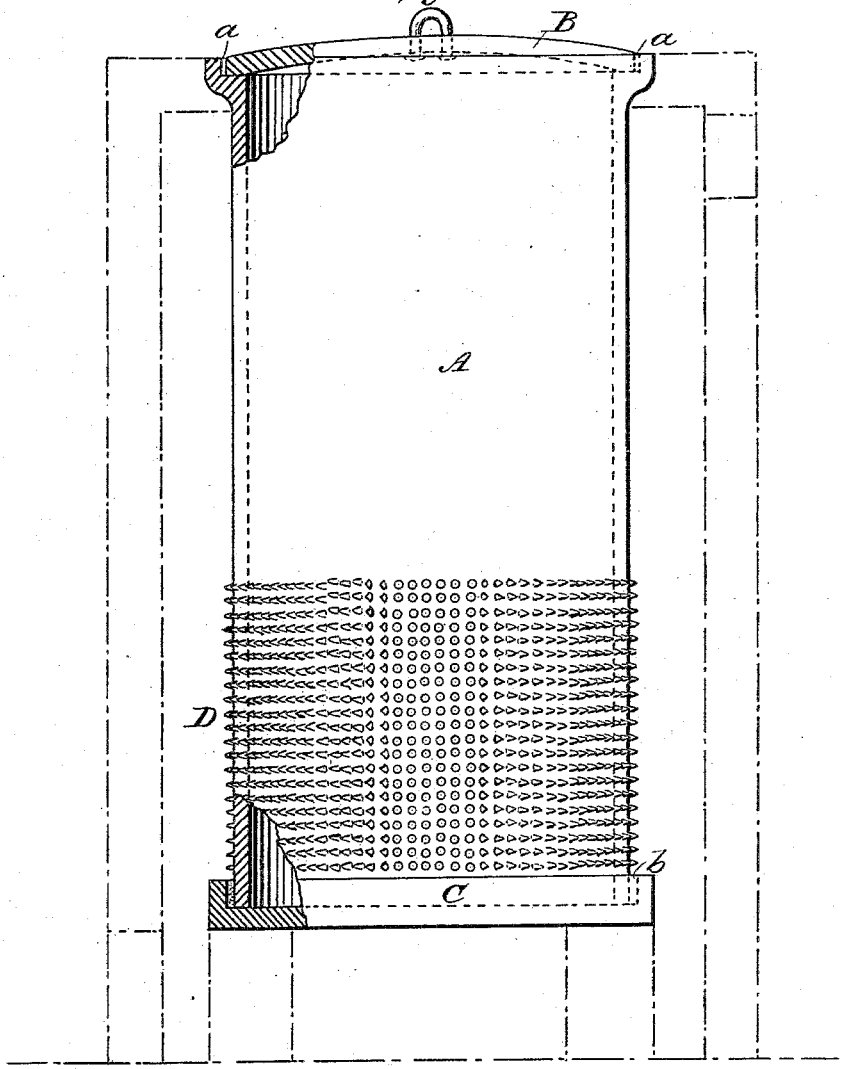
(No Model.)

P. WILKES.

ANNEALING POT.

No. 303,092. Patented Aug. 5, 1884.

Fig. 1.



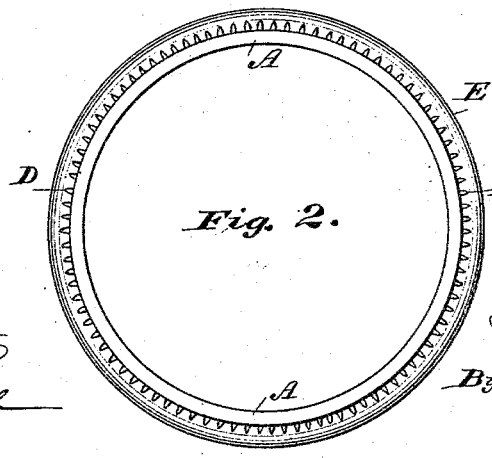


Fig. 2.

Witnesses:
T. C. Brecht.
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UNITED STATES PATENT OFFICE.

PETER WILKES, OF TRENTON, NEW JERSEY.

ANNEALING-POT.

SPECIFICATION forming part of Letters Patent No. 303,092, dated August 5, 1884.

Application filed June 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, PETER WILKES, a citizen of the United States, residing at Trenton, New Jersey, have invented new and useful Improvements in Annealing-Pots, of which the following is a specification.

My invention relates to certain new and useful improvements in annealing-pots such as are generally used in wire-mills. It has for its object to provide a pot which shall be simple and economic in construction and much more durable than those made at present.

The invention consists of a pot composed of a mixture of iron and steel in such proportion as to give the pot greater lasting qualities than is possessed by pots made of cast-iron.

In order to enable those skilled in the art to which my invention appertains to understand the peculiarities and advantages and be able to make my invention, I will now proceed to describe the same in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of one of my improved pots with the outer protecting covering removed, and with two of the corners in section to show more clearly the relation between the cover and the top of the pot and the bottom of the latter with the supporting-saucer. Fig. 2 is a bottom view of the pot with the saucer removed.

The material from the use of which I have obtained most satisfactory results is composed of iron and a small proportion of steel—about one part of steel to nine parts of iron; but I do wish to be understood as limiting myself to these exact proportions. As large as twenty per cent. of steel may be used; or a smaller proportion than ten per cent. of steel may be used with good results in some instances. In mixing these metals in a cupola-furnace, I put pig-iron and a predetermined proportion of scrap-steel into the furnace, and when the iron melts it takes down with it in molten form the scrap-steel. This admixture of scrap-steel with the iron gives to the latter a toughness and great capacity for resisting the destructive influences of heat.

In the drawings, A represents the annealing-pot, which consists of a cylindrical casting provided at its upper end with a flanged seat for the reception of a cover, B, the diameter of which is somewhat less than its seat, so as to provide an annular space, *a*, into which sand may be run to seal the joint between the cover and the pot. The lower end of the pot A is adapted to rest within and to be supported by a flanged disk or saucer, B, the diameter of which is slightly greater than the pot, so as to produce an annular space, *b*, similar to the space *a*, and for a like purpose—viz., to seal the joint by sand. The broken lines surrounding the pot are intended to illustrate the ordinary furnace or brick-work designed to confine the heat and cause it to impinge upon the pot in the well-known manner. The sand-joints at *a b* thoroughly protect the interior of the pot from ingress of air. The pot A is cast with projecting teats or spurs over its whole interior surface, as illustrated at D, which teats extend in various directions from the pot, to form a means of securing a coating of sand or fire-clay in position to envelope the pot and protect it from the direct action of the heat.

Having thus described my invention, what I claim is—

As a new article of manufacture, an annealer-pot composed of a mixture of iron and steel, in about the proportion of one part of steel to nine parts of iron, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

PETER WILKES. [L. S.]

Witnesses:

JAMES H. HAMMOND,

JOS. CROSSLEY.

Correction in Letters Patent No. 303,092.

It is hereby certified that in Letters Patent No. 303,092, granted August 5, 1884, upon the application of Peter Wilkes, of Trenton, New Jersey, for an improvement in "Annealing Pots," an error appears in the printed specification requiring correction, as follows: In line 35, the word *not* should be read between the words "do" and "wish;" and that the Letters Patent should be read with this correction therein to make it conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 16th day of June, A. D. 1885.

[SEAL.]

H. L. MULDROW,
Acting Secretary of the Interior.

Countersigned:

M. V. MONTGOMERY,
Commissioner of Patents.