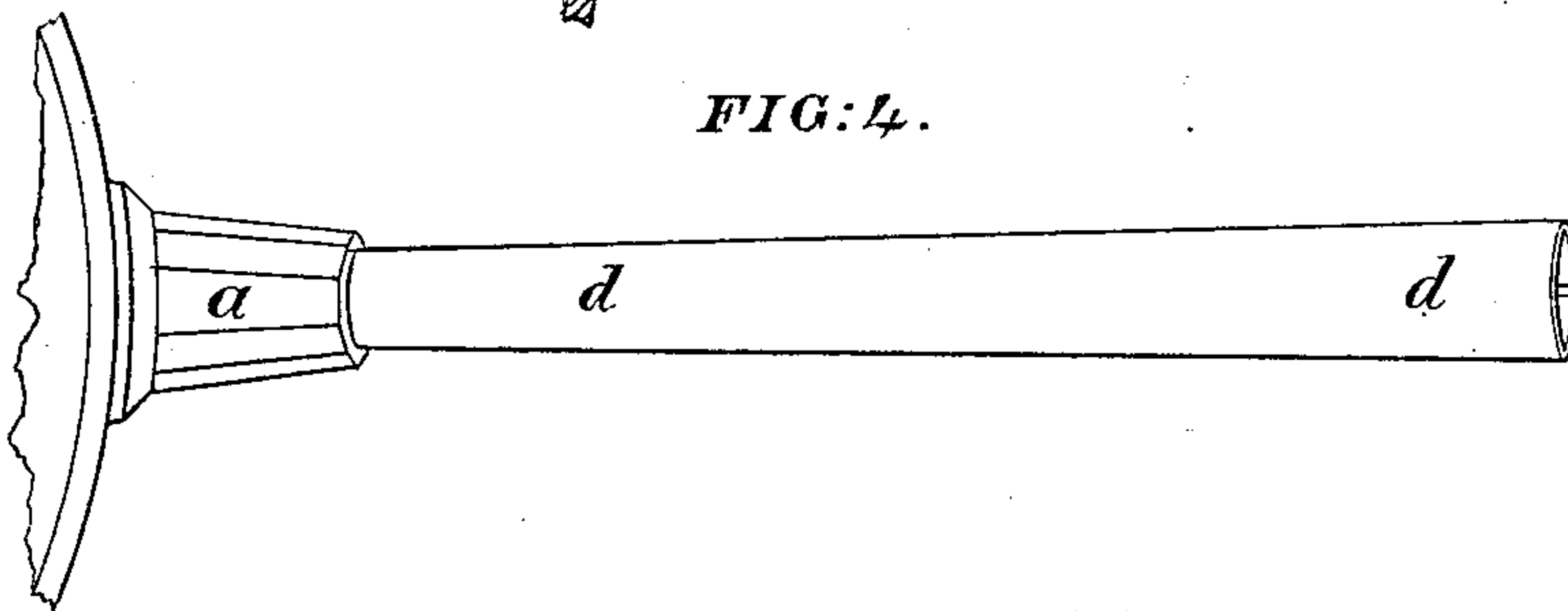


FIG:4.



Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES EZARD, OF MANCHESTER, COUNTY OF LANCASTER, ENGLAND.

HANDLE FOR SAUCEPANS.

SPECIFICATION forming part of Letters Patent No. 258,733, dated May 30, 1882.

Application filed December 27, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES EZARD, a subject of the Queen of Great Britain, and residing at Manchester, in the county of Lancaster, England, manufacturer, have invented Improved Means for Securing Tubular Handles to Saucepans or other Hollow-Ware Vessels, of which the following is a specification.

This invention relates to improved means for securely fixing tubular metallic handles to cast-iron saucepans and other similar hollow-ware vessels without riveting and without weakening either the vessel or the handle by drilling, punching, or otherwise forming holes therein. For this purpose I form or cast on the side of the vessel a dovetail socket, as shown at *a a* in Figure 1 of the annexed drawings, which represents in section a small portion of the side of a hollow vessel with the socket cast therewith. The socket *a a* is so formed that its internal diameter increases gradually from the mouth or external orifice, *b b*, inward. Upon one side of the interior of this socket I cast a solid wedge, *c c*, with its point nearest to the mouth or external orifice, *b b*, of the socket *a a*.

The tubular handle *d d*, Fig. 2, which may be either tapering or not, is made from sheet metal in the usual manner, with a butt-joint, as at *e e*, and of such a size as will just enter the mouth or external orifice, *b b*, of the socket *a a*. The handle *d d* is inserted into the orifice of the socket *a a* with the end of its butt-joint *e e* in contact with the point of the wedge *c c*, and it is then driven into the socket by a mallet. The wedge *c c* enters the butt-joint *e e* and opens it out more and more as the handle is driven into the socket, thus causing the handle to gradually increase in diameter as it enters the socket, so that when it is driven home, as shown at Fig. 3, every part thereof inside the socket *a a* is larger in diameter than the orifice *b b* by which it entered; and it becomes firmly fastened into the socket without any other operation than merely driving it in.

Fig. 4 is a plan or top view, showing the external appearance of the socket and handle.

In a modification of my invention shown in section at Fig. 5 I cast the socket *a a* of the same form both inside and outside, as before; but, instead of casting a wedge upon one side of the bore of the socket, I cast a conical pin or peg, *f f*, in the center of the base of the socket, which, instead of entering the butt-joint of the handle, enters the end of the tube itself and opens it out.

In a further modification of my invention, illustrated by Fig. 6, I cast the socket *a a* of the same form as before; but, instead of the wedge *c c* or the pin *f f*, I inclose a loose ball or sphere, *g g*, of metal or other hard material in the core upon which the bore of the socket *a a* is cast, such ball or sphere being of greater diameter than the mouth or external orifice, *b b*, of the socket. This ball or sphere *g g* enters the end of the tube of the handle as it is being driven into the socket, and opens it out in the same manner as the pin or peg.

I claim—

1. The combination of a vessel having a socket tapering outward and a wedging device within the socket with a hollow handle adapted to be expanded and secured in the socket by being forced therein, substantially as described.

2. The combination of a vessel having a socket tapering outward and a wedge within the socket with a tubular metal handle, having a butt-joint, and adapted to be expanded and fixed by being driven into the socket, substantially as set forth.

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

CHARLES EZARD.

Witnesses:

GEORGE DAVIES,
CHARLES DAVIES.