

No. 814,013.

PATENTED MAR. 6, 1906.

F. BAUMANN.
COVER FOR ROAD MANHOLES.
APPLICATION FILED JULY 1, 1904.

Fig. 1

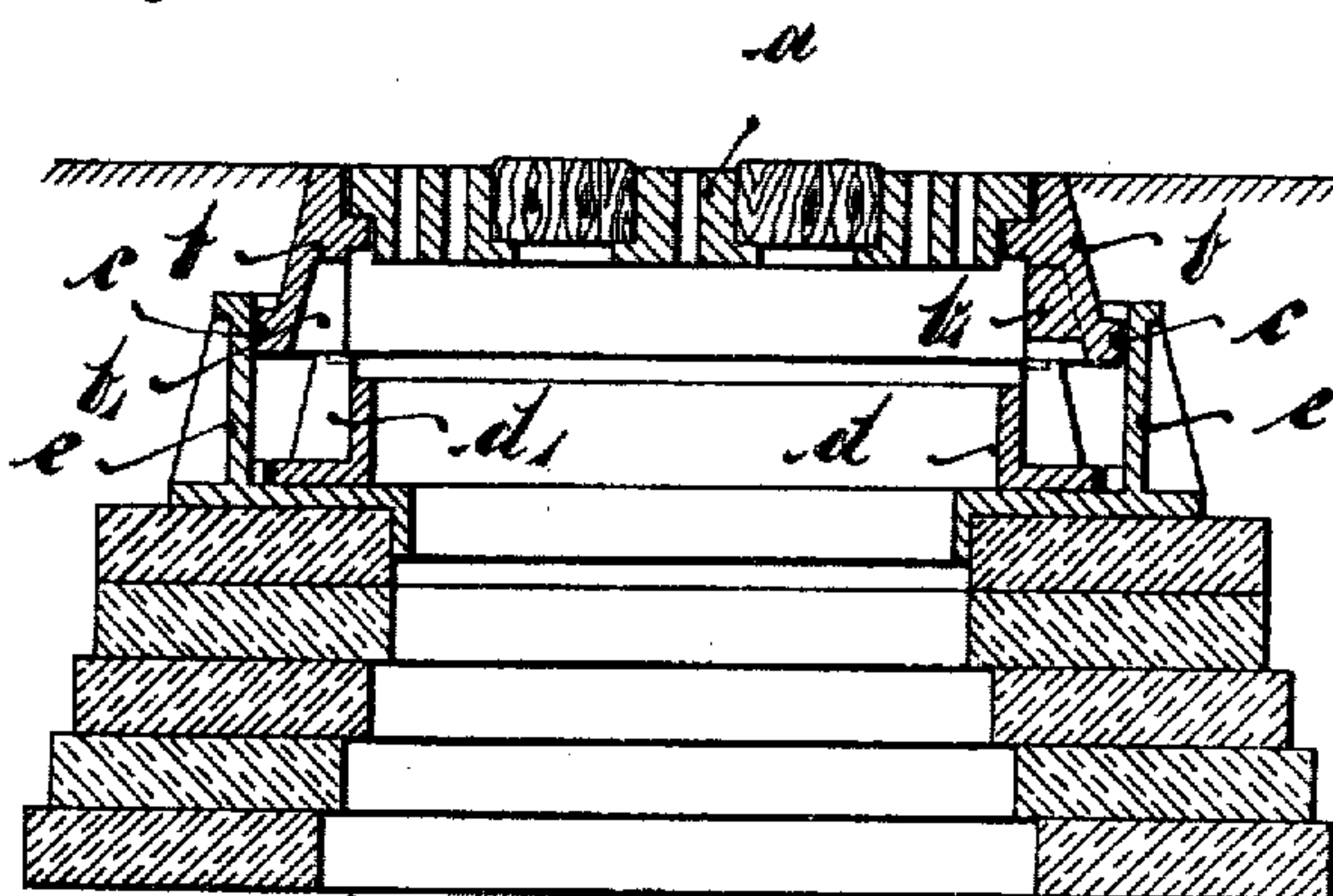


Fig. 2

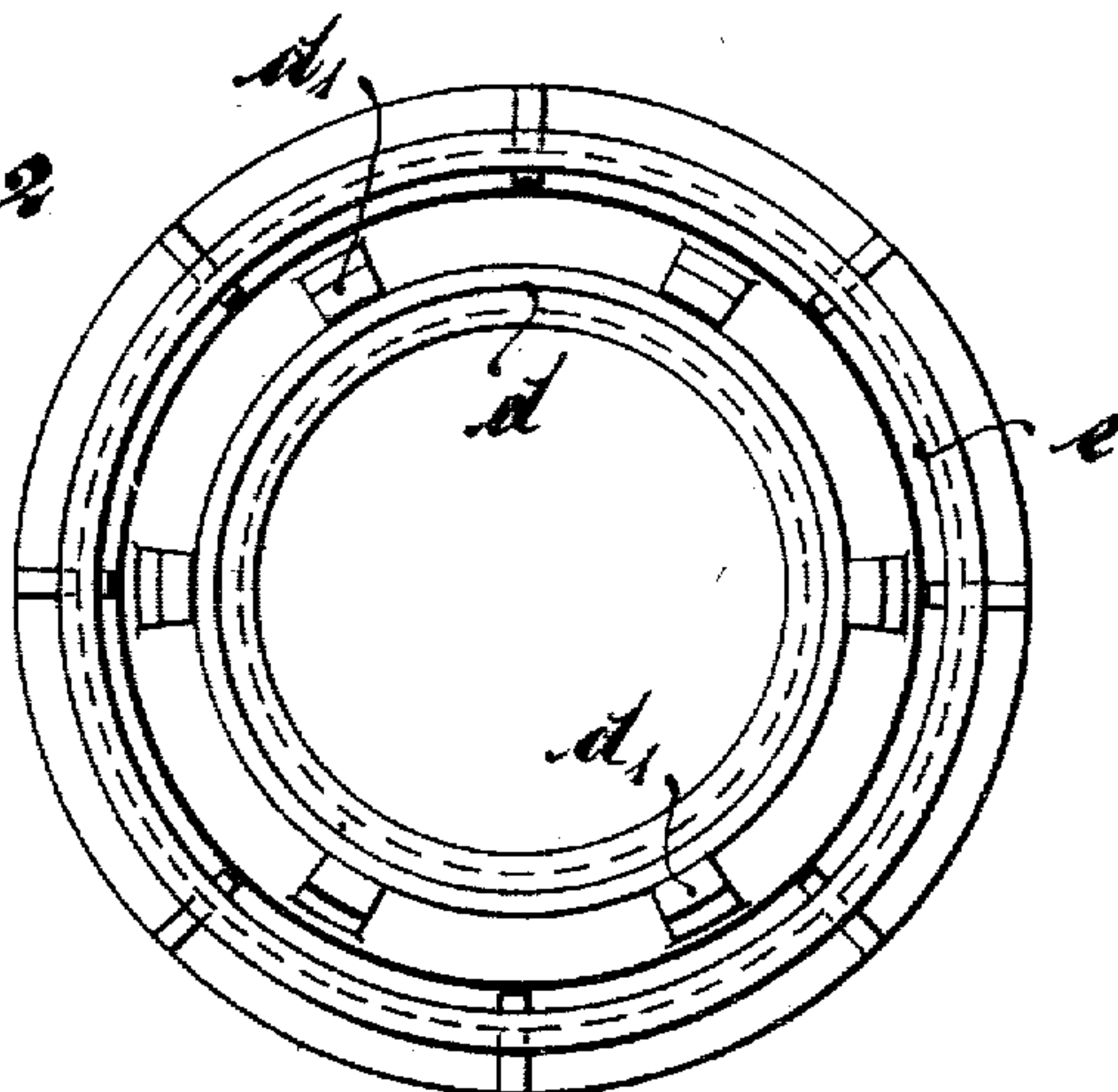
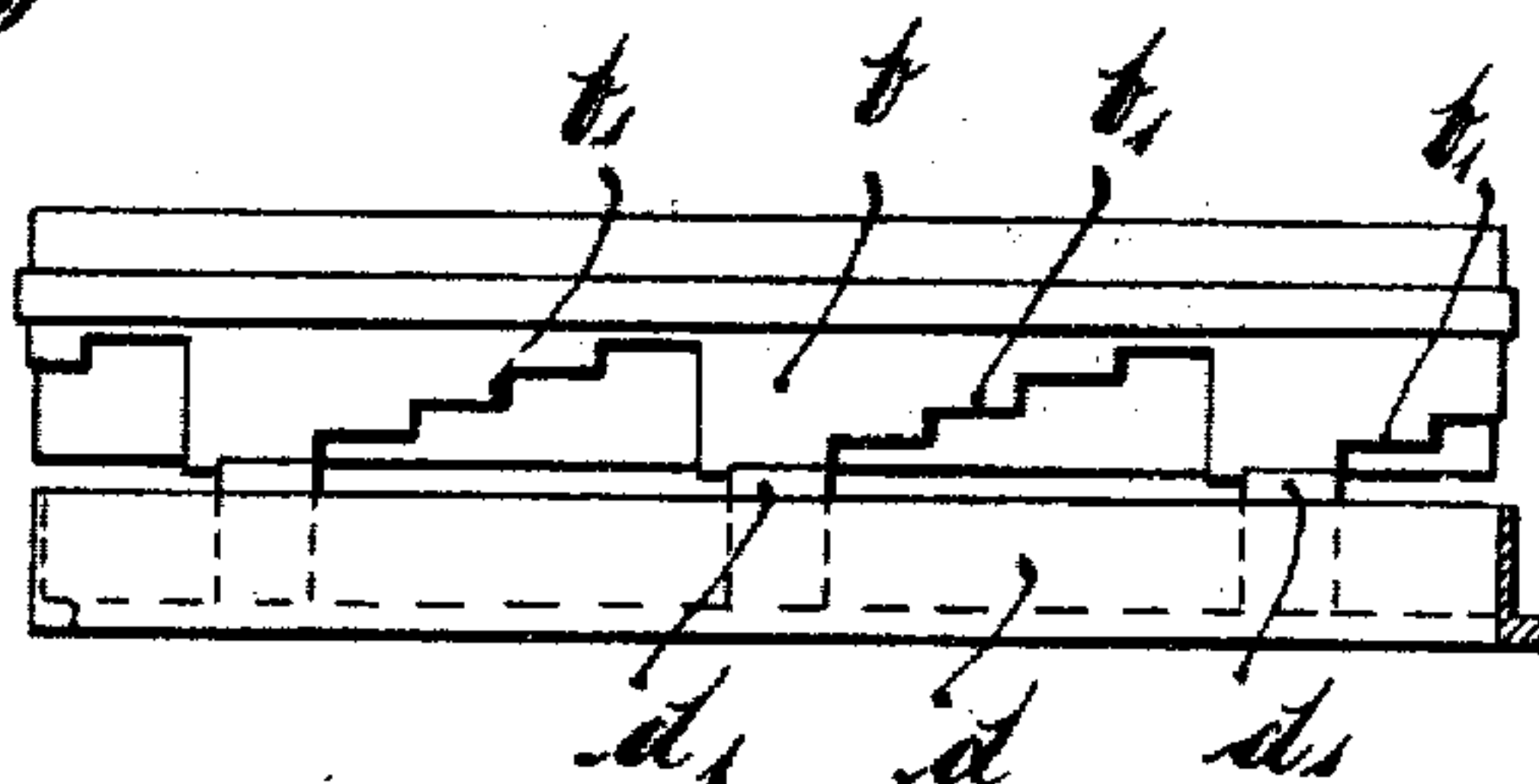


Fig. 3



WITNESSES:

Paul Lange.
Carl Fehner

INVENTOR:

Fritz Baumann

UNITED STATES PATENT OFFICE.

FRITZ BAUMANN, OF KAISERSLAUTERN, GERMANY.

COVER FOR ROAD-MANHOLES.

No. 814,013.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed July 1, 1904. Serial No. 215,010.

To all whom it may concern:

Be it known that I, FRITZ BAUMANN, engineer, a subject of the German Emperor, and a resident of 31 Logenstrasse, Kaiserslautern, in the Kingdom of Bavaria, German Empire, have invented certain new and useful Improvements in Covers for Road-Manholes, of which the following is a specification.

My invention relates to improvements in the covers of manholes or shafts in macadamized roads on which there is heavy traffic; and its particular object is to enable the manhole-cover to be adjusted in height without the road metal having to be taken up or disturbed.

In manhole-covers of the ordinary construction, comprising a cover-frame located with capability of vertical adjustment in a guide-frame, the inner wall of the latter is provided with stepped projections upon which the cover-frame, presenting similar steps, rests. When it is required to adjust the height of the cover-frame, the latter has to be turned. Since, however, the friction between the cover-frame and the well-rolled road metal is considerable, such rotary motion is seriously impeded, so that the metal must be broken up or loosened. According to my invention I overcome this inconvenience by dispensing with steps on the guide-frame and providing a ring inside the latter for the purpose of supporting the cover-frame. By rotating this supporting-ring the height of the cover-frame can be adjusted without the road metal having to be disturbed, since the cover-frame merely requires to be moved in a direction vertical to its axis.

My invention is shown in the accompanying drawings, in which—

Figure 1 is a vertical section of a manhole with cover, the cover-ring being shown in its elevated position. Fig. 2 is a plan of Fig. 1, the cover with its frame being removed. Fig. 3 is a view showing the inside of a portion of the cover-frame, which is here assumed to be

opened out flat, and likewise a portion of the supporting-ring similarly extended.

The cover *a* may be of any ordinary construction and is carried by a frame *b*, resting on a ring *d*, located inside a frame *e*, which affords guidance to the cover-frame *b*.

The inner wall of the frame *b* is provided with steps *b'* in well-known manner, while the ring *d* presents projections *d'*, which in cooperation with the steps *b'* enable the cover-frame *b* to be adjusted in height.

When owing to the road metal being worn down the cover *a* is to be lowered, the frame *b* should be slightly raised in any suitable manner in order to relieve the ring *d* from its load. The ring *d* must now be turned into the desired position, whereupon the cover-frame should be given a few blows to cause it to descend. Its conical outer wall essentially facilitates the loosening of any of the road metal which may be adhering to it. A tight joint is effected between the frames *b* and *e* by means of tarred rope *c* or like packing inserted in a groove in the lower portion of the frame *b*, whereby dirt is prevented from getting access to the shaft of the manhole.

In event of the road being remade the cover and its frame *b* can be elevated again into its highest position.

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

A manhole-cover, comprising a lid, a frame carrying the same and provided with steps on its inner wall, a guide-frame receiving the first-said frame, and a ring located within the guide-frame and presenting supports upon which the said stepped frame rests, substantially as described.

In witness whereof I have hereunto signed my name, this 4th day of June, 1904, in the presence of two subscribing witnesses.

FRITZ BAUMANN.

Witnesses:

K. GELBERT,

MICHAEL ZIMMERMANN.