

L. BAHLER.
REVOLVING TUBULAR KILN.

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1,062,946.

Patented May 27, 1913.

Fig. 1

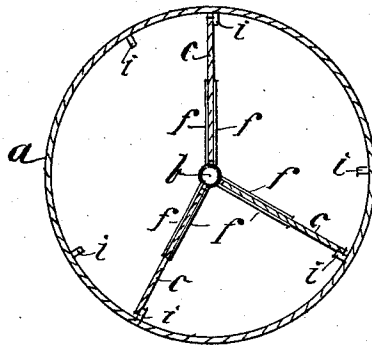


Fig. 2

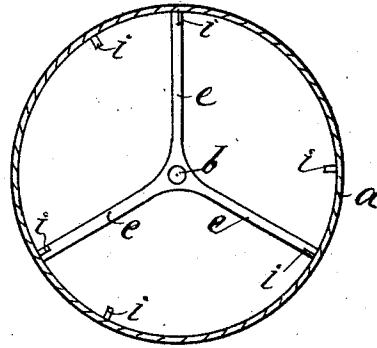
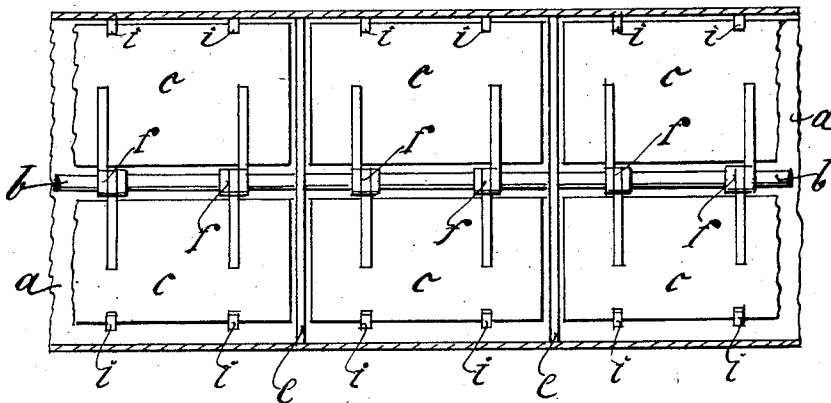


Fig. 3



Witnesses

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LUDWIG BAHLER, OF WOLGAST, GERMANY.

REVOLVING TUBULAR KILN.

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To all whom it may concern:

Be it known that I, LUDWIG BAHLER, a subject of the King of Prussia, residing at Wolgast, in the Kingdom of Prussia, Germany, have invented certain new and useful Improvements in Revolving Tubular Kilns, of which the following is a specification.

This invention relates to improvements in revolving tubular kilns such as for example as used in the hydraulic lime and cement industry.

In order to obtain a better mixing and drying the kilns are at present divided by partitions into three or more compartments. The kilns of this type suffer however from the inconvenience that the material adheres in the corners so that the kiln is clogged at the partitions, wherefrom results that it has to be put out of use from time to time to be cleaned after it has cooled.

The object of the present invention is to avoid this inconvenience and to further improve the admixing of the material and to reduce the duration of the burning.

The partitions of the kiln are not fixed to the wall of the kiln as at present, but they oscillate around the central axle of the kiln so that they can move freely between stops projecting from the inner surface of the wall of the kiln. Owing to the fact that the material packed into the kiln acts upon the partitions so that they descend, there is realized at each revolution of the kiln a double motion of the partitions between these stops, whereby the material is intermittently shaken and displaced so that it is prevented from sticking in the corners.

In the accompanying drawings the invention is shown by way of example.

Figure 1 represents a revolving kiln in cross section. Fig. 2 shows in cross section the revolving kiln and the support for the horizontal shaft. Fig. 3 is a longitudinal section of the improved kiln.

The revolving kiln *a* has a shaft *b* on which the partitions *c* are movably mounted by means of hinges *f*. The kiln being rather long the partitions are preferably made of several parts, and the shaft *b* is supported by several supports *e*. For each partition *c* a stop *i* is provided projecting from the inner surface of the wall of the kiln *a*, said partitions being adapted to oscillate between the said stops around the shaft *b*. After the partitions have passed through their extreme highest and lowest position they are forced by their gravity, and by the pressure exerted by the material, to move from one stop *i* to the other.

The oscillating motion of the partitions *c* can be obtained in various manners.

I claim:—

An improved revolving tubular kiln comprising in combination with the wall of the kiln, a central shaft, partitions movably mounted on said shaft so that they oscillate during the revolution of the shaft, and stops projecting from the inner surface of the wall of the kiln limiting the oscillating motion of said partitions, substantially as described and shown and for the purpose set forth.

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Witnesses:

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