

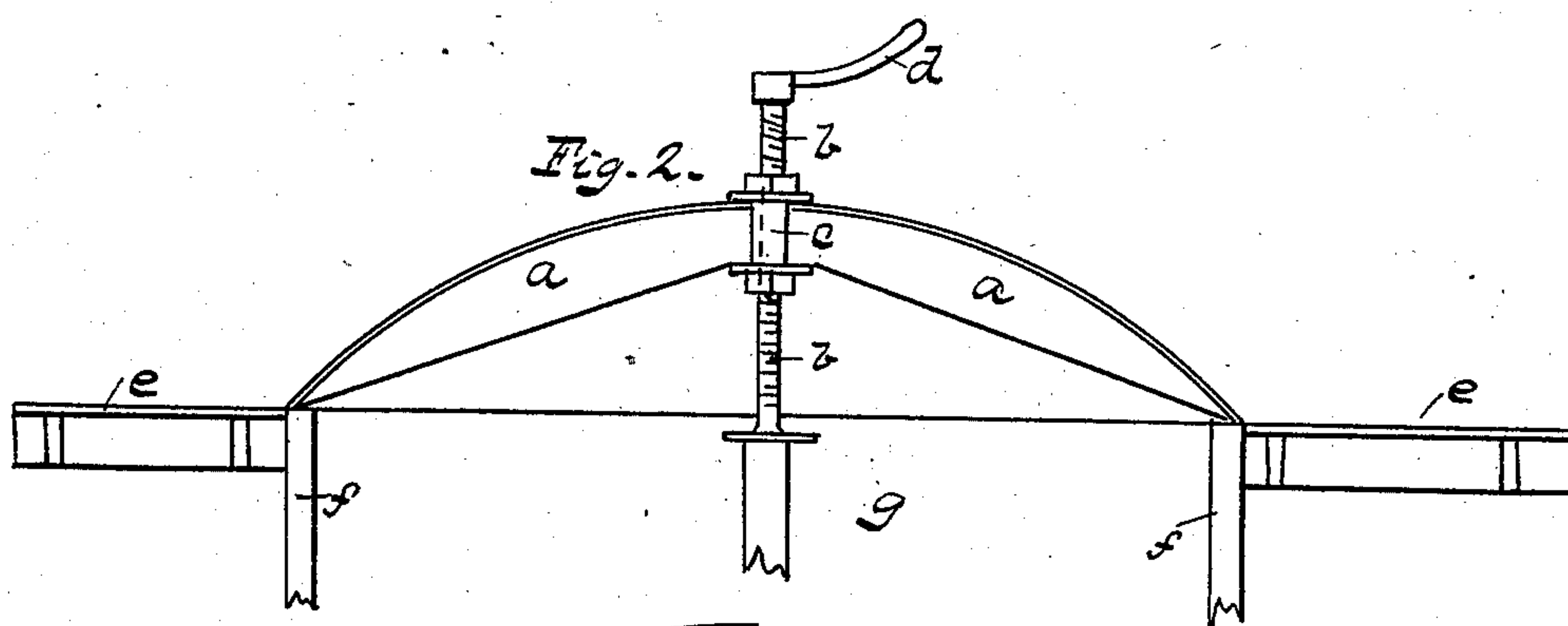
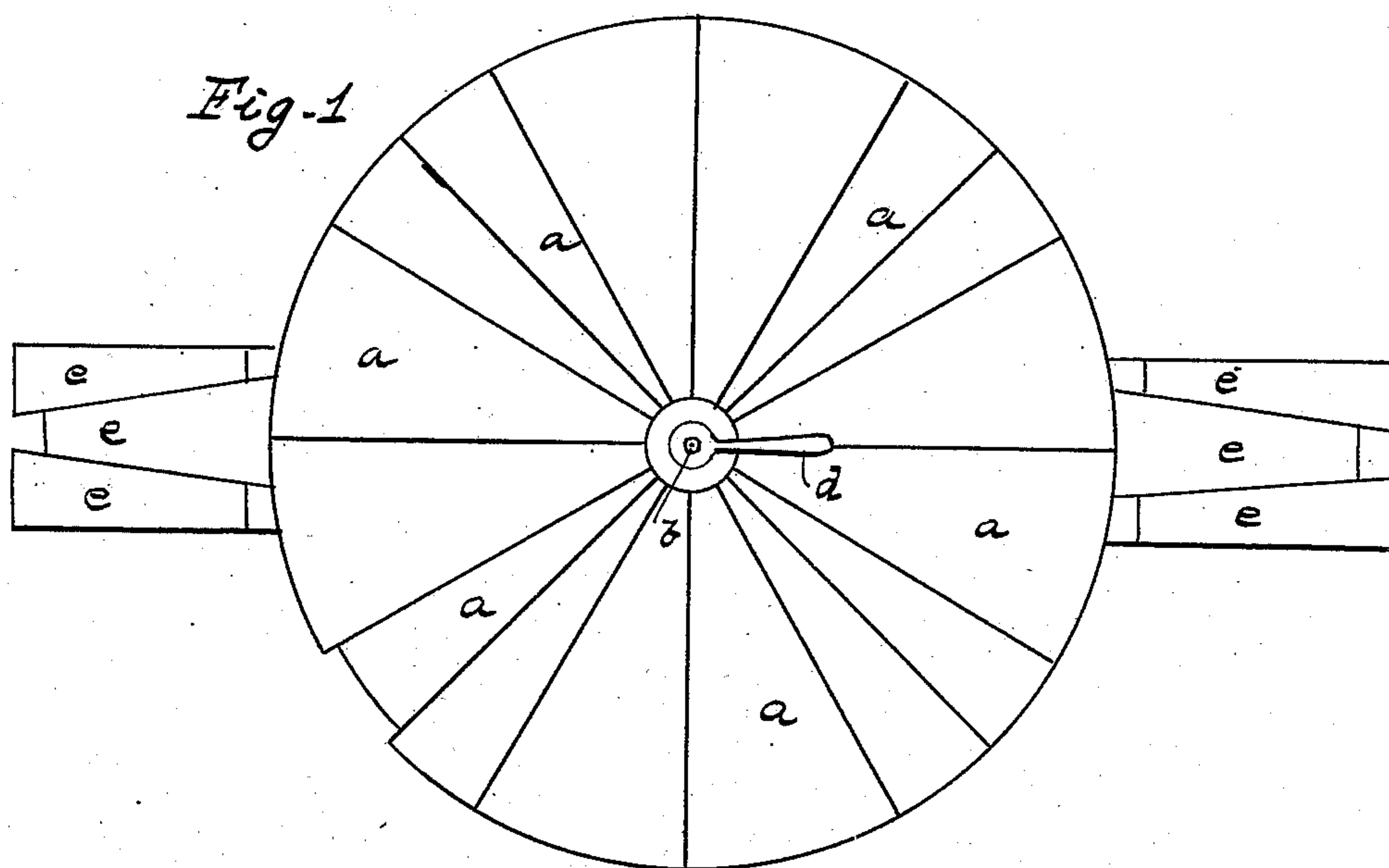
(No Model.)

A. FARLEY.

DEVICE FOR CONSTRUCTING ARCHES OR CENTERS FOR FURNACES.

No. 376,520.

Patented Jan. 17, 1888.



WITNESSES:
M. E. Harrison.
J. A. Kerron.

Inventor
Albin Farley
O. D. Lewis
Per.

att'y.

UNITED STATES PATENT OFFICE.

ALBIN FARLEY, OF PITTSBURG, PENNSYLVANIA.

DEVICE FOR CONSTRUCTING ARCHES OR CENTERS FOR FURNACES.

SPECIFICATION forming part of Letters Patent No. 376,520, dated January 17, 1888.

Application filed March 5, 1887. Serial No. 229,870. (No model.)

To all whom it may concern:

Be it known that I, ALBIN FARLEY, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Device for Constructing Arches or Centers for Furnaces; 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to a portable device for constructing arches or centers for furnaces, the object being to provide a means whereby arches or centers over furnaces, &c., may be built on a portable frame, and also to provide a means for adjusting the frame for the purpose of raising or depressing the spring of the arch; and with these ends in view my invention consists in a number of segments of circles and a device for sustaining the same in the proper position, together with certain details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a plan view of my device for constructing arches constructed in accordance with my invention. Fig. 2 is a side sectional elevation of the same. Fig. 3 is a perspective view of one of the segments.

To put my invention into practice I construct a number of segmental sections, *a*, forming a complete circle and of sufficient strength to sustain a heavy load placed on the top of the same. I now provide a threaded shaft, *b*, having secured thereon a sleeve, *c*, of such construction as to properly support the smaller ends of the segments *a*. A small crank, *d*, at the upper end of the threaded shaft *b* affords a means for turning the shaft and operating the sleeve. It will be seen that the sleeve *c* has a flange near its opposite ends, so as to receive between them the inner ends of the segments, so that they may be positively moved up or down, and this sleeve should be properly threaded internally to engage the threads of the rod.

In operation I provide a suitable number of standards, *f*, and arrange them about the perimeter of the furnace *g*, on which the broad ends of the sections *a* are placed. The threaded shaft *b*, I now place in the center of the furnace *g* and adjust the sleeve *c* to a suitable height, representing the spring of the arch. The sections *a* are now arranged or placed in position, supported by the posts *f* and shaft *b*, and adjusted up or down until the exact spring is given to the arch about to be built.

When the arch is finished, the nuts above and below the sleeve *c* are revolved back from the same and the sustaining posts *f* removed, which operation will allow the segments to be easily removed without destroying or in any wise breaking the same.

With this construction a suitable frame for supporting an arch while being constructed can be built in a short time and can be used any number of times.

I am aware that it is not new to provide a frame for constructing arches and domes, which consists of segments and a vertical shaft having a flanged nut or ring thereon, the segments having their inner ends flanged to engage the upturned flange of the ring, and designed, when the arch has been formed and the rod turned, to let the segmental sections fall into the structure, and therefore do not claim such construction, broadly.

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

The improved apparatus herein described for use in the construction of arches and domes, the same consisting of the segmental sections, the central vertical screw, the threaded sleeve thereon having flanges, as shown, to engage the upper and lower sides of the segments at their inner ends, and the hand-lever on the upper end of the shaft, whereby the said segments may be positively engaged and moved up and down to accurately attain the desired spring, substantially as specified.

ALBIN FARLEY.

Witnesses:

H. H. SALLADE,
M. E. HARRISON.